



Spatial practices of governing carbon.

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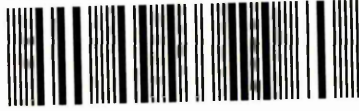
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Spatial Practices of Governing Carbon

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for the degree of Doctor of Philosophy

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This doctoral study is situated within key debates relating to a recognised need to reduce greenhouse gas emissions. National governments have been subject to binding targets through the Kyoto Treaty and linked EU legislation, with many governments implementing their own climate change programmes. One consequence of this is that sub-national governing organisations are being confronted with a need to re-think their own governing logics. This includes new strategies for reducing emissions and perhaps different ways of viewing spaces within their jurisdiction. Research in this area requires more empirical and conceptual development (although see While, Jonas and Gibbs, 2010). This study investigates carbon reduction policies in the English regions between 2005 and 2009, with a focus on practices of re-imagining, calculating and connecting the region as a 'carbon space'.

The PhD contributes to contemporary research on climate change policy in three key ways. First, although some scholars (for example, Bulkeley and Betsill, 2003) have explored the role of cities in climate change governance, few have engaged theoretically and empirically with debates around the spatial politics of carbon reduction. This thesis helps to fill this gap, and contributes to conceptual debates around low-carbon transitions and the political impacts of carbon management in Western states.

Second, the thesis draws from the work of John Allen (2003), Harriet Bulkeley and colleagues (*cf.* Bulkeley *et al.* 2005; 2007) and Multi-level Governance theories to develop a nuanced 'multi-level power modalities' account of governing practices. This particularly focuses on the mediations and translations between actors as governing technologies are deployed. This helps to highlight, third, an emerging 'multi-scalar politics of carbon' in particular relating to knowledge and evidence. This alludes to, first, the politics surrounding centralised regulation of spatial carbon emissions; and, second, a rising sub-national carbon 'elite' of policy professionals with greater access to carbon knowledges, thus able to better interpret and manipulate top-down imposition of carbon targets than others.

A number of people played an invaluable part in helping me get to the final point of submitting my thesis. First and foremost, Caroline Eadson provided constant support. My family also provided help, support and assistance along the way, including obligatory proof-reading duties. My supervisors, Peter Wells and Tony Gore offered the right mix of advice, encouragement, constructive criticism, gentle prodding and friendship. Aidan While was always available to discuss ideas with and also provided helpful comments on various working papers related to this thesis. John Flint and Paul Hickman also provided valuable advice and comments along the way, as did fellow students Mike Foden, Tom Moore and Sioned Pearce. CRESR was a fantastic environment to work in, and played a big part in making the whole process genuinely enjoyable.

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Any faults, mistakes and errors in the following thesis remain entirely my responsibility.

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A century after Svante Arrhenius (1896) first presented his “hot house theory”, the creation of the Kyoto Protocol of the United Nations Framework Convention on Climate Change (UNFCCC) in 1997 was a landmark point in the recognition of climate change as a political concern. The Protocol included binding emissions reduction targets for 37 industrialised nations, which included the UK as part of an EU bloc of 15 member states. This marked the point at which climate change first became a serious policy issue for nation states. It was a clear sign that a shift had taken place from policy interventions that focused on the science of climate change, to ‘science for policy’ (Agrawala, 1998). This shift signalled a deeper enmeshing of human political interests within climate change debates and from here the relatively simple mitigative solution in scientific terms – reduce activities that produce greenhouse gases – takes on all the characteristics of what might be termed a *wicked issue* (Rittel, 1969). That is, as a problem for humans, it is a symptom of – and is complicated by – other sets of human problems, while solutions are not easily defined and often sit within amorphous grey areas between ‘better’ and ‘worse’, rather than ‘right or ‘wrong’.

While the Kyoto Protocol was concerned with the umbrella terms of climate change mitigation¹ and adaptation, it was distinctive in that it focused on emissions reductions, and specifically that it required signatory states to begin to effectively account for national emissions levels.² This in turn developed the need for effective ‘carbon management’ systems: the need for governing processes to both account for and then instigate action to reduce carbon emissions (or remove them from the books through other means).

¹ Attempts to reduce, or mitigate for the extent of climate change resulting from human activity. This covers a range of actions, which may include different forms of non-emissions related geo-engineering as well as emissions reductions.

² The Kyoto Protocol aimed to reduce emissions in ‘Annex I’ industrialised nations by 5 per cent by 2008-2012 relative to a 1990 baseline. This built on the UNFCCC, drawn up at the 1992 Rio ‘Earth Summit’, which committed signatories to action on climate change, but did not introduce binding commitments.

Yet, progress on carbon management policy at the national level post-1997 did not happen as quickly as was perhaps at first anticipated, or hoped for. Initial policy development in the United Kingdom – for example – was slow and piecemeal and did little to address the wide ranging structural issues associated with ‘de-carbonising’ the UK economy. The decision by the United States – until recently the largest emitters of carbon dioxide – not to ratify the treaty was a factor in this lack of action. Various ‘serendipitous’ (Kerr, 2007) events, such as the de-industrialisation of economies and recessions of varying magnitude across Europe in the early 1990s also meant that countries like the UK were on course to meet their emissions quotas without having to implement major new policy instruments. But the lack of genuine progress was also partly to do with the fact that carbon management under the Kyoto Protocol required only that individual states’ carbon *accounts* be reduced: there were various means by which countries could effectively buy their way to meeting targets, for example through purchasing ‘hot air’ from nations that had achieved cuts beyond their own quotas.

In the mid-2000s this attitude towards action on carbon emissions began to change. After nearly a decade of relative inaction following the Kyoto summit in 1997, governments at all levels were seemingly beginning to take heed of the urgent need for action on carbon reduction – and reduced oil dependence – as well as adapting to the likely consequences of climate change. In 2007 the first national binding commitment to emissions budgeting was introduced in the UK Climate Change Bill, which accompanied political rhetoric regarding a new emphasis on spatial and individual carbon budgeting, emissions trading regimes and the search for a new international settlement on carbon reduction post-Kyoto.

Amongst this new-found seriousness about climate change a host of issues old and new were beginning to emerge or receive new levels of scrutiny. Many of these brought new dimensions to existing debates, such as re-invigorated tensions between state and market, or the organisation of responsibilities between individuals and collective or state bodies. It also brought added dimensions to discussions of how to effect changes in human behaviour, including the methods that governing actors could employ to do so and the time horizons within which such changes needed to take place.

These deliberations brought further questions regarding the best way of governmental and spatial organisation for such efforts. This included consideration of geographic scales at which policy would be best organised and implemented, the relationship between different scales of governing, and the role of different forms of network governance across and between cities, regions and nations. Amongst these issues are the scalar functions of different organisations and how this affects the types of actions they might become involved with. For instance, should certain organisations concern themselves purely with ‘steering’ action elsewhere, while others engage with direct emissions reductions? Alongside these quandaries of government came more fundamental questions about the ‘re-imagining’ of spaces as ‘carbon spaces’, including questions of how the idea of such spaces would fit with existing political spatial ‘fixes’. Within this, the question of how to effectively compartmentalise space for purposes of carbon accounting is a particularly interesting issue, as it throws human searches for order up against the fundamentally disordered ‘seething mass’ of nature.

To compound the list of concerns, these issues of political organisation sit alongside continuing uncertainty regarding aspects of the science of climate change and the measurement of carbon emissions. Tracing the multiple politics of these issues is fascinating in itself, but it is also crucially important to develop an understanding and assessment of emerging experiments that attempt to provide solutions to these problems.

The incorporation of climate change into more mainstream political agendas meant intervention at sub-national scales. Following initial understandings of the nation state as a ‘carbon space’ under the Kyoto protocol, the new emphasis on ‘carbon control’ (While, 2008) within the nation state requires a further stage of spatial re-imagining and calculation in order to draw sub-national actors into the logic of carbon management. As such, of particular interest here is the emerging role of sub-national governing organisations in the development of programmes for carbon management, including the ways in which international and national policy rhetoric is translated, replicated or produced by sub-national governing actors.

This research account is based on research carried out between 2007 and 2009 and provides an analysis of spatial practices of governing carbon management in the English regions between 2005 and 2009. The research takes as its starting point two moments of change in 2007: the emergence of climate change in the mainstream of political and popular discourse in the UK; and sub-national institutional reorganisation as a result of the 2007 'Sub-National Review' (HM Treasury, 2007). Specifically, it focuses on groups of 'first and second wave' practices identified through the evolution of carbon management policy within specific regions, which follows a rough pre- and post-2007 chronology. Yorkshire and the Humber provides the main focus of study on individual governing technologies, while the South West and North East regions are used to provide broader context as well as some specific comparator examples. The research began with an interest in the extent to which regional organisations were developing climate change policy, given an apparent gap in the literature to date on this issue. This then developed into the following four basic questions:

- How is carbon management being governed in the English regions?
- Specifically, how are practices of governing being used to re-imagine regions as 'carbon spaces'?
- What are the specific spatial practices involved in doing so?
- How have these practices changed over time?

This included an interest in exploring the ways that the multiple politics of space – particularly of scale – were being played out within these emerging practices and translation between the steering, or 'metagovernance' activities of regional organisations affected 'on the ground' action.

I began the research for this thesis in early 2007, the point at which climate change had just begun to filter through as a ‘serious’ national policy item, and more widely as a matter of concern within popular discourse. This new era of carbon calculation and control seemed to mark not only a change in the extent to which climate change was considered as a matter for concern, it also presented a potential shift in the type of governing practices used to achieve environmental goals. As Aidan While (2008 p8) notes: “a low-carbon polity is structured around a somewhat instrumental goal, especially in comparison with the integrated perspective of sustainable development”.

At the same time, while national and international climate policy had received a degree of attention in academic circles, emerging patterns of sub-national climate governance had been subjected to less examination. Some studies (e.g. Bulkeley and Betsill, 2003; Hodson and Marvin, 2007) had explored local approaches to climate protection, but these had not been placed within the context of this new phase of ‘eco-state restructuring’ (While *et al.*, 2010 via Meadowcroft, 2005). In particular, the role of meso-scales of governing – federal, regional and sub-regional governing actors – in governing climate change had received little attention. In 2010, despite growing interest in these issues these interstices remain largely unexplored within academic literature, with the extent and implications of the rise of ‘carbon control’ (While, 2008) yet to be empirically tested. This research therefore took as its starting point a commitment to bring empirical light to the role of sub-national actors – specifically the English regions – in governing carbon management and the ways in which these functions may be changing, with the aim that this would also lead to some conceptual and theoretical contributions to carbon control debates.

Concomitant to changing governmental climate change agendas was a seemingly more prosaic set of organisational changes taking place in the English regions. The failure of the 2004 referendum in the North East, and an element of general apathy towards the New Labour regional ‘project’ sparked off a period of existential flux for regional organisations, culminating first in the 2007 ‘Sub-national Review’, which resulted in the

abolition of Regional Assemblies.³ This provides a second ‘moment of change’ for the research, as regional actors struggled not only to position climate change as a point of action, but were subject to changing understandings of the role of the regions in the context of continuing institutional malaise and uncertainty about the future.

Following the election of the Coalition government in May 2010, the abolition of Regional Development Agencies and Government Offices for the Regions was announced. Disregarding the merits of these decisions,⁴ from a self-centred point of view this final rejection of the regions in England appeared at first to me as disastrous. Removal of the entire governing network that I had spent three and a bit years exploring seemed to me initially to reduce this thesis to a historical document. Notwithstanding the fact that these events serve as a useful reminder to other researchers about the merits of submitting research findings as soon as possible after conducting fieldwork, on reflection I believe that the research does retain empirical relevance and utility to others. This is in part because it focuses on a range of more general trends in carbon management and spatial regulation, but also as it provides an examination of continuing debates around scales and spaces of governing: not least the UK’s apparent addiction to the spatial reorganisation of administrative units. This is set within the context of what proved to be the death-throes of the Labour government and, in turn, the post-1997 form of institutional regionalism.

Theoretical background

A key area of interest, which runs through both climate change as a policy domain and the region as a political space, is the importance of *legitimacy* in achieving policy aims. In particular, the research explores the notions of *spatial* and *governing* legitimacy and aims to uncover the extent to which these have played a role in the acceptance or rejection of governmental programmes, and the effect that changing institutional and policy arrangements have had upon them. This includes analysis of attempts to develop

³ The regional project might perhaps be more accurately termed Prescottism given the main source of enthusiasm for English devolution, the rise and fall in influence within government of John Prescott perhaps also providing at least part of the explanation for the later political apathy for continuing regionalisation of government.

⁴ Although they are important, they are not the focus of this research.

legitimacy through different sets of practices. For instance, central to changing attitudes and behaviour towards action on carbon emissions is a need to re-imagine governed spaces as ‘carbon spaces’, which requires legitimisation of climate change as a policy concern (termed here as *thematic* legitimacy); the space concerned as a place, territory, network or scale for dealing with that concern; and the governing actors as capable of acting upon it.

The carbon control thesis suggests that moves towards a change in perspective of environmental governance are being pushed by attempts to re-calculate space through carbon accounting. This is not an entirely new phenomenon: as I explore in an analysis of ‘pre-carbon control’ action in Yorkshire and the Humber (Chapters 9, 10 and 11) sub-national attempts had been made by governing actors to re-calculate regions as carbon spaces in the early 2000s. This was, however, limited to individual local and regional actors’ attempts to effect change, rather than as part of a wider instrumental programme of spatial regulation. In question therefore is the extent to which previous attempts were successful in bringing about change, but also how more recent attempts at re-calculating sub-national space differ in form and extent to these earlier programmes.

Calculative practices tend to be used to provide an illustration of instrumental approaches to carbon management. They may, however, be utilised as the focal point of associative programmes to build consensus on a particular issue, something which is perhaps under-emphasised in discussions of carbon accounting. Similarly, associative programmes such as partnerships, intelligence networks and enabling funding streams did not disappear with the emergence of new carbon rationalities. Instead it is important to uncover the ways in which these initially developed as programmes prior to the implementation of carbon control regimes and the effect that new governmental programmes then had upon these programmes. This has received less attention in the literature relating to ‘carbon control’ to date.

Exploring these events required grounding in three sets of theoretical debates. First, an exploration of the production of spatial formations led to a general conceptualisation of spatial relations that draws on Bob Jessop, Martin Jones and Neil Brenner’s (2008) ‘TSPN’ – territory-scale-place-network – approach. Second, an exploration of ‘eco-state restructuring’, sustainability and emerging understandings of ‘carbon control’ framed

the understanding of policy trends in the UK and ‘the West’ more widely. Third, an interest in attempts to legitimise political programmes and changing practices of governing required an understanding of the specificities of power as exercised by governing actors. Here, John Allen’s theorising on the lost ‘geographies of power’ is drawn upon to re-work Harriet Bulkeley’s (*et al.*, 2005; with Kern, 2006; *et al.* 2007) modes of governing framework into an approach that is both sympathetic to the (multi-level) ‘whereabouts’ as well specific ‘howabouts’ of power as governing actors act as producers, mediators, intermediaries and recipients of governmental technologies.

This leads to three broad aims for the thesis beyond the specific research questions outlined above. These are as follows:

- To bring empirical light to the role of sub-national actors in governing carbon management and the ways in which these roles may be changing, leading to some conceptual contributions to carbon control debates
- To utilise and develop a framework of understanding practices of ‘group formation’ and the development of ties between governing actors through understanding of the different ways in which power is exercised in governing processes.
- To explore notions of spatial and governing legitimacy as a focus of governmental programmes but also as a framework for understanding the success or failure of different sets of governing practices.

There is also a broader concern, which sits behind the decision-making process, to recognise and draw attention to a ‘geography of practice’, with particular emphasis on the actors and objects that work ‘in between’ others to shape these practices. Even more broadly, there is an aim to continue the vein of thinking that should come naturally to those trained within geographical disciplines but which is not always apparent in their accounts: an approach to space which recognises human and non-human entities as intrinsically linked; ontologically the same; and entirely contingent.

Reference to Italo Calvino’s 1979 novel, *If on a winter’s night a traveler*, draws a number of these themes out more clearly. In the novel, the protagonist “You” becomes

embroiled in a farcical journey through different books that are at first apparently identical. He begins one book, which he is then unable to finish, before starting another, apparently the same, book with virtually the same title. Except, of course it is an entirely different book. This is a continuing theme of the story, with no satisfactory answers elicited from his search for the ends to the books, and no final 'closure'. This serves, in part, as an analogy for the research process, or even a history of the challenges of research. Endless dead ends and fruitless searching for further information, only to be interrupted by other, equally important avenues of research, which result in yet more dead ends and unanswered questions.

But it also serves to present two other sets of issues relating to the analysis of data. First, You's engagement along the way with other people who provide him with books; passively watch; enable access to other people and places; who divert his attention; offer false information; threaten him; or simply refuse to co-operate with his search, highlights the role of the 'in-between' people: the mediators, intermediaries and other actors that can aid, hinder, or be passively neutral in both the practice of research and of governing. These are recurring themes in the empirical chapters in this, present work. As Bruno Latour (2005 p43) notes, "action is always overtaken".

Second, two of the book titles in the novel draw attention to the subtleties of power, and the formation of ties: *In a network of lines that enlace* and *In a network of lines that intersect*. They sound almost the same, and apparently represent the same thing at first glance: a group of entities that coalesce at various points. But they do mean subtly different things. The former relates to ties that are bounded, and work to constrict something, or someone. The latter on the other hand denotes a coalition of entities, a coming together without imposition. Untangling these subtle differences is another recurring theme of this work: for instance the points at which seduction becomes induction becomes manipulation becomes coercion becomes domination...

The thesis is organised into three sections in a relatively conventional manner. The first four chapters are concerned with setting the research questions through engagement with the theoretical debates and empirical literature regarding the broad areas of the production of space and the practice of governing. Chapters 2-4 work with ideas about the construction of political spatial formations. This begins with some 'initial propositions' (Massey, 2005) of types of spatial formation and notions of spatial and governing 'legitimacies' (**Chapter 2**) and then leads into more specific discussions in relation to the 'chaotic construction' of the English regions (**Chapter 3**). The institutional arrangements are posited as being inherently unstable, caused in part by a degree of existential muddle as to the function and meaning of 'the region'.

Chapter 4 shifts to look at the incorporation of non-human space into political decision-making. This is based around an exploration of the evolution of environmental policy discourses in the West in relation to sub-national governing actors and takes the idea of 'eco-state restructuring' (While *et al.*, 2010) as its guiding theme. The analysis looks first at the literature on the incorporation of sustainable development agendas into policy, noting how its core aims have been first subverted and then substituted for narrower 'smart growth' and eco-modernisation projects, before being potentially subsumed by emerging 'carbon control' agendas. From this angle carbon control is distinct from sustainable development, but also can be seen as part of a longer process of 'instrumentalisation' in economising environmental goals. The core research agendas are set out in the conclusions, based around the need to empirically explore the purported shift in governing logics towards developing regimes of carbon control.

The final chapter in the first section of the thesis (**Chapter 5**) is concerned with developing an analytical framework for exploring the agendas highlighted in the preceding chapters, based on an identified need to uncover the specific practices involved in developing governing programmes and the changes that may have taken place to the form of these programmes over time. The chapter argues that such an approach needs to be attentive to both the multi-site nature of governing as well as the different power modalities that are exercised in attempting to effect behavioural change. This requires combining and re-casting multi-level governance and 'modes of

governing' (Bulkeley *et al.*, 2005) frameworks towards developing a framework capable of exploring the way governmental technologies are developed, implemented, mediated and translated through space.

Having set up the study questions and the broad 'angle of attack', the second section of the thesis deals with the practical matter of carrying out the research. As such, it looks at developing a methodological framework, deploying methods to capture information, and then reflection on the challenges that these brought in carrying them out. **Chapter 6** sets out the case for using an in-depth case study approach to explore the research questions, including the rationale behind the choice of Yorkshire and the Humber, North East and South West regions as case studies. **Chapter 7** reflects on the process of 'doing' the research in terms of the methods of data collection, the experience of actually carrying out the data collection and methods of data analysis.

The final part of the research account focuses on research findings and analysis, with a study of both general and specific developments in governing carbon management in Yorkshire and the Humber alongside the two 'comparator' regions. **Chapter 8** begins this section by outlining an initial 'baseline' of activity on carbon management in the regions 'pre-2007' by setting out an analysis of the modes of governing being utilised and some of the political issues surrounding these alongside a brief analysis of carbon emissions trends across the regions.

Chapters 9 and 10 open up the analysis of specific 'first wave' spatial practices of carbon management with an exploration of early attempts to re-calculate, re-imagine and – in doing so – 're-connect' Yorkshire and the Humber through, first, a regional carbon reduction target and later a regional climate change partnership with an associated action plan. Both sets of practices sought to develop 'carbon regionalisms' through co-option to a shared regional agenda on carbon management and specific understanding of the region as legitimate space for governing carbon. **Chapter 11** is a short discussion chapter, which sums up some of the key underlying issues threading through the previous three chapters in terms of governing and spatial legitimacy. In particular it focuses on the level of connection between scales of governing, different understandings of the region as a 'carbon space' and the extent to which different local actors shared these understandings with regional policy-makers.

Chapter 12 moves on to look at the development of ‘second wave’ practices in the regions, with particular emphasis on the centralisation of governing carbon through the development of instrumental practices for calculating carbon emissions. The main focus for this is the introduction of local area carbon reduction targets through Local Area Agreements in 2008, which brought a new carbon management role for Government Offices for the Regions as mediators between central and local government in the setting of targets. The final part of the chapter explores how introduction of instrumental programmes, an increase in wider engagement with carbon management as a policy agenda and changing institutional relationships in the regions led also to a second wave of associative spatial practices, which were more fractured across sectors and scales than previous ‘carbon regionalisms’. Finally, **Chapter 13** provides a concluding discussion of broader themes and research agendas that emerge from the thesis.

Look. This is the idea: to study man as he really is. Not this metaphysical marionette they've made us believe he is, but the physiological human being, determined by his surroundings, motivated by the functioning of his organs ... What is thought, in God's name, but the product of the entire body? Can they get a brain to think by itself? What happens to the "nobility" of the brain when its owner has belly-ache?

'Sandoz', in Emile Zola's *The Masterpiece*, 1886/1993 p154

Two sets of broad theoretical debates underpin this research. These relate respectively to the conceptualisation of spatial and governing processes. Chapter 5, which outlines the analytical framework for this project, will deal with the latter – the issue of *governing* space – while this chapter aims to introduce the literature surrounding conceptualisations of space. This will then lead on to a discussion of two specific sets of spatial concerns: the construction of political spaces – in this case the English regions – and the incorporation of non-human space into (sub-national) political decision-making, in particular the challenges posed by climate change.

This initial discussion stems from the separate works of Doreen Massey and Bruno Latour to develop an understanding of space(-time) as relational, always contingent and without necessary conceptual distinctions between human and non-human elements.⁵ From these starting points, the focus turns to exploring some of the terms used to describe different types of spatial formation. This takes recent debates relating to geographical scale as a starting point, before developing a more plural approach to the various types of spatial discourses that political actors may seek to generate through different practices of legitimisation. This then leads into an exploration of the English regions as 'chaotic constructions' (Chapter 3): the coalescence of various political

⁵ As Massey explains, the full term 'space-time' helps to understand the concept as relational and contingent. I will mostly stick with the shorthand of 'space' for the remainder of this account, however.

strategies in the late 1990s and early 2000s represented a range of potentially conflicting spatial discourses, which led to an inherently unstable spatial fix.

A second set of debates surround the various phases of ‘eco-restructuring’ of the state – broadly defined – identified by Aidan While, Andy Jonas and David Gibbs (2010). Of particular interest are recent trends towards incorporating physical and/or non-human space into policy, first through a dominant ‘sustainable development’ paradigm, and more recently through the emergence of a distinct ‘carbon control’ policy fix that focuses explicitly on the ecological crises threatened by anthropogenic climate change (Chapter 4). Here a number of trends are highlighted, including the co-option, subversion and substitution of environmental policy to legitimise short-termist economic policy. While the advent of carbon control presents a shift in the form and extent that states needs to ‘take the environment seriously’ (Meadowcroft, 2005), work in this area highlights a need to explore further the continuities with and shifts away from ‘old’ sustainable development logic, and the politics that arise from these.

Conceptualising space

To begin, a brief exposition of the general principles underpinning the approach to space taken in this account is necessary in order to develop some ontological and epistemological foundation for what follows. In doing so, Andrew Sayer’s (2000 p106) warning relating to spatial theorisation is heeded. He notes that scholars often become tied up in attempting to theorise space, without ever moving beyond the point of high-level abstraction, which makes such discussions relatively meaningless:

There have been numerous attempts to develop spatial social theory which find it difficult to get beyond repeated *mentions* of space, without being able to say much about what social spaces are like in terms of their spatial form or configuration.

Emphasis in original

The intention here is that *mentions* of space are taken somewhat further, first through conceptualisation and then later employing these conceptualisations in an analysis of governing practices. This research is concerned with the construction of conceptions and configurations of spatial formations, approaching socio-political processes as

critical, but not all-encompassing in terms of understanding the world; that is, examining the politics of certain forms of spatial practice. In taking this approach to research, there is an obvious temptation to ‘fetishise’ space: to be clear, it is not argued that everything *must* be considered in terms of space – although it cannot be entirely avoided – but that many processes and events may be well served by a spatial approach.⁶ Others may not require an explicitly spatial approach to uncover the mechanisms and structures of their being, but may equally well be served in using spatial terminology to explain them.

This research account takes Doreen Massey’s ‘opening propositions’ (2005, p9) to her spatial treatise, *for space*, as solid foundations for a conceptualisation of space. These propositions seek to understand space as being contingent, relational and essentially ‘thrown together’. First, space should be conceived as being produced by interrelations.⁷ In line with conventional physics, space can never be anything but relative; spaces are always evolving and changing, the universe ever-expanding, the Earth always moving through space.⁸ This is something that has been approached in the lexicon of the social sciences through the contemporary ‘relational turn’ in geography (Yeung, 2005).⁹ This is outlined in earlier work with John Allen *et al.* (1998) on *Rethinking the region*. Here the argument is that spaces should, or can only be, defined in relation to other spaces; by what makes them different:

‘Regions’ only exist in relation to particular criteria. They are not ‘out there’ waiting to be discovered; they are our (and others’) constructions.

Ibid. p2

Second, Massey outlines space as being the ‘realm of possibility’: it allows for “the existence of multiplicity in the sense of contemporaneous plurality” (p9) and space is

⁶ As Sayer (2000 p107) argues, “In some respects, [space] is absolutely vital, in others it doesn’t make much difference”, but see, for example, Bertrant Zuindeau’s (2006) spatial approach to sustainable development, which shows how potential conflicts are more easily outlined and give a clearer (more bleak) picture when viewed through a spatial lens. Also see Stefanie Duhr (2005) on mapping and policy outcomes.

⁷ This is a concept long held within physics, but can be just as well explained in the lexicon of the social sciences.

⁸ Although there may be such thing as absolute *motion* – see Huggert and Hoefler (2006).

⁹ Although Yeung is unconvinced as to the actual novelty of this ‘turn’, instead pointing to the array of literature produced in the 1970s, ‘80s and early ‘90s exploring the production of space as a function of social and economic inequalities; that is of spatio-social relations.

seen as *fundamentally* plural. Later on in *for space*, Massey talks of the ‘throwntogetherness’ of place. This can be taken further to link in with the ideas of Bruno Latour, who points to the false boundaries that have been drawn up and maintained – often without question – between the human and non-human spheres. Instead, events and processes should be seen as taking shape through *heterogeneous* bundles of associations (Latour, 2005). Heterogeneous in that they are not made of ‘political’ or ‘economic’ or ‘physical’ associations, but all of these and many more. This approach is particularly important in reasserting the importance of material processes that are in danger of being lost through approaches that reify the power of ‘the social’ or discursive practices: as Latour points out, only the most basic of human interactions can be said to be purely ‘social’ in the common understanding of the word.¹⁰ Increasingly few ‘social’ encounters involve direct ‘face-to-face’ verbal communication, and even then these encounters are reliant on myriad extra-social forces that, for example, make speech possible, or travelling to the point at which a person is within talking distance of somebody else.

Third, space is dynamic, in a constant state of emergence (Sayer, 1992). It should not be seen simply as ‘the crystallisation of time’ (Castells, 1998), a viewpoint which leads to a static understanding of space. This highlights important issues, not least that spatial formations – such as regions – should be recognised as (temporary) constructions in space:

Precisely because space on this reading is a product of relations-between, relations which are necessarily embedded material practices which have to be carried out, it is always in the process of being made. It is never finished; never closed. Perhaps we could imagine space as a simultaneity of stories-so-far.

Massey, 2005 p9

¹⁰ As a relevant example of this failure, in an initial review of 42 papers relating to the ‘new regionalism’ in Europe and North America, not one made reference to the physical spatial properties, or of non-human relations, including those that sought to critique different spatial conceptualisations used by others.

There is, therefore, “no coherent now” (p158) to space. This is important to bear in mind in relation to any spatial exploration: research is always being carried out “in the middle of things, *in media res*” (Latour, 2005 p30). As Massey (2005, p141) notes of her favourite peak in the Lake District:

...the rocks of Skiddaw are immigrant rocks, just passing through here, like my sister and me only rather more slowly, and changing all the while. Places as heterogeneous associations. If we can't go 'back' home, in the sense that it will have moved on from where we left it, then no more, and in the same sense, can we, on a weekend in the country, go back to nature. It too is moving on ... [I]n the end there is no ground, in the sense of a stable position.

Having said that, understanding space as a relative, dynamic concept should not be seen as 'absolute' relativity in the practical sense. In recent years the trends of technology-led globalisation (or 'glocalisation'; Swyngedouw, 1997) have led to notions such as the 'space of flows' (Castells, 1998), and space-time compression (Harvey, 2000). These understand relational space as becoming less fixed, and capable of being easily transgressed through leaps in communication technologies, for example. As Castells points out, however, the outcomes of these processes are not even; the result is 'switched on' and 'switched off' spaces. In essence then, the result of globalised communications is not space-time compression, but space-time distortion (Massey, 2005). For Latour (2005), like Massey, space-times are not linear. They instead are characterised by 'nearness and rifts', of points of connection and of disconnection: as in Castells' 'switched on' and 'switched off' spaces that may be neighbours in cartographic space, but are otherwise entirely disconnected from one another.

Instead, it is worth highlighting the nature of *time* within the more comprehensive notion of space-time. A key point here is that different points in space move, or flow, at different rates; thus those that are more historically fixed, or moving at something akin to 'glacial time' (Castells, 1998) in many ways may as well be absolutely fixed to a human living for his/her allotted 'three score and ten'. Like the most recent (neoliberal) guise of globalisation, climate change destabilises space-time in that it may cause 'glacial' processes to speed-up¹¹ – perhaps exponentially – or others to slow down or even stop; such as the gulf stream. Grasping the impermanence of *everything* indeed is a continual issue for all humans in an existential sense, but more prosaically speaking,

¹¹ Quite literally in this instance

current ecological crises make recognition of the relativity, impermanence and plurality of space a critical challenge for policy actors.

In this vein, Gottfried Leibniz (1989) suggests that the notion of absolute space should be seen as *ideal* space: a hypothetical situation where spatial-temporal relations reach a point of ‘balance’. The notion of sustainable development shows an earthly attempt to achieve this balance, but raises significant questions surrounding the ‘value’ of non-human space, as exemplified in the principle of inter-species equity. These themes are traced out more comprehensively in exploring the literature on governing the environment (Chapter 4), but first it is useful to turn to the problems faced when attempting to describe different types of spatial formation, focusing particularly on the sensitive¹² issue of scale, and how – predominantly – political theorists and economic geographers have investigated the political ordering of space. First, the idea of spatial relations as formed through practice is explored through a discussion of the recent ‘scale debates’. This is followed by consideration of the ‘spatial polymorphy’ of Bob Jessop, Martin Jones and Neil Brenner (2008), before settling on a slightly more nuanced version of this approach which recognises the different ontological ‘layers’ of relations.

Categorising formations

Site, arena, area, space, place, territory, domain, point, network, scale, level, assemblage... An array of different terms are used to describe particular types of spatial formation meaning sometimes similar, sometimes very different things. Often these are used as short hand – a common term – for something generally, if vaguely, understood. If a scholar talks of this place or that, it is generally understood that they mean a point in space, which – generally – has been given a specific spatial moniker: Rotherham; the Picos de Europa; Clapham. If they talk of an arena, it is understood as a bordered space within which an event happened: a house; a football stadium; ‘politics’. This is largely unproblematic, because there is a widely understood general meaning for these terms which does not need to be any more sharply delineated than to give a broad feel for a situation, or study focus. If, however, the focus of a study is of particular types of

¹² At least, it has been a sensitive issue for some human geographers

relations – and this is what these spatial labels essentially refer to – then they do become more problematic, especially when seemingly different meanings are applied to the same or similar terms: a critique that has been applied by various geographers to others' works (*cf.* Brenner, 1999; Herod and Wright, 2002; Jessop *et al.*, 2008). Most academic investigations also tend to focus on a particular spatial concept largely in isolation from others, which can compound this issue: if we only consider one option, it is hard to see how it is different in relation to other options. These problems are well highlighted by the recent 'scale debates' in human geography. An initial focus on conceptualising scale would therefore seem appropriate, and will lay the foundations for covering three other "dominant" spatial concepts (Jessop *et al.*, 2008): network, territory and place.

The vexed issue of scale

The 1990s and early-mid 2000s witnessed a rise to prominence of the region, both in academic and policy circles. This was broadly co-temporal with – and in many cases explicitly linked to – a number of debates concerning conceptualisation of geographic scale. These debates coincided to the extent that there was an emerging emphasis on the *social construction* (*cf.* Smith, 1992; Marston, 2000) of *relational* scale in the works of a number of scholars (*cf.* Jones, 1998; Brenner, 1999; Swyngedouw, 2004; Jessop, 2002a and 2002b; Herod and Wright, 2002), which brought about scrutiny of scale as a concept from those within and outside debates around 'territorial re-scaling'; most notably from Sallie Marston and Neil Smith (2004; Marston *et al.*, 2005). Yet there is divergence as to where this should lead; including a questioning of the relevance of scalar concepts in the age of networks and relations.

In approaching the *limits to scale*, Neil Brenner (2001) sparked off a debate on the application of scalar concepts, arguing that the proliferation of works based on the social and political production of scale have resulted in a degree of “analytical blunting” (p591), or theoretical “slippage” (*ibid.*) of the concept in relation to other geographical concepts such as place, territory, locality, arena, *et cetera*. He warned that:

...if the notion of geographical scale is extended unreflexively to demarcate any aspect of sociospatial processes, then much of the analytical power and theoretical potential of recent methodological innovations may ultimately be lost, causing scale to collapse into an overgeneralized ‘chaotic conception’.

p593

Brenner cites Sallie Marston’s (2000) study of the social construction of scale in relation to the household as a case in point, arguing that she pays scant attention to the scalar dimension of the household: a focus on transformations within the household is really a discussion of territory, locale, or place. As such, Marston has seemingly overstretched the concept of scale until it is no longer distinguishable as a distinct concept.

To further this argument, Brenner turns to the ‘politics of scale’ (Smith, 1992), pertaining to geographical scales as frameworks for a broad range of social processes; arguing that scale should be studied as an epistemological construct rather than an ontological reality. He begins this debate by suggesting that the politics of scale are best studied in terms of scalar relationships, contests and positionality, as opposed to politics within a scale, which should be analysed using an “alternative geographical lexicon” (p600). This approach may appear to suggest that scalar relationships can only be between the scale of study and a ‘higher’ scale. For instance, this logic might understand a house only as an ‘arena’ when internal events are explored, but may be a scale if discussed in relation to things that contain it: the street, locale, region and so on. As Mark Purcell (2003) states, however, there is a valid point here:

One cannot understand a scale without analysing its relationship to other scales, since the meaning and importance of each scale is unavoidably embedded in interscalar relationships.

p318

In response, Marston and Smith (2001) argue that there is a degree of arbitrariness in determining which spaces are granted 'scale status', though, in fairness Brenner did not suggest that the household cannot be analysed as a scalar category, rather that Marston's analysis did not do this. Marston and Smith do agree, however, that the popularity of scalar discourse has led to 'analytical blunting'. This has been taken further by Marston *et al.* (2005, p416) to suggest a new, 'flat' ontology of space. They begin by stating that "there is today no consensus on what is meant by [scale] or how it should be operationalized" and compare 'vertical' hierarchical models (*cf.* Agnew, 1993; Smith, 2000; Brenner, 2005) with arguments that scales are simply "intuitive fictions" (*cf.* Thrift, 1995; Jones, 1998) to suggest that there is a problem beyond even the issues of scale as a 'chaotic' or 'fuzzy' concept (Hudson, 2003; Markusen, 1999; Harrison, 2006a). In short, their argument is that vertical hierarchical conceptions of scale cannot be successfully integrated with network theories: instead they offer a "flat alternative, one that does not rely on the concept of scale" (Marston *et al.* p417), which instead focuses on interrelationships between specific sites. This viewpoint is also in part borne out of a frustration with particular scales being *a priori* assumptions and their unreflexive utilisation in denoting generalised processes: for example the idea of ephemeral 'global' forces or globalisation being responsible for certain actions, rather than the forces of particular firms, states or individuals. This is an important point, and underlines the need for more robust theoretical and conceptual tools to enable research to move from the particular to the general.

Similarly there is an argument against the power hierarchies that scalar conceptions ultimately imply: the individual (or particular urbis) being in the shadow of higher and greater powers. As Andrew Jonas (2006) points out, however:

Upon close inspection, many so-called 'scalists' are not writing about 'scales-as-fixed-structures'; nor are they treating scalar territories as 'vertical structures' or 'rational abstractions' in the realist sense. Instead they are responding to the challenge of narrative and deploying scalar categories in ways that attempt to show how particular material structures and processes have become fixed at or around certain sites and scales, are in the process of becoming unfixed at a specific scale, or combine to differentiate the world in complex scalar and site-specific dimensions.

p404

A more subtle critique of the work of 'scalists' may therefore be more enlightening. This is something that has been attempted by Adam Moore (2008).

Moore (2008) outlines similar concerns to Marston *et al.* (2005), but takes a more conciliatory - and progressive - approach. For Moore, like Marston, scale as a concept has become “unwieldy” and “laden with multiple, contradictory and problematic meanings” (p203). This is in part through a lack of distinction between scale as a ‘category of practice’ and scale as a ‘category of analysis’. Latour (2005) sets this issue within wider problems related to ‘mainstream’ social science, whereby categories are developed through *a priori* assumptions rather than as a result of enquiry:

The problem is that social scientists use scale as one of the many variables they need to set up *before* doing the study, whereas scale is what actors achieve by *scaling*, *spacing* and *contextualizing* each other through the transportation in some specific vehicles of some specific traces.

Latour, 2005 p184. Emphasis in original

The suggestion is that treating scale as an *analytical* category – of presupposing semi-fixed scales of enquiry – there is often a reification of scale as a “fundamental ontological entity” (Moore, 2008 p203). Instead, Moore suggests an alternative conceptualisation, with a particular scale seen as a category of *practice*; for instance, as a discursive tool of spatial politics.

Moore argues that the trend towards viewing scalar categories as socially constructed through fluid and contingent processes has tended to “obscure, rather than illuminate, different theoretical approaches to scales” (p204). In attempting to clarify where these differences do lie, two general theoretical schools of thought within scalar work are highlighted. The work of many of those referenced above, including Neil Smith (2004) and Erik Swyngedouw (2004), is characterised by Moore as viewing scales as *material* sociospatial entities, corresponding “to real material processes, events and spatial formations” (p204). This is contrasted with the work of Katherine Jones (1998) and Hilda Kurtz (2003), amongst others, who view scale as an epistemological construct, whereby there is no necessary relationship between scalar representations and material conditions; although deployment and contestation of representations can have material effects. This is then taken to suggest that materialist theorisations run the risk of ‘spatial fetishism’ whereby inert space is charged with causal powers. Drawing on Rogers Brubaker’s work (*cf.* Brubaker, 1996; Brubaker and Cooper, 2000; Brubaker *et al.*,

2004) on the discursive construction of identity categories, Moore suggests that the ideas of, for example, national, local and global scales are:

...deeply ingrained, 'intuitive fictions' ... that inform our folk understandings of the spatial organisation of the world. And, like the political fiction of nations, the notion that scales are actually existing sociospatial levels, platforms or arenas is often taken for granted in social scientists' research.

Moore, 2008 p208

There is much to be said for Moore's argument. While there is no avoiding that processes are scaled in that there are limits to their sphere of influence or engagement, beyond certain physical boundaries they tend not to be *necessarily* fixed at particular categorised, or discrete, scales. Where they are partially or temporarily fixed at particular categorised scales this is through a discursive engagement with, or 'belief in' that scalar category; for example – as I will turn to shortly – the institutionalisation of the English regions. Similarly, a categorised scale is defined by its engagement with other scalar categories, but there is no *necessary* scalar engagement between, for example, local, regional and national governing entities, just as a 'regional' organisation does not *necessarily* operate at the regional scale simply by dint of its ambition to do so: this is based on recognition from at least one of the parties involved as the other constituting a scale in relation to themselves. Julie Cidell's work on *the individual and the politics of scale* (2006) amply demonstrates this issue. In her study of the politics of a proposed airport development she notes how individuals who do not abide by the expectations associated with scalar hierarchies and delineations are able to have a degree of success in 'jumping' scales and to some extent negating constructed scalar boundaries.

In this sense exploring the practices of developing and deploying scalar discourses – as well as those relating to other spatial concepts or formations – becomes a key research programme. This approach requires some caveats, however. Firstly, the implied suggestion that those who focus on 'presupposed' categories of scale are automatically 'reifying' categories as ontological 'givens' is misguided: a more sensitive understanding would be to view such works as focusing on a relatively fixed scalar category of practice – for instance those spaces that have been legitimised politically through the construction of tiers of governing – and exploring the ongoing political

discourses and power relations between the actors involved that serve to produce, reproduce or dissolve scalar discourses.

Second, and more fundamentally, it is important to note again that, while actions are not *necessarily* fixed at particular categorised scales, there may be functional approximations to the limits of different spheres of activity; most importantly a recognition that spatial engagement is intrinsically bound, and scaled, by physical space, which cannot be reduced to discursive arrangements. Although in physics space is no longer seen as having absolute qualities (Hugget and Hoefer, 2006), for humans the environmental differences between the Earth and the space that surrounds it, large stretches of water or mountains and human creations such as transportive technologies, houses or boundary walls work to limit the scale at which we operate. Finally, although Moore calls for an understanding not of what scale should be understood as meaning, but of how it is (discursively) *deployed*, he does not offer a suggestion as to what such a deployment might consist of: how one might differentiate between a scalar practice and a network practice, for example. This final issue is a point of exploration within this thesis, with an ongoing concern for analysing the different ways in which governing organisations interact with the space they seek to govern.

Towards a plural conception of space

The debates outlined above highlight some of the issues raised by Markusen's (1999; discussed in further depth in Chapter 6) 'fuzzy' concepts, and this is perhaps something that is unavoidable when discussing interrelated terms such as space, scale, territory, networks and place. There is an inevitable degree of crossover and even confusion between meanings. The works outlined above helped bring about a greater sensitivity to understanding scale as process rather than fixed relations; helping to create conceptions of 'scale-time', as well as pointing out the multiplicitous and messy nature of 'lived' scales. Nonetheless, in the initial 'Brenner-Marston' debate, the later 'scale or nothing' debate and the category-practice delineations of Moore, there have been a consistent creation of unhelpful, and at times false, dualisms. Mark Purcell's (2003) entreaty following the first scalar spat argues for a bridging of 'islands of practice' – which act in effect as professional silos – to allow for more holistic theoretical engagement with

spatial theory. This is taken on board more broadly here in approaching the project as necessarily engaging with plural schools of thought, conceptualisations and methodological disciplines. In the case of the debates above there is therefore a commitment to overcoming a number of the constructed dualisms and circular arguments presented.

With regard to Moore's argument for scales of practice, as opposed to scales of analysis, I have already outlined a brief case for tempering some of the claims made, but have sympathy with the general projects involved. In all, there is a need for 'porous' understanding of spatial formations – and more specifically here, regions – based on the confluence of political discourses, functional practice and theoretical analytics. I would also argue that despite Marston and colleagues' contention that networks and scales cannot be reconciled – and that scale is now an unhelpful, chaotic, concept – scale remains an essential ingredient in understanding spatial interactions, but only as one component amongst others: whilst the distinctions may often be blurred and overlapping, regions may be viewed as, for instance, places, spaces, territories, sites, networks, arenas *and* scales of action. It should be made clear that I would not be alone in this project: in this regard, some recent attempts have been made to achieve a more reflexive, plural, approach to more comprehensively theorising the 'mille-feuille' (Lefebvre, 1991 [1974]) of socio-spatial relations. For instance, Bulkeley (2005) attempted a dual theorisation of networks and scales, arguing that:

...insights on the politics of scale can provide a means through which to reconfigure notions of ... governance to create an approach which can be sensitive to processes of scaling and rescaling the objects and agents of governance, and the consequent political, social and environmental implications, whilst at the same time engaging with the politics of networks.

p897

In essence, Bulkeley argues that a straw man of hierarchical scalar theories is often drawn by network theorists and points to the ongoing importance of understanding the construction of scalar identities and related governing institutions: Moore's 'scalar practices'. This includes the political bounding of space, as well as the fact that networks are effectively scaled in both their spatial extent and the ways in which they are discursively framed. Although acknowledging differences between the ways in which network, territorial and scalar approaches to research are conceptualised,

Bulkeley states that “any polarisation of the debate into ‘scalar’ and ‘non-scalar’ perspectives should be avoided” (p888).

Plural spatial relations

Arguably somewhat belatedly but nonetheless offering a welcome contribution, Bob Jessop, Neil Brenner and Martin Jones (2008) have recently joined in explicitly outlining a plural, or polymorphous, approach to space, which they call TSPN (Territory, Scale, Place and Networks):

...we now question the privileging, in any form, of a single dimension of sociospatial processes, scalar or otherwise ... [instead] we argue for a more systematic recognition of polymorphy – the organisation of sociospatial relations in multiple forms and dimensions – in sociospatial theory.

p389

Antecedents of this may be seen in Brenner’s (2001) initial comments on the *limits to scale*, although these were more focused on precisely delineating scale as a useful analytical concept rather than developing a spatial ‘polymorphy’. This contains an important reminder of the role of analytical concepts in research:

Some readers may object that this methodological procedure imposes an arbitrary separation of distinct ‘dimensions’ of social spatiality that are in practice dialectically intertwined. Although this danger is admittedly a real one, I believe that it stems from certain unavoidable methodological dilemmas that accompany any exercise in theory construction. All forms of social theory, even the most avowedly poststructuralist approaches, necessarily involve the introduction and deployment of conceptual distinctions.

p593

A mere acknowledgement of the role of different spatial dimensions is not sufficient, however. Jessop, Brenner and Jones (2008) argue that there is a need to explicitly engage with each of the four outlined dimensions in order to effectively come to grips with the sociospatial relations in a particular context: sometimes the deployment of scalar hierarchies may prevail as key factors in a process; sometimes territorial competition and bordering processes; at other times network flows and interconnections; at others ‘place-making’ activities. More likely, each dimension will be involved; and a

rigorous understanding is only possible by engaging with each. The key is to avoid spatial ‘one-, or two-dimensionalism’. Costas Hadjimichalis (2006, p698), for instance, argues that the conceptualisation of space within ‘institutional’ new regionalist texts is overly territorial, invoking the notion of regions as analogous to firms. At the same time there is a tendency to understand a ‘flatter’ space, with networks and flows – of capital, knowledge, social relations and so on – as the more predominant lexicon, which can distance the role of scalar political processes such as hierarchical modes of state governing from economic action. Similarly, works on the ‘politics of scale’ and ‘re-scaling’ may exclude more complex network relations and/or the continuing importance of territorial discourses. Erik Swyngedouw (2004) characterises scalar configurations as either ‘regulatory orders’ *or* as network-based: in a more plural spatial lexicon these could be fleshed out discursively in various spatial ‘directions’ to understand, for example, that networks operate within and across different scales, different territories and are sited in various places.

The TSPN framework offers a seemingly common-sense way to view processes of spatialisation, taking as it does the four most prevalent conceptions of spatiality and attempting to combine them to give a more holistic overview. We are left then with a sense of different forms of – often overlapping – spatial practices, with different sets of political discourses helping to shape both the form and outcome, to which I will return in more detail in later chapters.

Levels of spatial relation

This approach is not without its critics, however. Edward Casey (2008) and Margrit Mayer (2008) both question the ‘limits to plurality’ as laid down by Jessop, Brenner and Jones (2008): in other words, “Is it necessarily the case there are just four leading dimensions of sociospatial relations?” (Casey, 2008 p403). Casey also asks questions of the supposed co-equal status of the different dimensions. Although Jessop *et al.* assert that some dimensions will be more important at different times than others, he argues, might not some be more important in general? Casey contends that place is the most important, and it “does so by virtue of being itself ingredient in the other three dimensions, structuring them from within” (p403). Although I disagree with Casey’s

specific point on place, in general these are valid sets of points, and worthy of exploration. I will return briefly to the issue of ‘the limits to plurality’ in Chapter 4 in exploring material spatial relations.

The issue of the status of different relations might also be framed through a more fundamental re-casting of this approach through exploration of the ‘level’ at which these four types of relation might be conceptualised. That is, not only are they different types of relation in themselves, but they are also composed of different forms of associations. At base, we might say that only networks – as conceived by Latour (1999; 2005) – may be said to unambiguously operate in the realm of ontological ‘existence’: in fact networks are a necessary factor of existence. Scale as a geographic concept is purely about relative distance, or size. In other words it is about the ordering of networks. Scales as categories are entirely constructed through practice, of relations between actors or networks (or actor-networks) that operate – by dint of different levels of resources – at a certain geographic scope, which often include discursive production of the notion of acting at a particular scale. Territory might be conceived similarly to scales as categories, in that it is about the practices of bordering and control over a particular network. Places, on the other hand, cannot be said to exist in the same way. They exist only in their naming and in essence are simply arbitrarily labelled networks, confluences of networks, scaled or bordered networks. The idea of place, therefore, is one of network relations discursively framed as something imbued with cultural *meaning* and one might therefore argue as a result that the framework would be better labelled TSN, although I will keep the P for reasons detailed below.

In this sense, networks provide the ‘base’ category of spatial formation and relations, with territorial and scalar processes sitting – figuratively speaking – ‘above’ this. They relate to processes involving networks, rather than separate from them; that is, the bordering and ordering of networks. The idea of place sits a further step removed from the ‘real’, as it is produced discursively through the bordering, ordering and confluence of networks.

In the analysis sections of this thesis, this framework is utilised in two ways. First, it is used as a way of analysing relationships between actors, and second, to analyse practices that attempt to discursively frame space, and work towards building particular

types of relationships between actors. In the former, the emphasis is on relations within a provisionally bordered network (regional governing actors and organisations) and scalar practices between national, regional and local actors; territorial processes may be important, but were not foremost in the range of issues presented through the research. In the latter, the full TSPN model is used to highlight sets of discursive practices and it is in this understanding that place retains importance; it is in fact perhaps the category that is most discursively imbued with meaning of the four. I will turn briefly now to the latter, before following this up in further depth in the following chapter, relating specifically to the practices of 'region building' in England.

Region-building

In attempting to construct a new political space, the issue of spatial conceptions moves towards building a shared discourse around a 'logical' space of governing: that is, legitimising the introduction of governing actors by building a spatial narrative supporting the pertinence of, say, 'the region'. In this process, the TSPN model can be 'flattened' once more: the key is to be discursively accepted; other conceptualisations become only important in deconstructing these discourses and in analysing the outcome of the narrative process. Keeping with the same four 'core' spatial concepts, the theoretical 'model' region might therefore be understood as requiring successful legitimisation of the following forms of spatial relationship:

- (a) A cohesive *place*, a discursive belief in shared – and in some way unique – community values and heritage, or a 'critical mass' of network connections or confluences.
- (b) The region as *territory*: this could be reducible simply to economic competition; or to more basic issues relating to land 'ownership' including statutory and legal definitions.
- (c) A natural, or functional, *scale* of relations that also relates to other scales of relations.
- (d) Possessing strong internal *networks* bound by (a), (b) and (c).

This, however, requires a second form of legitimisation in order to make the leap to constructing a political institutional fix. At this point spatial concepts are no longer

sufficient and a need to engage in the discourse of governance and power becomes clear. This will be explored in further depth later, but it is worth noting now that in order for political space to become successfully ‘legitimate’ there is a concomitant desired aim of creating an understanding that new political institutions provide:

(e) Adequate *representation* of the values/needs of the cohesive space outlined above, as well as of governing institutions with influence over wider spatial scales.

(f) Sufficient resource *autonomy* to potentially carry out (a) into specific actions

Crucially though, in addition, there should be an understanding that regionally oriented institutions also provide:

(g) *Accountability* to the actors and institutions represented by a governing organisation.

Regional fixes are inserted to a multi-level governing framework in which the region acts at a spatial level between not just local political institutions, but also – most importantly – national government, as well as supra-national governing institutions, who possess the resources to influence the creation and actions of regional institutions.

The above represent routes to discursive ‘input’ legitimacy for regional institutions. Output legitimacy is also desirable for the model region; that is there needs to be:

(h) *Competent* translation of (e), (f) and (g) into specific actions

Whilst desirable, the confluence of these inputs and outputs is not *necessary* for the institutionalisation of regions, and neither should the spatial inputs be seen as necessarily preceding the creation of institutions. Indeed, the presence of new institutions with an arbitrarily defined spatial influence may precede the existence of spatial conditions, and may be involved in their development. As such, attempting to discursively frame regions and their institutions as being representative of these ideals is a continuing project for political actors, as is explored in more detail in the later analytical chapters.

Conclusion

This opening theoretical chapter set out an exploration of some underlying understandings of space in itself, with an exposition of space as fundamentally relational, plural and ever-changing. This should be tempered with notions of relative fixity, however, and remembering spatial and temporal constraints that, for example, humans are faced with, which effectively work to fix and scale certain aspects of space. These ideas were then applied in outlining conceptions of different types of spatial formation, or relations. The TSPN framework offers a starting point in exploring spatial relations, but needs further fleshing out to reveal the multi-layered nature of these conceptions: in doing so, networks become understood as the ‘bedrock’ of spatial formations, with other conceptions layering – and interlinking – upon this base. This is important only in so far as analysing relationships between actors and networks, however. In analysing discursive strategies through a TSPN lens the layering becomes flat once more.

In the following chapters it should be clear that there is a continuation of others’ concern for spatial institutional relations in the governing process: a second set of issues also come to light here, with the dominant neoliberal economic ‘imperative’ and the politics of scale also strongly shaping the ways in which regional organisations develop alternative policies. A spatial lexicon of governing will continue to be used in what follows, but it is important to note that this should not be confused with a reification of space as a way of explaining society. Instead then, terminologies of spatial relations are used to identify discursive constructions of power; the ways in which power is exercised by governing institutions; and as referents to particular forms of institutional relations. The spatiality of these relations does not in itself mean anything; more precisely it is the concentration and mobilisation of resources at certain points in the process of spatial governing that matter.

In theorising the discursive process of ‘region building’ it is important to make explicit reference to the role that governing legitimacies – for instance, accountability, autonomy, representation and competency – can play in strengthening, or building, ties. Chapter 5 returns to these issues and develops a more comprehensive framework for theorising and analysing governing practices, but Chapter 3, next, begins to draw out

some of the themes discussed here in reviewing the process of constructing regional institutional arrangements in England. This explores the rise of a Western European and North American academic and political ‘discourse hegemony’ (Lagendijk, 2007) around the region as an important point of spatial organisation and the construction of regional governing organisations in line with this. In doing so, this also serves to shed further light on the issues explored in this chapter, as well as develop the context for the ensuing account of the empirical research.

The previous chapter was concerned with regions as conceptual entities; leading towards a view of regions as particular forms of temporal-spatial fixes, constituted through a number of heterogeneous spatial practices. The key concern of this research, however, is of regions as political spaces within a framework of spatial governing. In this form, regions are first and foremost political – often arbitrary – constructions which may not, initially at least, be based on existing spatial ‘legitimacies’. In this case it becomes the role of political actors to build a ‘regional discourse’ through governing practices.

The ‘model’ region at the end of the previous chapter framed governing and spatial legitimacy largely in terms of how relations between actors within a region might be constituted. In this chapter, the discussion moves to an account of the English regions in terms of attempts by various actors to seek to achieve these forms of legitimacy through different spatial practices, with an emphasis on the discursive developments that led to the (re-)emergence of ‘institutionalised’ regions in the 1990s.

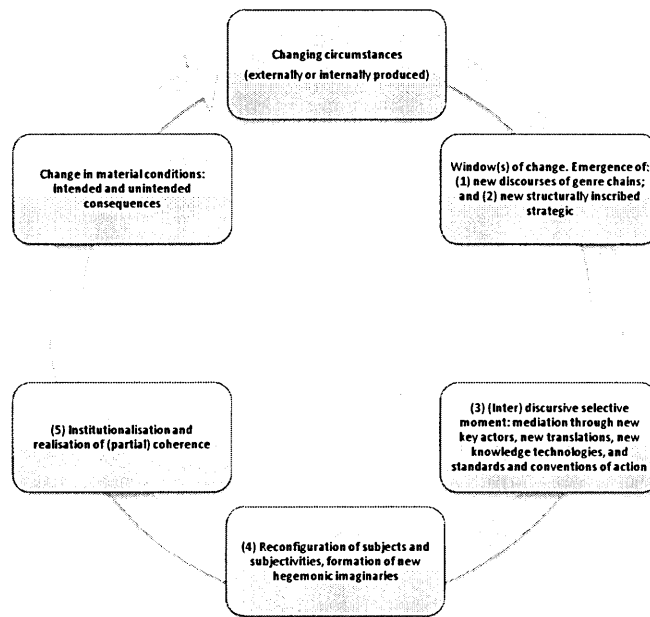
Arnoud Lagendijk’s (2007) ‘production of discourse hegemony’ approach is employed here to explore the roots, rise and re-opening of the region as a ‘hegemonic discourse’ in England. This included the coalescence of various different political discourses to develop a potentially ‘uneasy coalition’ of rationales. The last major staging point in this process came in the move towards re-constructing the regions following the 2007 *Review of Sub-national Economic Development and Regeneration* (Sub-National Review, SNR; HM Treasury, 2007). The election of the Conservative-Liberal Democrat Coalition government in June 2010 brought an end to the ‘regional project’. The layering of particular policy doctrines based around “vulgar” ‘new regionalist’ economic theories (Lovering, 1999), on to regional divisions that initially were largely developed from a pragmatic desire to co-ordinate planning and modernise the delivery of sub-national governmental programmes, leads to a notion of the English regions as

‘chaotic constructs’, which have suffered from a lack of discursive spatial or governing legitimacy.

Constructing the Region

The creation of a new regional space of governing involves a process of ‘region-building’: in other words employing strategies with the aim of ensuring that regions are discursively accepted as a legitimate governing space. With this in mind, turning to Arnoud Lagendijk’s (2007) work on the rise of regions in academic and political thinking is helpful; not least in emphasising the role of discourse hegemony and political power relationships in determining the construction of regions as institutional spaces. In doing so, Lagendijk builds on the work of Ngai-Ling Sum (2004) on the ‘production of hegemony’: in this case used to demonstrate the rise of the institutionalised region in Europe. This focuses on moments at which periods of gradual change, characterised by path-dependency, “are punctuated by moments at which paths may change”, where “‘counter-hegemonic’ discourses and practices might cause new imaginaries to take priority, power relations to be overturned, and new forms to emerge” (Lagendijk, 2007 p1197). Lagendijk uses Sum’s five stages of the production of hegemony, as reproduced in Figure 1, below:

Figure 1: The Production of Hegemony



Source: Lagendijk (2007), adapted from Sum (2004)

A number of ‘windows of change’ in the 1980s and ‘90s are outlined by Lagendijk, which began the process of region building in Western Europe and North America. These include, firstly, the emergence of the post- or after-fordist economy and new regulatory approaches based around institutional and re-scaling debates centred on ‘the new regionalism’. These approaches generally espoused different variants of the spatial inputs outlined above, and aimed to develop ways of harnessing these forces through securing governing legitimacies. A second ‘window’ is identified in changes to governmental practices: in particular in seeking ‘modernising’ responses to problems of coordination and control in light of a greatly expanded state since the Second World War. This includes the alignment of European funding regimes at regional levels and the ‘Europeanisation’ (cf. Benz and Eberlein, 1999; Gualini, 2006) of governance. Finally, Lagendijk points to the cultural-political development of various regional movements based on territorial identity and difference, representing longer running ‘old regionalisms’ and ‘regional nationalisms’ (cf. Mackintosh, 1968).

Each of the 15 pre-2005 EU States had some form of regional governing settlement, ranging from the long-standing federal arrangements of Germany and (dysfunctional)

Belgium, to the regionalised states of Spain, Italy and France, and the two arbitrary administrative boundaries of the Republic of Ireland. The UK moved from operating as a unitary state in 1994 to one with mixed-level or asymmetric devolution between ‘nations’ and regions by the end of the decade. Each of these structures reflects different internal economic, cultural and political arguments surrounding territorial identities, the role of the nation-state and economic development rationalities.

This gives an idea of how regions developed as discursive policy solutions in Western Europe, and some of the outcomes, but in order to follow these processes through to the construction of specific regional institutional arrangements – that is, examining what Jessop, Brenner and Jones (2008) might term the concrete-complex issues – I will now turn to the case of the English regions. What emerges is a slightly more complicated situation; in particular showing that discursive constructions are not necessarily successful and do not often follow a straight-forward path to hegemonic status, nor are they necessarily consolidated in stable institutional fixes. Essentially, if these fixes are contested in their conception, they will equally be contested in their implementation and consequent development.

In order to explore the specifics of the construction of the English regions, it is important first to devote some time to exploring the development of dominant trends in academic and political regional discourses: in particular those of ‘new’ and ‘old’ regionalism against the ‘pragmatic’ regionalist tendencies of central government in the UK. As will become clear below, the majority of recent empirical, theoretical and normative work has focused on regions as *economic* spaces, most notably through the loosely connected body of work collectively comprising the ‘new regionalism’.

The region as a territorial place: ‘old’ regionalisms

Arguments for devolution and regionally based governing institutions in the UK are by no means a new phenomenon. In fact, regionalism has been present in varying forms and varying degrees of prominence since the end of World War II and the inception of the welfare state. Regionalist texts of the 1960s focused on the UK as a semi-planned economy, in particular focusing on the re-scaling of service management. For instance,

Mackintosh (1968) debated devolving planning of utilities and certain functions of the NHS and education to a regional level, transport and planning at the city-region level, with local authorities retaining control of municipal planning and management. The 1970s saw a re-emergence of secessionist movements from the peripheral UK nations and/or regions (Scotland, Wales, Cornwall), which formed the basis for many of the cultural and democratic devolution movements of the last 30 years. The heavily centralised governmental policy of the 1980s meant that the regions were off the agenda from a policy perspective in the UK, but the 'two-nation' politics brought increasing concern from commentators, particular with regard to the UK's peripheral regions and the 'north-south divide' (*cf.* Martin, 1988). That said, uneven economic development between regions has long led to arguments for intervention through both redistribution of state function and funding (see Massey, 1984; Amin, Massey and Thrift, 2003) and also provided the basis for regional interventions since the dawn of the welfare state. Alongside these arguments, a political movement towards European integration during this period brought the notion of the "Europe of regions" to the fore, before the early to mid-1990s returned issues of devolution to policy. These sets of arguments may be said to have been instrumental in the devolution of resources (although not necessarily in terms of finances) to Scotland and Wales in the UK in 1998, following referenda.

The region as a competitive territory: new regionalism

The late 1990s saw the birth of this renewed interest in regions as economic and political spaces, based primarily around shifts in economic thinking towards a more spatially orientated, institutional, approach, and a concern for the future of the nation-state in the face of the apparently relentless forces of globalisation. A range of commentators in the late 1990s, including Michael Keating (1998), Ash Amin (1999), Martin Jones and Gordon MacLeod (1999), Phillip Allmendinger and Mark Tewdwr-Jones (2000), Ian Deas and Kevin Ward (2000), and John Tomaney (2002) heralded a new regionalism in academic inquiry and political discourse.¹³ The new regionalism thus rapidly gained currency as shorthand for describing the work of various scholars, mainly based in North America and Western Europe, who highlighted the significance

¹³ The earliest found citing of the term 'new regionalism' is that of *Robin Murray* (1992, "Europe and the new regionalism")

of the region as an effective arena for situating the institutions of after-Fordist economic governance (MacLeod, 2001).

Taken as a whole, this trend in academic and political thought is described succinctly by John Harrison (2006a p25) as “the trial and error search for the best socio-spatial fix for advanced capitalism”. It is, nonetheless, important to note that those labelled as sitting within the new regionalist canon are many and varied in their contributions.¹⁴ As a starting point, however, the literature can be split into categories that follow two dominant trends: that which focuses on the importance of institutions and ‘non-economic economics’; and that which focuses on ideas of ‘territorial re-scaling’.

Institutions and non-economic economics

The first new regionalist strand revolves around the evolution of ‘new institutionalism’ (cf. Amin, 1999), drawing particularly on work around agglomeration economies, flexible specialization, cooperative competition and the knowledge economy.¹⁵ This is described by Lagendijk (1997, p1) as “a new orthodoxy built around an emphasis on the region, networking and resource-orientation”, in particular that “knowledge is the most strategic resource and learning the most important process” (*ibid.*). These drew heavily on the work of Michael Porter (1998) on economic clustering, Robert Putnam (1993) on social capital, Richard Florida (1995) on learning regions and Michael Storper’s (1995) accounts of the “wealth of regions” (with Scott, 1995) and regional competitiveness. Such works are typified by statements such as that of MacLeod (2001):

Amid the protracted struggle to configure an after-Fordist regime, many of the advanced industrial countries are experiencing a renaissance of cities and regions ... a range of high-profile regional economies and urban metropolises appear to be surging ahead in the race to be leading motors of wealth creation.

Ibid., p808

¹⁴ Taking in as it does debates from economic, cultural and social geography, as well as political science; covering concepts such as cluster theory, learning regions, institutional thickness, globalisation, territorial re-scaling; including perspectives from both the political ‘left’ and ‘right’, as well as a range of differing spatial conceptions of the region.

¹⁵ Each of which are critiqued as, or constituting part of, ‘fuzzy concepts’ by Ann Markusen (1999)

From a governing perspective the focus is on “existing skills, industries and, above all, relationships; endogenous growth and development instead of inward investment ... and boosting supply-side economic measures” (Sandford, 2005 p26). Central to these theories is the importance of non-economic factors in economic success, particularly knowledge and practices that are not fully codifiable; of ‘untraded interdependencies’ (Storper, 1995) within a new, reflexive capitalism where sharing and networking of information is replacing market-based competition.

Despite the attempts in these works to bring about a more nuanced economic geography, a number of relatively wide-ranging critiques have arisen. A line of attack focusing on the conceptual foundations of the ‘knowledge cluster’ approach has provided a rich vein of material for even those ‘sympathetic’ to the cause (*cf.* MacLeod, 2001; Harrison, 2006a; Hadjimichalis, 2006) as well as those seemingly not (*cf.* Lovering, 1999; Markusen, 1999). These include a belief that the importance of non-economic factors has been embraced to the extent that the primary economic motors of capitalism are marginalised (Hadjimichalis, 2006), with critical concepts de-politicised and ‘de-economised’. Understandings of social capital, trust and reciprocity are also heavily critiqued, including a failure to take into account path-dependency and historical factors in achieving success (Harrison, 2006a; Cooke, 1997; Morgan, 1997; Cooke and Morgan, 1998) and even an attack on Putnam’s original conceptualisation of social capital (Hadjimichalis, 2006); in particular that it is approached as a benign, apolitical concept, with a consequent conflation of correlation and causation in making an *a priori* assumption that community solidarity tends to lead to economic growth. A further criticism centres on a selective use of empirical evidence – for instance, the Emilia-Romagna region of Italy is often cited as a replicable new regionalist success story, while less successful regions are ignored – which also highlights the paradox of replicating seemingly space-dependent non-codifiable processes elsewhere.

Territorial Re-scaling

An allied body of work is that based around an analysis of ‘territorial re-scaling’ and a concern for changing spatial forms of governance. This is perhaps most easily understood through the contention by scholars (*cf.* Brenner, 1999; 2001; Jessop, 1997;

2005) that changes in the organisation of capital have brought about significant transformations of scale, territory and governance; in particular re-examining the role of the nation state amid claims that “scholars and politicians began to suggest that it was now too small to solve the world’s big problems and too big to solve its little ones” (Jessop, 2005 p13), or as Enrico Gualini (2006) puts it:

Changes in the world order have challenged regional integration and inter-governmental theories based on the centrality of the nation state as primary unit of analysis. Debate on “globalization” of the economy has highlighted new relationships between sociospatial and economic phenomena and pointed to the challenges of governance “beyond the nation state”.

Ibid., p882

There were concerns regarding the ability of the nation state to effectively manage and regulate its territory, particularly in terms of the economy, with global forces eroding space in one direction and re-forming as localised constellations at a (city-) regional level. Andrew Herod and Melissa Wright (2002) cite the re-scaling of territories as a method for dealing with this problem, by situating governance closer to the actual sites of production. In relation to this Allen Scott *et al.* (2001) state that:

There are many institutional experiments now under way that are leading in the direction of a new social and political organization of space. This new organization consists above all of a hierarchy of interpenetrating territorial scales of economic activity and governance relations, ranging from the global to the local.

p1

Both institutional and re-scaling literatures identify with a changing economic system brought about by the intensification of globalisation. However, while institutional variants of the new regionalism focus on a seemingly neoliberal system of economy, literatures based around re-scaling take an approach that focuses on the regulation of the economy, seeing the region as a new spatial fix to control and shape societal processes.

A particular point of debate surrounding re-scaling approaches is the lack of consideration to the way in which the region relates to other scales of governing, in particular its relation to the nation state. John Harrison (2006a) argues that the demise of the state has been overplayed in political analyses, with Bob Jessop’s ‘hollowing-out’ thesis (see, for example, 1998) being a case in point, although Erik Swyngedouw’s

(2004) more overtly political notion of ‘glocalisation’ may be similarly accused. He points to MacLeod’s (2001) assertion that we are instead seeing a process of geographical ‘filling-in’ with the state enhancing its capacity – rather than its size – by creating different scales of intervention. Similarly, Barry Goodchild and Paul Hickman (2006) talk of ‘de-concentration’ of state apparatus. In fairness, Jessop’s more recent work (for example, 2005) has included a number of caveats to the hollowing-out concept, emphasising the fact that resources remain in the control of a centralised state and that welfare-state institutions are still largely centrally controlled. Similarly, Kevin Cox (2002) suggests that the separation of state from capital evident in re-scaling approaches ignores the role of states in constructing globalisation and even exaggerating its effects for their own purposes; the assumption has been that the nation-state has been undermined by oppositional capital, rather than as a player in its own ‘downfall’. ¹⁶

On a related issue, Harrison (2006a) suggests that the new regionalism in general is characterised by a degree of conceptual fuzziness - in particular in approaches to scale - and MacLeod (2001 p435) highlights “the perennial enigma surrounding any definition of ‘the region’”. This criticism can be aimed at both institutional and re-scaling strands, and is particularly problematic when combining the two to consider the new regionalism as a ‘movement’. Perhaps the main problem here is the variety of research questions being posed in relation to the region. For example, the region might be seen as a sub-national administrative unit; urban-metropolitan agglomeration formed out of political economic independence; or culturally defined ‘old’ regions such as Cornwall, the Basque Country or Sardinia: MacLeod (*ibid.*) asserts that researchers must be unambiguous in defining the scale and context of their inquiry.

Policy outcomes: pragmatic regionalism?

Taking a step further to look at the actualisation of these discourses in the institutionalisation of the English regions, we can see how the three identified regionalisms have played a part in the process, but in particular the – often under-

¹⁶ See also Andrew Gamble (2002) on the ‘politics of fate’.

acknowledged – role of pragmatic ‘modernising’ policies. As Sandford (2005, pp34-35) argues, moves towards regional governance structures were initially:

...justified and defended on grounds of efficiency and administration grounds ... not on the basis of any territorial identity ... Regions came into being not as part of a drive towards decentralised decision-making or political involvement at the sub-national level, but through a desire for a more efficient structure of central administration.

In 2007 there were three statutory regional bodies operating in each of the eight administrative regions in England: a regional Government Office, a Regional Development Agency and a Regional Assembly, as shown in Table 1.¹⁷

¹⁷ London is excluded here as it is geographically and administratively different from the eight other regions. It is a city or city-region in itself, and administratively had different resources and structures, including an elected mayor.

Table 1: Statutory Regional Actors in England (excluding London)

Agency	Created	Core Functions	Average Annual Expenditure
<i>Government Offices for Regions</i> ('Whitehall in the regions')	1994	Management of EU Structural Funds Management of SRB funds (up to 1999) Efficiency and modernisation in local government	£805m (2003/4) ¹⁸
<i>Regional Development Agencies</i> (Quangos)	1998/9	Management of SRB, later 'Single Pot' funds (1999 onwards) Delivery of 'strategic' economic development and regeneration (inc. European programmes) Co-ordination of inward investment	£239m (2007/8) ¹⁹
<i>Regional Assemblies</i> (LA elected members and 'SEEPs' ²⁰)	1998/9	Regional Planning body Scrutiny of RDAs Development of regional 'partnership-working'	3.6m (2004/5) ²¹

The introduction of Government Offices for the Regions (GORs) by the Major Government in 1994 was a largely pragmatic reaction to a small range of key pressures. Insistence from the EU on co-ordinated regional strategic planning for allocation of European Structural Funds provided a major catalyst, alongside the launch of the Single Regeneration Budget (SRB) as a means of co-ordinating a number of previously separate programmes (Mawson and Spencer, 1997; Bache and Jones, 2000).²² Similarly, there were perceived efficiency gains from more effectively co-ordinating the sub-national activities of governmental departments. Initially this encompassed the then departments for Trade and Industry; Employment; Transport; and Environment. This

¹⁸ Source: Pearce, Mawson and Ayres (2008). Includes management of EU structural funds: falls to £676m when this is excluded.

¹⁹ Source: Pearce and Ayres (2009)

²⁰ Social, Economic and Environmental Partners

²¹ Source: Pearce and Ayres (2007)

²² Structural Funds are made up of three funding streams: the European Regional Development Fund (ERDF), European Social Fund (ESF) and European Agricultural Guidance and Guarantee Fund (EAGGF).

was followed by the inclusion of the department for Education when it merged with Employment (DfEE) in 1995.

Moving ahead three years, by which time the New Labour Government had swept to power, the regional agenda had moved on. The 1997 New Labour manifesto included a commitment to the inception of Regional Development Agencies (RDAs). This was formalised in the 1997 White Paper *Building Partnerships for Prosperity*, which set out the Government's intentions in this regard. While the pragmatic emphasis on modernising governance continued, a different approach to that of the previous government is clear. In particular, new regionalist economic agendas were prominent, and indeed can be seen to be already embedded within policy discourse: 'regional economies' are referred to throughout the 1997 White Paper, assuming no need for explanation, which relates to new institutionalist thinking in implicitly suggesting that business-led public institutions at the administrative regional level will enhance and develop institutionally thick learning regions. This is compounded with continued emphasis on regional competitiveness, in particular the role of RDAs in marketing the regions and encouraging inward investment.

Up to 2007, the new regionalism had been most influential in the subsequent regional policy prescriptions rather than in the impetus towards institutionalised regions (Sandford, 2005): RDAs uniformly adopted 'cluster' policies, advanced the idea of 'learning regions' in their mission statements and attempted to brand regions as competitive territorial units. These discourses even comprehensively enveloped day-to-day practice: whilst working for a sub-regional regeneration agency, it was routine for my colleagues to refer to "[The Region] PLC". An essential problem here is that the normative and prescriptive approaches that thread through institutional and re-scaling literature were simply dropped into a pre-existing administrative 'fix': quite against the 'ideal' approach to the model region that these approaches would prescribe.

Proponents of 'old' regionalisms were a persistent, if marginal, voice throughout the 20th century – and up to the present day – but had little political exposure, and only a modicum of influence on government policy: there has been no increase in fiscal

redistribution across the country and relatively little decentralisation of resources.²³ Even the 1997 RDA White Paper, signed off by then Deputy Prime Minister John Prescott – a key proponent of regionalisation – is relatively quiet on these issues. The White Paper and the subsequent Regional Development Agencies Act (1998) emphasise that no additional fiscal transfer to the regions would in fact take place.

The development of formalised Regional Chambers – incorporated in 1999 – as representative bodies for local authorities and representatives of other sectors could be seen as a concession towards these pressures. However, these may be more accurately understood as part of wider governmental programmes. These included a programme of modernisation and ‘partnership’ governance. At the same time, the government were attempting to find a solution to the ‘English Question’ exacerbated by the creation of devolved administrations for Wales and Scotland alongside the eventual re-opening of Stormont in Northern Ireland. These Chambers, later renamed Assemblies, were designed to inject a degree of democratic accountability into the institutionalised regions, starting with local authority and regional ‘stakeholder’ engagement, with plans for directly elected members at a later date. While Regional Assemblies’ ambit included scrutiny of RDAs’ operations, their other core function was to oversee regional planning: again a distinctly pragmatic, strategic role.

In cases where there were genuine identity-based calls for regional autonomy, these were either spatially different to the administrative regions - for example, Cornwall in the South West region - or have proved to be less cohesive than imagined by academic and political elites: as was arguably the case in the North East in light of the failed referendum on an elected regional assembly in 2004. On the other hand, one form of ‘organic’ regionalism may be seen in the tendency in English regions for local authorities to form their own regional chambers and policy organisation (Tomaney, 2000), even during the 1980s, when central government’s interest in the regions was ambivalent at best. These have not always been involved in the regionalisation of central government, however, and in various regions - for example, Yorkshire and Humber and the North East - regional local government networks to some extent opted out of the Regional Assemblies designed to give them a voice.

²³ In fact, between 1999 and 2008, the only region to receive an relative increase in public expenditure was London (National Statistics / HM Treasury, 2004 and 2008)

In contrast to the model region outlined in Chapter 2, the English regions were given input legitimacy through centralised rationales. Beyond a largely unreflexive notion of regions as scalar links between local and national government, spatial inputs were largely absent; the bordering of English regions has been largely arbitrarily based on administrative divisions created in the Second World War following the Barlow report (1940): “Like watermarks on paper, throughout the twentieth century a pattern of eight to twelve regions have been used again and again as an off-the-shelf solution” (Sandford, 2005 p14). This is referred to by Harrison (2008) as “centrally orchestrated regionalism”, which has “resulted in a noose being placed around the neck of successive attempts to address England’s longstanding regional ‘problem’” (p3). This reflects the fact that regions have been constituted by central governments reluctant to accede any substantive powers to regional institutions, and also, given that the core problem has been framed around uneven development, the insistence on treating each region the same. In returning to debates on territorial re-scaling, this process may be more accurately described as a process of ‘deconcentration’ or ‘filling-in’ of the state, than by the hollowing-out thesis; although the influence of EU funding structures in this process act as a reminder of multi-level governing processes. This arguably has ramifications for regions’ abilities to successfully pursue their own agendas and develop unique ‘policy regionalisms’:

[R]egional strategy-making and project development only represents a fragment in a much wider ‘policy space’ ... which subjects them to additional sets of constraints and interdependencies.

Lagendijk, 2007 p1203

In this sense the pre-2007 regional settlement represented pragmatic regionalisation, overlaid with various confused and potentially conflicting policy prescriptions based on various forms of new regionalist thinking, with an exaggerated sense of the existence of ‘old’ cultural regionalisms within the regions.

As noted, the introduction of a regional tier of governing was in part designed to reduce inter-regional inequalities in the UK through ‘bottom-up’ growth and more targeted redistributive spending. Indeed, government Public Service Agreement (PSA) targets for RDAs included the following:

[1] Make sustainable improvements in the economic performance of all English regions by 2008, and [2] over the long term reduce the persistent gap in growth rates between the regions, demonstrating progress by 2006.

BERR, 2004

The two elements are vaguely paradoxical when taken together, reflective once more of the confused political thinking behind the English regions. Nonetheless, as an indication of the impact of regional structures, Tables 2 and 3 are helpful in displaying progress on these two targets in turn. The data has been split to cover three periods: 1989-1994, prior to the introduction of regional structures; 1994-1998, following the introduction of Government Offices; and 1998-2008, following the introduction of RDAs and Regional Assemblies.

Table 2, overleaf, shows the mean yearly growth for each of the English regions. They can be seen to have all achieved a mean growth level of above one per cent over the period in which RDAs operated. However, growth between 1998 and 2008 was not markedly higher than across the whole period, with Yorkshire and the Humber, West Midlands and the South East all achieving a lower rate of growth than in the period 1989-98. In relation to the second element of the PSA target – to reduce inter-regional inequalities – the difference in the rates of growth for the ‘Greater South East’ (2.3%) and the ‘North, Midlands and West’ (1.5%) suggest a failure to do so.

Table 2: Inflation Adjusted Mean Yearly Growth for English Regions

<i>Region</i>	<i>Inflation Adjusted Mean Yearly Growth (%)</i>			
	<i>1989-94</i>	<i>1994-98</i>	<i>1998-08</i>	<i>1989-08</i>
North East	1.0%	1.7%	1.7%	1.5%
North West	0.9%	2.3%	1.6%	1.6%
Yorkshire & the Humber	0.8%	2.9%	1.4%	1.5%
East Midlands	0.7%	2.5%	1.5%	1.5%
West Midlands	1.1%	2.8%	1.2%	1.5%
East of England	1.1%	2.8%	2.0%	1.9%
London	0.8%	3.6%	2.6%	2.4%
South East	1.5%	3.8%	2.0%	2.2%
South West	1.0%	3.1%	1.9%	1.9%
<i>Greater South East</i>	<i>1.1%</i>	<i>3.5%</i>	<i>2.3%</i>	<i>2.2%</i>
<i>North, Midlands & West</i>	<i>0.9%</i>	<i>2.6%</i>	<i>1.5%</i>	<i>1.6%</i>
<i>England</i>	<i>1.0%</i>	<i>3.1%</i>	<i>1.9%</i>	<i>1.9%</i>

Nb. Growth based on Growth Value Added (GVA) per capita

Source: BIS (2010)

Table 3 explores inter-regional inequalities further, in showing relative changes in Gross Value Added (GVA) per capita by region against a UK baseline. Relative GVA for all six of the regions in the North, Midlands and West (NMW) fell over this period, while the East of England, South East and London all rose. GVA for each of the NMW regions had also fallen relative to the rest of the UK in the period 1989-1998, but for Yorkshire and the Humber, East Midlands, West Midlands and South West, this decline accelerated in the latter period.

Table 3: Relative change in workplace GVA per capita 1989-2008

<i>Region</i>	<i>Relative Change</i>				
	<i>Baseline</i>	<i>1989-94</i>	<i>1994-98</i>	<i>1998-2008</i>	<i>1989-2008</i>
North East	83.5	-0.30	-4.05	-1.69	-6.04
North West	91.3	-0.84	-2.21	-2.72	-5.76
Yorkshire & the Humber	89.5	-1.15	-0.10	-4.95	-6.20
East Midlands	94.9	-1.84	-1.49	-3.66	-6.99
West Midlands	91.8	0.19	-0.51	-6.36	-6.68
East of England	95.3	-0.17	-0.66	0.41	-0.42
London	156.9	-2.31	4.06	10.85	12.60
South East	100.2	1.96	3.43	0.13	5.52
South West	91.9	-0.39	0.49	-0.47	-0.37
England	102.3	-0.41	0.59	0.00	0.17
Wales	84.5	-1.39	-4.59	-4.22	-10.20
Scotland	96.0	3.14	-3.47	2.22	1.89
Northern Ireland	72.9	4.99	1.35	-0.33	6.01
United Kingdom	100.0	0	0	0	0

Note: change calculated based on an indexed baseline (1989), where UK mean = 100

Source: BIS (2010)

While these tables take no account of added value or additionality, they do suggest that ultimately the regional structures did not bring about the core change that they were charged with achieving. Attempts have been made to carry out a more nuanced analysis of regional impacts, but – as noted by Grahame Pearce and Sarah Ayres (2009) – deficiencies in the data available have made this difficult. They cite the English RDAs:

The overall contribution of RDAs to regional economic performance and their influence on the macro-economy requires further quantification and is hard to assess at this stage ... The evaluation evidence which would assist this quantification is currently scarce

England's RDAs, 2006 pi cited in Pearce and Ayres, 2009 p545

Similarly, BERR's 2009 report *Impact of RDA Spending* was unable to quantify the additional benefits of RDAs; instead measuring only the crude benefits accrued by their spending. On the other hand, the point of having regional structures – from the 'endogenous growth' perspective – was not simply to spend money. In fact, combined

RDA expenditure was just £2.3 billion in 2006/7, compared to £402.2 billion central governmental expenditure for the same year. RDAs were also designed to develop ‘institutionally thick’ agglomerations, the effects of which are harder to pin down. Although not related specifically to economic growth, the analysis in Chapters 9 and 10 touch upon this issue.

Re-constructing the regions

The initial chaotic construction of the regions was partially borne out in the continual ‘fiddling’ with regional structures right from their conception. Aside from the major institutional developments, regional structures were subject to a number of centrally-led reforms between 1998 and 2007, culminating in the *Review of Sub-national Economic Development and Regeneration* (2007). Government Offices underwent various reviews and reforms (Pearce, Mawson and Ayres, 2008; *cf.* Cabinet Office, 2000; HM Treasury and Cabinet Office, 2004); the last being the 2006 *Review of Government Offices*. RDAs were not completely overhauled, but did undergo ongoing organisational and functional tweaks, and when considered in conjunction with Regional Assemblies a range of policy documents were released by a number of government departments (*cf.* DETR, 2001; Cabinet Office and DETR, 2002; ODPM, 2004a). In 2004 a referendum was held in the North East to determine whether an elected Regional Assembly would be created in the region. The resulting ‘No’ vote sent the whole ‘regional agenda’ into crisis and brought into stark focus the lack of spatial and governing ‘input’ legitimacy in regional governance; and perhaps also, a lack of public belief in the ‘output’ legitimacy of regional organisations.²⁴ This lack of internal legitimacy may also be seen as a driver for the continuing debates over a regional settlement for England in between institutional changes over the period 1999-2009; although, as with the creation of regional institutions it is important to stress the importance of a pragmatic ‘co-ordination’ agenda in the continuing review and reform.

²⁴ The unpopularity of the New Labour government at the time also hindered the debate for regional democracy. Action within a shorter period of the election in 1997 when there was widespread goodwill towards the new government may have swayed the argument in the other direction: for instance when France underwent regionalisation in 1982, this was taken forward within a year of the election of Francois Mitterrand, who viewed this as a key political project. By way of contrast, New Labour’s hesitancy on the issue also reflected a degree of uncertainty or ambivalence towards ‘the regional project’.

The 2004 referendum also arguably led to the opening of a new ‘window of change’ in English regional policy, to which I will now briefly turn. The proposed ‘institutionally thick’ ‘knowledge’ or ‘learning’ regions discussed in much of the foundational new regionalist literatures were becoming more linked with the city-region approach to regions rather than the larger administrative regions previously in place in England. One might argue that some academics had been applying these arguments to established administrative regions without considering the various spatial factors that might determine a ideal-type region and that the shift to city-regionalisms was simply another attempt to make these arguments ‘fit’ geographically.²⁵ John Harrison (2006a) argues that this was a key stumbling block for the new-regionalism; in particular that those working from an economic geography perspective have taken regions as particular urban economic agglomerations, while the more regulation-based accounts tend to characterise regions as sub-national territorial ‘units’. Economic geographical accounts have tended further towards an analysis of the city-region in recent years, with a concomitant turn towards policy networks based on city-regions – for example, the Core Cities and Eurocities networks – which have also filtered through to policy approaches.

The Core Cities group – established in 1994 – was particularly strident in its claims for greater focus on England’s major cities in sub-national economic policy.²⁶ This was also reflected in a range of reports produced by ODPM, later CLG, including *Competitive European Cities* (Parkinson *et al.*, 2004); *Our cities are back* (2004); *State of the English cities report* (Parkinson *et al.*, 2006); and finally *A framework for city regions* (Robson *et al.*, 2006). These essentially worked to continue the development of a narrower focus on “cities that do well” (Gonzalez, 2006 p10). The *Northern Way Strategy* (2004) took these discourses a step further. The strategy was a collaboration between the North East, North West and Yorkshire and the Humber, aimed at promoting the north of England as a potential growth engine. This involved the identification of eight city-regions to act as the focal point for growth strategies, followed by the construction of some ‘soft’ governing infrastructure within these areas.

²⁵ Or even more likely, the role of academic prescriptions was not the core driver of regional policy.

²⁶ The group is made up of England’s eight largest cities outside London: Birmingham, Bristol, Leeds, Liverpool, Manchester, Newcastle, Nottingham and Sheffield.

The institutional crisis following the 2004 referendum thus brought about an opportunity to assert the discourse of city-regions in more concrete policy terms, with the potential to address the inherent conflicts in the coalescence of divergent policy discourses at the regional level. HM Treasury's 2007 'Sub-national Review' (SNR) was a key staging-post in this regard. It suggested two sets of policy formulae for sub-regional entities; which leads to some ambiguity as to the future of the city-region concept in policy terms. First, there was a call for greater devolution of policy delivery to the sub-regional tiers of the established English regions, with RDAs expected to delegate more economic development responsibilities to sub-regional partnerships and local authorities. This suggested a fairly straight-forward hierarchical relationship based on existing governing structures, and was a continuation from sub-regional investment planning approaches that some regions already had in operation. At the same time, however, the SNR built on the city-regions rhetoric of the Northern Way, and proposed the development of 'soft' institutional partnerships that were not necessarily bound by regional, or sub-regional, boundaries: for example the Sheffield city-region contained Chesterfield in the East Midlands, and Barnsley, which was also part of the Leeds city-region.

These city-regions were to be developed by local authorities as opposed to the more arbitrary, top-down, sub-regional approach. Following publication of the SNR, Multi-Area Agreements (MAAs) were introduced. These consisted of a group of shared priorities for local authorities within a city-region in agreement with central government through Government Offices for the Regions. As of February 2009, 10 MAAs were in place. Potentially, two sets of institutional structures would operate within the same governed space, with similar *modus operandi*. As with the regional tier, it seemed that the government had taken a relatively reactive approach to a 'regional crisis' without a deeply coherent understanding of what this would mean in the long-term.²⁷

The SNR also had a number of implications for the remaining regional organisations. With the delegation of delivery duties to sub-regions, RDAs moved towards a more 'strategic' role centred on their core roles of setting the regional 'agenda' through

²⁷ The Coalition government continued in the tradition of *ad hoc* regional restructuring in 2010 with the abolishment of RDAs and GORs, and the incorporation of voluntary city-regional Local Enterprise Partnerships for those areas that put forward proposals. At time of writing this left a 'patchwork' of arrangements, with many parts of the country not covered.

regional economic strategies (RESs), attracting inward investment and business support. They were also going to take on the planning function of regional assemblies, which were abolished: most assemblies ceased operations in 2009. Government Offices were to continue more or less unchanged, subject to minor tweaks to their internal operations. Harrison (2008 p3) argues that “the post-referendum years have been noteworthy for the surprising lack of critical debate” (although see Jonas and Ward, 2007a; 2007b; and Harding, 2007), either politically or theoretically. Throughout the period of this research a high level of uncertainty prevailed with regard to the way in which the changing roles for regional agencies and the strengthening of sub- or city-regional structures would affect the delivery of sub-national policy, or how in fact how the institutional landscape would look in the near future: this is something that will be touched upon throughout the analysis in chapters 8-11.

Conclusion: Positing (English) regions as ‘chaotic constructs’

Bruno Latour (1999) argues that facts are constructed through the interlinking of five facets: links and knots (that is, concepts), instruments to mobilise the concept (for instance, statistical tools or the written word), autonomisation through bringing colleagues on board, alliances with new groups (for example, between academics and politicians) and finally through public representation. It may be that the English regions failed through their basis on ill-defined and ill-matched conceptions, followed by a mis-translation of different sets of ideas through alliances with politicians, and then failure to mobilise these facets to achieve effective public representation. Crucially, the bonds between the conceptions and politicians were always relatively weak, even amongst the strongest protagonists, such as John Prescott. So, while – for example – redistributive approaches are not necessarily incompatible with approaches that aim for greater internal competitiveness, neither were pushed through to the extent that they had significant impact, nor was the political will strong enough to engage with the wider debates about the ‘purpose of the region’ or to build a discourse around an underlying spatial regionalism: the latter was either ignored or simply assumed.

Regional governing structures in England were particularly characterised by two sets of problematising issues. Firstly, there was a lack of spatial legitimacy. John Lovering

(1999), Ray Hudson (2003), Ann Markusen (1999) and John Harrison (2006a) refer variously to the 'woolly', 'fuzzy' or 'chaotic' conceptualisation of economic and spatial processes that have come to characterise contemporary regional studies (and policy). Markusen defines fuzzy concepts as "characterizations lacking conceptual clarity and difficult to operationalize" (p870); with underdeveloped methodologies, lack of empirical rigour and a level of abstraction which distances them from 'real world' policy (that is, the agent is removed from the analysis).

It is possible to see how regional governance arrangements were built on fuzzy conceptualisation and utilisation of the notion of the region: for instance as a functional, social, economic or cultural unit; as a site for redistributive economics or for encouraging endogenous, market-led growth; as a city-region or larger administrative region; as a site for national government to extend its tentacles, a site for the EU to bypass national government, a site for the organisation of local government, or as a site for direct engagement with individual businesses and actors; and relatively unsuccessful discursive 'region-building', either as places, territory, scales or networks. This might therefore go some way to explaining the continuing flux, upheaval and uncertainty within regional governance. In other words, it is not simply that there was 'institutional muddle' (Stoker, 2002); there was also existential muddle, with the administrative regions acting to some extent as self-perpetuating chaotic constructs.

Markusen (1999) also goes into some depth in arguing that flexible accumulation, agglomeration economies, social capital, 'cooperative competition' and world or global cities should be regarded as fuzzy concepts; all concepts that had become part of the accepted lexicon of economic geography. Although these concepts may be apparently distanced from 'real world' policy, they have in fact been taken on by policy-makers, particularly with regard to regional policy, resulting in a form of what Lovering has described as "vulgar" new regionalism (1999, p7): these concepts can be seen repeatedly in the language of regional governance. With regard to the prevalent 'new regionalist' policy prescriptions, Arnoud Lagendijk (2007 p1203) argues that "a major handicap ... is the spurious nature of many regional knowledges, and their incompatibilities once they are put into practice". This is backed by the wider critiques of institutional new regionalist discourses outlined above, and points towards a lack of

'output' legitimacy in regional activities. The problem of legitimacy for regional constructions is encapsulated by Lagendijk (*ibid.* p1205):

...with the exception of regions where coherence is institutionally induced (such as in federal systems), these fragments are themselves torn in many directions. Regions are continuously subjected to multiple spatial and scalar selectivities of state and other dominant organizations. It comes down to organizations such as Regional Development Agencies to cope with such centrifugal forces and instabilities. Accordingly, together with local business, state and community organization, they have to weave an image of coherence, functionality and identity through a myriad of programmatic activities.

Pertinently for this present research, Lagendijk notes that regional bodies had to work hard to develop their own legitimacies through various programmes of action; and as will be seen in Chapters 9 to 12, this had to be continually re-negotiated with each new policy paradigm. As I will investigate in these later chapters, these issues may become particularly important when regional bodies attempt to develop stand-alone policy on issues that are not based primarily on (crude understandings of) economic growth. This may become especially evident when working 'in partnership' on 'cross-cutting', or non-statutory, policies such as those relating to carbon management; and especially when working on an emergent policy area with little overt guidance from national government or the EU. The effects of the 'chaotic' construction and the continual reconstruction of the regions on these issues will form an important part of the analysis here: see in particular, Chapters 9 and 10.

The previous chapter focused on the construction of the English regions as governed spaces, in particular their political production as spaces of, primarily, economic governing. It gave little attention to the non-human (or 'real', Lefebvre, 1974/1991) dimension of space. This focus is mirrored in the academic literature on regions; as Graham Haughton and Kevin Morgan (2008 p1219) note, while there have been attempts to explore regions as spaces for sustainable development or environmental management:

... it is dwarfed by the literature devoted to the role of the regions in economic development. Indeed, given the large amounts written about local and national approaches to sustainable development, one could easily be forgiven for thinking that the regions are the weakest link in the governance landscape when it comes to sustainability.

Ibid.

Similarly, policy and academic literature relating specifically to environmental governing has often taken a dualist 'local-global' approach. As a result, the 'meso-spaces' of governing have been under-researched. This chapter therefore moves to re-introduce consideration for non-human space to the debate, briefly from a theoretical point of view – in line with the discussion in Chapter 2 – and then in more depth to look at how non-human space has been incorporated into policy, particularly at sub-national levels of governing.

The search for achieving balance between human actions and the effect they have on non-humans is, to borrow Iris Murdoch's (1959, p51) definition of love, chiefly about "...the extremely difficult realization that something other than oneself is real". That is, real in the sense that not only do human actions matter to the stability of ecosystems, but also that these ecosystems matter to human actions. The allied threats of anthropogenic climate change and resource depletion – amongst the many other environmental challenges – offer devastating evidence that humanity has failed to understand the world it inhabits as being constituted of 'real' things.

That said, attempts have been made to incorporate non-human space into political thought, something which has been long debated by environmentalists, political theorists and now in an emerging avenue of geographical political economy. In terms of the latter, there is a growing concern for the uneven distributional consequences of neoliberal economic growth strategies, with increasing attention being paid to different understandings of the environment, including different notions of ‘sustainability’ and ‘sustainable development’ (Jonas and While, 2007). The main area of interest here lies in analysing responses made by sub-national organisations to perceived environmental pressures; in particular, the ways in which these pressures are framed, the approaches taken to overcome them and the interactions between organisations working at different spatial scales. This may be framed also through the notion of ‘thematic’ legitimacy: environmental issues as seeking a legitimate role within governing networks and programmes. Work by Aidan While (2008) with David Gibbs and Andy Jonas (2004; 2010), as well as a similar analysis by Roger Hayter (2008), provides an analysis of trends in ‘eco-state restructuring’ in Western nations. This is used here as a template to visit key developments in ‘sustainability’ literature at the (city-)regional level. I will then move on to look at emergent work on governing carbon reduction through the gaze of While’s ‘carbon control’ thesis, which hints at a new era of eco-state restructuring. Specifically, he calls for:

...the urgent need for an approach that focuses on the realpolitik of what is happening rather than add to the growing normative wishlist of what might be done; to focus on ‘actually existing; low-carbon politics and regulation ... and to place environmental governance within the complexities and contradictions of state territorial management.

2008, p2

This move towards an era of carbon control may be framed as an extension and partial re-imagining of trends in ‘ecological modernisation’ that have been observed in recent local and regional approaches to sustainable development. Questions remain, however, as to how this shift is being played out in emerging policy prescriptions: for instance, relating to the breaks and continuities with previous eco-management paradigms; and where shifts are taking place, the causes behind them, and the effects of their implementation. This provides an important basis for developing the research agenda for this thesis.

Henri Lefebvre (1991 [1974]), laments the privileging of 'abstract' space in theoretical discourse, stating that "the modern theory of inquiry known as epistemology has inherited and adopted the notion that the status of space is that of a 'mental thing' or 'mental place' and that notions of 'man' and space itself are conspicuously absent from debate" (p28). Our knowledge is based in abstractions of reality; metaphor and signs are used to describe 'fuzzy' concepts such as geographical scale (*cf.* Herod and Wright, 2002; Moore, 2008). Our conceptions of boundaries are discursively produced through socio-political practices. But they still *refer* to and are shaped by connections to 'real' space. As Sayer (2000 p129) states "[physical] space is a necessary dimension of all material phenomena, social ones included", for example we are influenced by physical processes extra-discursively when we catch a virus. "We are involved in the world, as one of its forces" (*ibid.* p37) and we should therefore be attentive to the "socially constructed yet biophysical character of nature" (Gibbs, Jonas and While, 2002 p126). More fundamentally, Latour (2005) argues that human and non-human space should not be categorically distinguished from one another.

The de-materialisation of space can be seen clearly in the development of Western societies. For instance, the prevailing modernist or post-modernist architecture and infrastructure of cities has aimed to dominate nature, and remove any sense of limits to human endeavour: Erik Swyngedouw and Maria Kaika (2000) warn that nature is being subsumed by an "increasingly managed clarity of the urban environment". In an increasingly urbanised world, nature is being literally taken further and further from view. For instance, Swyngedouw and Kaika talk of urban water networks being buried underground, thus removing the 'production' of water from its consumption: a familiar story of high-capitalism. This in turn creates a world which is seemingly entirely distanced from nature, where social forces are the only 'visible' forces and the abstraction of simulations and simulacra (Baudrillard, 1994 [1981]) can appear to be the only reality. For Ulrich Beck (1998), Western society fostered this 'metabolic rift' (Marx 1992 [1867]) to the extent that there is now an inability to act on ecological crises. We are trapped within a vicious cycle of *risk*, whereby "nobody knows" the impact of their actions (Beck, 1998 p590), the conclusion being that, "We have to

rediscover this crazy, mad-cow diseased world sociologically, and the script of modernity has to be rewritten, redefined, reinvented” (*ibid.* p587).

The Ecological State

In order to counteract the marginalisation of non-human space in contemporary society a number of ‘grand’ theories of governmental re-structuring have been posited. These often take current forms of liberal democracy as the problematising factor (*cf.* Beck, 1998; Dryzek 1990; 1992; 1995; 2000; Hajer and Wagenaar, 2003). Other approaches have attempted to work from within current modes of liberal democracy (*cf.* Paehlke, 1988; Wissenburg, 2001; Fabre, 2000). Along these lines, James Meadowcroft (2005) takes a less prescriptive, more pragmatic theoretical approach in exploring the idea of an ‘ecological state’. This approach looks to a shift, more or less within the framework of current liberal democracies, towards a state that “takes the management of environmental burdens seriously” (*ibid.* p3), without environmental values necessarily forming the primary basis of politics and policy. In other words, towards environmental concerns becoming a legitimate theme for political action. For Meadowcroft, the ecological state would be concerned with ensuring that societal development did not take place at the expense of the environmental conditions necessary to allow future development. With this in mind, the ecological state is required to have the capacity to:

- Monitor the state of the environment, map patterns of socioecological interaction, and anticipate future developments;
- Take decisions relating to the assessment of risk, the definition of preferred environmental outcomes, the reconciliation of objectives with other individual and societal goals, and the distribution of social costs;
- Deploy effective steering strategies and policy instruments;
- Finance and legitimate its activities; [and]
- Act in both the domestic and international realms.

Meadowcroft, 2005 p5

Meadowcroft goes on to place these requirements within the context of the welfare state, marking out a number of parallels between the two forms of state organisation. Like the welfare state, he argues, the ecological state involves an extension of state authority into

new areas of life, “or at least a systematisation and intensification of pre-existing interventions” (p6). This extension of authority is borne out of political desire to respond to market failures, which have not been addressed by other social institutions: in the case of the ecological state it has been recognised that environmental sustainability cannot be achieved without active state intervention. As a result, both sets of programmes will inevitably “alter patterns of ‘normal’ economic interaction” (p7), but at the same time will be faced with high levels of economic and political constraints. A key issue here is the relationship between the ecological state and the economy. In Meadowcroft’s eyes it is not necessary for sustainable development to equate to a reduction, or end to, economic growth: it is the quality of growth that needs to change. Although, unlike the welfare state, the ecological state is expressly related to patterns of production and consumption, the challenge for the state is to achieve ecological aims without interfering unduly with freedom to pursue other policy aims, such as economic growth.

Unlike the work of Dryzek and others cited above, Meadowcroft’s ecological state is based on analysis of trends in environmental governance and how policies are actually being developed in response to environmental crises from within capitalist liberal democracies. Nonetheless this remains a normative theoretical observance, rather than explicitly dealing with uncovering the ways in which environmental issues and policies have manifested themselves in practice, either spatially or institutionally. It is especially vague on the practice of governing the eco-state and in exploring the specific forms of governing required to achieve ecological aims. This represents a wider lacuna within environmental literature; and Rob Krueger and David Gibbs (2007, p4) argue that, “engaging the politics of sustainability represents a gap in the current sustainability literature”. I interpret this as being about a lack of engagement with the practice of sustainability as it is discursively framed, implemented, distorted and displaced – including processes of co-operation, co-ordination and co-option – as opposed to concerns with ‘grand’ political theory. There are, unavoidably, normative elements to this, but it is essentially about analysing a policy area that has not been thoroughly scrutinised in terms of the ‘politics of practice’.

As noted, Meadowcroft’s approach is based in observation of trends in environmental policy over the last two to three decades and it is from this analysis that While, Jonas

and Gibbs (2010) take their exploration of processes of 'eco-state restructuring', involving the selective incorporation of environmental discourses into policy in recent years. This approach forms the framework for the following outline of trends in environmental discourse, policy and analysis. In doing so, the discussion will turn to a number of other normative discourses that have been taken on in some form by policy makers; in particular the concepts of sustainable development, ecological modernisation and 'smart growth', before moving on to the idea of a new political paradigm in the guise of 'carbon control'.

Eco-state restructuring

Despite the recent profusion of apocalyptic discourses that envisage human-induced ecological breakdown (Swyngedouw, 2007), concern for the effects of human activity on the environment is by no means a new phenomenon. Concern for public health as a result of environmental degradation, for example, may be traced at least as far back as the sixth century BC, with the provision of rudimentary sewerage systems in Rome. More recently, policy interventions in the late 19th and early 20th Centuries began to show concern for issues of preservation and conservation (Robinson, 2004). It is not until the last few decades, however, that a gradual 'globalisation' of environmental issues has begun to take place, with a slowly growing recognition of the global consequences of human environmental consumption. This period has seen policy actors begin to understand non-human space as 'part of' the 'social', rather than an external resource to be managed separately. Most pertinently for this discussion, the specific threats of climate change and peak oil have reached a relatively global level of consciousness, but issues such as ozone layer depletion, acid rain and other forms of pollution have also gained prominence at one time or another. There has also been recognition that these 'global' issues have spatial manifestations, affect different points in space in different ways and that individual or localised actions can have global ramifications (Barry and Eckersley, 2005).

While, Jonas and Gibbs (2010) frame these policy debates within the notion of eco-state restructuring:

...defined here as the reorganisation of state powers, capacities, regulations and territorial structures around institutional pathways and strategic projects, which are (at least from the vantage of state interests at a given moment in time) viewed as less environmentally damaging than previous trajectories.

While, Jonas and Gibbs, 2010 p80

That is, the process of potentially moving towards a situation approaching Meadowcroft's (2005) ecological state. This framework identifies distinct phases of eco-state restructuring, and from this work and that of Hayter (2008), we might thus develop a chronology of environmental policy (see Table 4, below) with eco-state restructuring identified by both Meadowcroft and While, Jonas and Gibbs as beginning to really take shape in the 'sustainable development years'. While, Jonas and Gibbs then outline a new restructuring phase in the guise of 'carbon control', which forms a core concern of this research. As such, this review will concentrate on these two policy discourses. The work of While, Jonas and Gibbs (While, 2008; While *et al.*, 2010; While, forthcoming 2011) focuses particularly on the development of different practices of governing, or what Meadowcroft (2005 p5) calls "steering strategies and policy instruments". It also touches on discursive arrangements that may help the eco-state to "legitimate its activities" (*ibid.* p4). As these aspects of governing provide a key theoretical focus of this research, the following discussion is based around developments in these areas of eco-state restructuring.

Table 4: Eras of eco-state restructuring

<i>Years of Ascendancy</i>	<i>Policy Discourse</i>	<i>Dominant Policy Practices</i>
600BC – 1900s	Public Health	Development of physical infrastructure
1895 - 1940s	Preservation/Conservation	Urban/Rural planning
1950s - 1980s	Pollution Control	Direct regulation at source
1980s - 2000s	Sustainable Development (or ecological modernisation)	Partnerships, networks and strategic selectivity
2000s -	Carbon Control?	(Market based) Instrumental rationalities: targets/budgets (spatial and sectoral); direct regulation; taxation; potentially internalised within the ‘capitalist state’

Sources: Robinson (2004), Hayter (2008), and While *et al.* (2010)

Sustainable Development

The notion of sustainable development, as popularised by the Brundtland report (World Commission on Environment and Development, WCED, 1987), is in essence a principle of equity between social, economic and environmental goals. In a sense, it may be seen as a search for time-space balance; to create an ideal or absolute space, where medium to long-term space-time processes are balanced out so as to be relatively unchanging: a fundamental holistic re-imagining of space. It is, however, largely an anthropocentric approach, both in the sense that it creates distinctions between human and non-human concerns, but also that it is concerned with achieving the conditions for perpetual economic development. That is, an approach that “meets the needs of current generations without compromising the ability of future generations to meet their own needs” (*ibid.* p23), whilst still aiming for a “5-10 fold” increase in world GDP over the following century (*ibid.*, cited in Robinson, 2004 p372). One might in fact argue that the inclusion of an economic dimension automatically skews the aims of sustainable development: it is not really a dimension in its own right, but a label given to a

particular form of social organisation aimed at achieving individual or collective social goals. As such, 'the environment' is weighted against from the outset.

Sustainable development – or at least the WCED conceptualisation – is chiefly concerned with institutional responses to social and environmental problems; with what Robinson (2004) terms a utilitarian 'technical fix' as opposed to 'value changes' in society. Nonetheless, the Brundtland Report represented the beginnings of an apparent willingness in policy circles to take seriously the idea of the Earth as a potentially vulnerable ecological system. Following publication of the Report, the concept of sustainable development became increasingly popular in policy realms. The 1992 Rio 'Earth' Summit provided the stimulus for an explosion of activity, most significantly the implementation of UN Agenda 21 within many signatory countries. The EU (at the time the European Community) enshrined a commitment towards environmental policy within the Single European Act and its fifth Environmental Action Programme was initiated in 1992, with strong reference to the concept of sustainable development. This also became instrumental in the development of Agenda 21 in Europe (McCormick, 2001). By 2006, 23 of the 30 OECD member states had prepared at least one formal national sustainable development strategy (OECD, 2006). The UK became the first country to develop a national strategy in 1994 – revised in 1999 and 2006 – and as part of this programme all English local authorities developed Local Agenda 21 strategies at some point during the following decade. By 2003 all of the English regions had produced sustainable development strategies, and by 2006, six of the eight administrative regions – plus London – had published a second iteration of their strategy. In more general terms, sustainable development became a near-ubiquitous policy discourse, as acerbically noted by Erik Swyngedouw (2007 p20):

I have not been able to find a single source that is against "sustainability". Greenpeace is in favor, George Bush Jr. and Sr. are, the World Bank and its chairman (a prime warmonger on Iraq) are, the Pope is, my son Arno is, the rubber tappers in the Brazilian Amazon forest are, Bill Gates is, the labor unions are.

The fact that this disparate collection of individuals were apparently committed to sustainable development may suggest that it had become successfully integrated within the practice of governments and other actors across the (Western) world. In turn this could suggest that a successful process of eco-restructuring had taken place, and that

humans were on the road to an ecologically-balanced future. Equally, however, it could suggest that the ideal had become weakened in its implementation, through subversion of its principles, or substitution for other ideas whilst retaining the sustainable development moniker. Explorations of sustainable development in practice have increasingly come to draw the latter set of conclusions.

Sustainable Development Subverted

Meadowcroft (1999) talks of sustainable development as being adopted as a meta-narrative for governing strategies. For Meadowcroft, however, its adoption is not to do with the ‘quality’ of the concept and the ability for the implementation of sustainable development principles to forge a path to social, ecological and economic balance. It is instead, he argues, largely a reflection of its fluidity and context dependency as a concept: it can be used to justify any number of policy agendas. Sustainability – defined as the ultimate ‘fuzzy’ concept by Ann Markusen (1999) – can therefore be reshaped and appropriated for a range of different ends. Most frequently, commentators have pointed to the co-option of sustainable development principles into dominant modes of economic policy discourse. Roger Keil (2007), for instance, finds that instead of a new era of anti-capitalism and ecological rationality, proponents of neoliberal growth policies subverted sustainability principles so as not to deviate economic trends from current paths. Put more simply, Swyngedouw (2007 p20) follows his list of pro-sustainability actors with the observation that “All are presumably concerned about the long-term survival of (parts of) humanity; most just keep on doing business as usual”.

This has been observed across different levels of governing, including local and regional policy. Drawing attention to the ‘politics of scope’ operating in sustainable development policy, in their exploration of regional planning David Counsell and Graham Haughton (2006) examine the ways in which different sectors, groups or ‘silos’ within and across institutions engage in bargaining and manipulation over the scope and prominence of policy domains. In doing so, they analyse the UK government’s approach to sustainable development and attempts to overcome silo mentalities:

The government has adopted an 'integrative' definition of sustainable development, which emphasises that it should not be seen as an environment-led agenda, but rather an agenda for integrating economic, social and environmental issues.

Ibid. p108

Counsell and Haughton later note, however, that this kind of policy integration – characterised as a search for 'win-win-win' solutions – can simply weaken the position of environmental agendas. Similarly, environmental and conservation groups such as the Campaign for the Protection of Rural England (CPRE) have been critical of the preference for *sustainability* appraisal as opposed to strategic environmental assessment; Ann Hamblin (2004 p13) states that, "traditionally, this has meant the environment almost always loses out". As Jonas and While (2007 p130) contend, "[t]he idea that all cities can be competitive, liveable *and* good for the environment seems to us to involve a leap of faith".

Sustainable Development Substituted

More recently, while sustainable development has remained the catch-all term for integrating environmental and economic goals, the goals and underlying rationales have been substituted for narrower agendas. David Gibbs (2000) contends that in order to escape the "vague and all-encompassing" (p9) terms of sustainable development, an exploration instead of 'ecological modernisation' in both theory and practice offers a more rigorous approach to focusing on the tensions between economy and environment. This is particularly apposite given that ecological modernisation is more directly amenable to the pressures of the 'growth imperative':

Ecological modernisation specifically argues that economic development and ecological crisis can be reconciled to form a new model of development for capitalist economies.

Ibid. p10

The concept of ecological modernisation was developed in the early 1980s by Huber (1982) and Janicke (1985), who argued for an *ecological switchover*; a move towards an ecologically rational organisation of production, which envisages a progressive modernisation of the institutions of modern society as opposed to their destruction or dismantling. Therefore it aims to work within, rather than against, the capitalist market

economy and current governmental configurations. Gibbs (2000; 2006) suggests that this pragmatic political programme can also be used theoretically to analyse changes in institutions that are redirecting environmental policy making. The three main 'projects' of the switchover are as follows:

- Restructuring production and consumption through development of clean technologies and reducing or removing dependence on non-renewable resources.
- Economising ecology by placing economic value on nature (e.g. through tax reform).
- Integrating environmental policy goals into other policy areas.

These are closely linked to three programmes that characterise the political approach:

- Compensation for environmental damage and the use of new technology to minimise the effects of growing production and consumption.
- Focus on altering the processes of production and consumption.
- Dismantling and deindustrialisation of economies and a transformation towards small-scale units and a closer link between production and consumption.

A basic tenet is that businesses will support these programmes because they respond to environmental issues through notions of profitable enterprise: for instance, greater efficiency, avoidance of future costs such as clearing up contaminated land, the sale of environmentally friendly products or services and the sale of eco-technologies. New technologies are a key part of ecological modernisation and changes are predominantly a task for state-business partnership through negotiated agreements: consumers are essentially passive elements. Unlike the original conception of sustainable development, issues of democratic participation and equality are not present in (narrow) interpretations of ecological modernisation.

The early 'sustainable development' policies of – for example – RDAs in England, Gibbs (2000) suggests, in fact implicitly drew on ecological modernisation as a guide

for policy implementation. Weaker variants of ecological modernisation can be seen in fact to have a number of similarities with various ‘new regionalist’ discourses and so this is perhaps not surprising: for example, there is a fatalist belief in globalisation as an unstoppable force; that part of the answer lies in moving towards de-industrialised vertically and horizontally integrated economic clusters; and the idea of a politically smooth process whereby cooperative competition leads to ecological switchover.

Viewing certain state practices as weak ecological modernisation also works well to frame the degree of apparent ‘fracturing’ of sustainability agendas at both national and sub-national levels of governing. For instance, Batchelor and Patterson (2007) point to ‘smart growth’ as the latest incarnation of sustainable development in the South East. This, they argue, is a weaker variant of ecological modernisation, which allows a neoliberal ‘business as usual’ approach to development. Rob Krueger and David Gibbs (2008; Gibbs and Krueger, 2007) have explored smart growth policies in the USA as variants on sustainable development policy – although firmly couched within the remit of eco-modernisation discourses – with smart growth posited as a ‘third wave’ sustainability discourse based around market solutions to sustainability issues. They note that sustainability is essentially about a change in the world’s relationship with the environment and social justice: in contrast to this,

...smart growth may indeed just be a result of a fetishized urban lifestyle, not a change of course ... Smart growth provides an alternative for the consumption of open space. It does not address the larger issue of consumption itself

Krueger and Gibbs, 2008 p1272

From another perspective, Mike Raco (2005; 2007) explores the ‘Sustainable Communities’ (SC) agenda in the UK, which was couched in more holistic sustainable development terms. Yet, in reality there are striking similarities between the two agendas. The SC programme represented a binding of New Labour modernisation agendas – centred on partnership-based local governance – with sustainable development discourses. Raco argues that the agenda was “anything but a coherent and logical spatial development programme” (p215); and while Raco (2005) originally argued that the SC programme should be seen as lying somewhere on a continuum between neoliberalism and sustainability – however that might be interpreted – more

recently (2007) he finds that this over-estimates the coherence of the programme. In particular, there is a continuing difficulty in marrying economic objectives with sustainability agendas: the SC agenda is a form of hybrid between the – seemingly antithetical – principles of sustainable development and a pro-growth strategy emphasising economic competitiveness. There is also a clear ‘new regionalist’ emphasis to SC plans: they are keenly focused on regional competitiveness within a discourse of globalisation and global markets, leading towards a notion of the SC programme as again being more in line with a narrower ecological modernisation approach to development.

Taking an ecological modernisation approach to sustainability politics brings into sharp focus the apparent degree of subversion from the original political ideology of sustainable development to a point at which it can often appear to be a meaningless discourse. As an analytical theory ecological modernisation – in its weakest guises – seems to quite aptly describe the rhetoric surrounding ‘ecological switchover’ coming from political elites at different scales of governing across the world. This understanding sees environmental issues as ‘negative externalities’ of the capitalist economy that can be dealt with within existing arrangements, rather than the current form of global capitalism as being fundamentally flawed. Roger Keil argues that these weak variants of ecological modernisation – couched within the rhetoric of sustainable development – have become the “new master discourse” (2007, p46):

The Brundtland and Club of Rome proposals were subsequently re-cast from a critical set of potentially anticapitalist warnings to a recipe for the survival of capitalism through a concrete set of measures involving ecological modernization. Instead of throwing a wrench into the capitalist machine, sustainability subsequently gets redefined as one of the possible routes for a neoliberal renewal of the capitalist accumulation process.

Keil, 2007 p46

As such, the discourse of sustainability shifts from being one of protecting nature from the impacts of the economy, to protecting the economy from the impacts of nature: a determination to continue the capitalist, neoliberal, or modernist project, with a continued emphasis on the environment (the effect) as the problem to solve rather than current economic configurations (the cause).

As sustainable development policies have been implemented across the (Western) world, they have apparently been subverted to incorporate neoliberal growth oriented approaches to development, which has in practice led to an adoption of weak ecological modernisation agendas. As noted, this discursive shift highlights the ‘politics of scope’, and the ideological concerns of national and sub-national governing institutions. No matter the weakness of the approaches, local authorities and regional governing institutions in Europe and North America have nonetheless been involved in developing environmental policies and strategies. Focusing on the ‘politics of scope’ – or ‘horizontal’ policy networks – is useful to highlight conflicts of interest between environment, social and economic goals. An exploration of specific forms of governing strategies and the ‘politics of scale’ involved would, however, shed greater light on the reasons behind the ways in which policy has been framed and implemented sub-nationally.

The emphasis in initial sustainable development policy was on the nation state transferring powers upwards to supra-national governing institutions – for example, the EU and UN – with a strong emphasis on delivery at the local level (Gibbs, 2000); in many ways following the environmentalist ethos *think global, act local*. There is, however, no mention of meso – federal state, regional, or city-regional – tiers of governance in the original UN Agenda 21 (1992) document and The Johannesburg Plan of Implementation (2002) refers only to regions as supra-national spatial units. That is not to say that regions were entirely excluded from sustainable development agendas. In the UK, the 1998 Regional Development Agencies Act states that RDAs are expected to “contribute to the achievement of sustainable development where it is relevant to do so” (p2), while Regional Assemblies were charged with developing a sustainable development strategy for their region. Government Offices have also had some impact through influence from central government.

At the same time it would be fair to say that a degree of confusion remained regarding the role of regional governing organisations, and indeed the region as a space more generally, in developing sustainable development policy. This is on top of the ‘chaotic’ construction of the regions as a political entity discussed in the previous chapter, which

potentially creates a further problematic. By way of explanation, work relating to English RDAs by Paul Benneworth, Leanne Conroy and Peter Roberts (2002) shows how a lack of governmental steering led to overriding economic imperatives winning out within regional policy implementation. They argue that, although the national government included a commitment to sustainable development in the founding statutes of RDAs, the meaning of this was developed insufficiently. This allowed RDAs to subvert the concept to the extent that economic policies almost always took centre stage. As noted by an interviewee (in Whitehead, 2003 p253):

... how anyone will ever take them to court on negligence of that duty is difficult to imagine because there is no legal definition of sustainable development and I don't think that there possibly could be ...

Similarly, Anna Batchelor and Alan Patterson (2007) note that the fact that each of the statutory regional organisations had some sustainable development responsibilities regarding sustainable development, it in fact made it policy “diffuse” (*ibid.* p205) and thus weak in practice. Because the three regional institutions have differing roles and responsibilities with regard to sustainable development, “it is hard to ascertain where the lead is and on which ideology it is based ... [T]he institutional muddle ensures that the regional scale lacks leadership” (*ibid.* p212). So, while rhetoric on sustainable development is strong, the structures within which policy is framed and implemented make it difficult for anything other than the status quo of neoliberal or ‘vulgar’ new regionalist economic development to continue, while sustainable development policy is weak and ‘muddled’. Based on Gerry Stoker’s (2002) notion of ‘purposeful muddle’, Batchelor and Patterson argue that this approach allows the Government to see “what works and what effects SD [sustainable development] policies have at a regional scale before committing to institutional reform” (p208). There is an alternative, but linked argument that successive UK governments deferred decisions to avoid making difficult choices, and that it reflects a general lack of concern for sustainable development.

Despite the lack of a binding framework for sustainable policy-making at the regional level in England, Mark Whitehead (2003 p236) notes “a concerted effort to recast regions as important spaces through which to develop a more sustainable society” in the 1990s and early 2000s, specifically that:

... the contemporary political construction of the region as a site of social and ecological regeneration is (re)creating a moral geography of regional space in the UK. This moral geography combines traditional concerns for social and economic justice with an emerging brand of environmental ethics ... Close analysis reveals that encrypted within the rhetoric of the sustainable region is a valorisation of the region as a particular scale of socio-ecological activity.

These strategies were therefore in part aimed at developing new forms of legitimacies for regional governing arrangements in attempting to overcome some of the issues discussed in Chapter 3: they aimed to act as ‘meta-technologies’ in re-framing understandings of the region as a space of sustainability. Whitehead explores the West Midlands sustainable development strategy as an example of this process, showing the way in which it draws on a particular moral argument: that people in the West Midlands have rights and responsibilities with regard to quality of life, which can be met through acting in a ‘sustainable’ manner. This is taken to include stakeholders in the region beyond the regional planning bodies, or regional institutions more broadly, in developing a framework of ‘good’ citizenry. This framework also attempts to develop a vision for a sea-change in the practice of governing in the region and draw local authorities into a regional spatial logic:

... this change sees local government not just as a legalistic regulator or guardian of sustainable development, but as a crucial actor in the complex web of socio-economic and ecological relations which make up regional space

Ibid. 2003 p239

For Whitehead, though, this is more than a framework for internal spatial morality. The construction of institutionalised ‘standard’ regions in the UK represented a ‘new scalar rationality’ towards regional space, which helped to engender space as “politically *legible* and technically manageable, through which the UK state can read its territory and orchestrate different forms of spatial policy” (*ibid.* 2003, p250, emphasis in

original). As shown in Chapter 3, the regions in England did not develop as natural ‘bio-regions’; they are political constructs which initially developed from pragmatic concerns for spatial management. As a result, the region may be seen as bound within moral discourses at the national level more than any internal spatial legitimacy.²⁸ Attempts to develop new spatial ‘imaginaries’ within the region then become an important project for actors seeking to build policy goals around non-statutory aims.

The development of scalar constraints and prescriptions are played out in further writings on sustainable development strategies in the English regions. In England, each of the regions had either a Regional Sustainable Development Framework (RSDF), or an Integrated Regional Strategy (IRS) that incorporated sustainable development principles. Graham Haughton, Dave Counsell and Geoff Vigar (2008) also found a distinct lack of variation between the sustainable development policies and approaches of the English regions. They contend that prescriptive guidance on strategy from central government made it difficult for regions – with the possible exception of London – to develop innovative approaches. Sustainable development strategies “lacked coherence and ownership, in spite of the apparent progress in producing paper strategies” (p1233), although they argue that these strategies did act as a form of metagovernance (Jessop, 1995) in establishing ‘the rules of the game’ for governing and policy processes. Taking these findings alongside those of Batchelor and Patterson (2007), it may be argued that the government offered strong guidance on strategy content – where it was not necessarily beneficial – and weak guidance in terms of responsibilities and structures, where it was seemingly required.

Other experiments in creating sustainable (city-) regionalisms have taken place across the UK and elsewhere. Unlike Whitehead’s ‘morality’ discourse, however, these have often shown clear links with wider ‘new regionalist’ economic policy discourses, and in fact serve to highlight the issues around politics of both scale and scope discussed above. These ‘sustainable regionalisms’ have often operated as outward facing ‘branding’ exercises as much as they have been about inward facing attempts to foster societal engagement with sustainability issues. In common with the discussion above, Jonas and While (2007) found that “[c]entral to the urban regime’s strategy is the mobilization of

²⁸ Although attempts to meet policy goals might attempt to draw on, or develop, particular internal regional spatial characteristics: see Chapter 9

environmental assets for material goals” (p138), while David Gibbs and Rob Krueger’s (2007; Krueger and Gibbs, 2008) exploration of ‘smart growth’ policies in the Austin and Boston city-regions drew similar conclusions, arguing that ‘new economy spaces’ attempt to develop sustainable strategies only when the material conditions that underpin them are compromised by rapid growth, and that these conditions are more about branding than deeper ecological concerns. Gibbs and Krueger’s work (2007; Krueger and Gibbs, 2008) does, however, pick up on attempts to develop internal partnerships and action following the failure of initial strategies: in Austin, one response was to develop a business-led sustainability network (started by CEOs in the city), as well as a chamber of commerce-led economic strategy that included environmental issues as a central part of its development plans. This included the funding of a Clean Energy and Development Council.

Sustainable Development Subsumed?

The above discussion of regional policy in relation to environmental issues has on the whole looked at a generalised notion of ‘environment’ within the wider realms of sustainable development and ecological modernisation. The more specific issue of climate change has, however, recently been subject to a growth in attention from academic and policy spheres. At the same time, while publications from policy-makers and academics concerned with normative and practical solutions have abounded, perspectives from political geography – and the social sciences more widely – still remain relatively thin on the ground. In particular, there remains a lack of material exploring the political and spatial ramifications of emerging carbon reduction politics (Bailey and Compston, 2008; Bumpus and Liverman, 2008), especially beyond discussions of national policy programmes. This is understandable, due to the relatively recent appearance of climate change as a serious issue in the political realm, and the fact that sub-national carbon regulation is only just beginning to take shape, if at all, in most countries. As Neil Adger (2001 p921) points out, however, “global climate change is a significant challenge to structures of governance at all temporal and spatial scales” and so it is vital that attention is paid to the way in which carbon reduction policy is played out across and between different spaces.

Aidan While (2008; 2010) and colleagues (While, Jonas and Gibbs, 2010) have begun to open up debates relating to the spatio-political implications of a perceived shift from the fuzzily defined and implemented discourse of sustainable development to a specific concern with ‘carbon control’. While explores the rise of a ‘low carbon polity’ as an emerging, and increasingly dominant discourse within regulatory governance; so much so that “the management of carbon flows, and especially carbon emissions, could be said to be rapidly supplanting ‘sustainable development’ as the central goal of ongoing processes of eco-state restructuring” (2008 p1). This sees a concern for carbon reduction not just as the key issue *within* sustainable development discourses (Bulkeley, 2006), but as marking a new era of eco-state restructuring.

Potentially the most significant element of this turn is that of spatial carbon targets – and possibly carbon *budgets* in the future – which mark a first in terms of governmental regulation of spaces in terms of monitoring economic circulations through an extra-economic lens. This therefore moves to a much narrower, instrumental form of environmental management; one focused on direct outputs. Alongside this are efforts to create carbon markets, through carbon offsetting and trading schemes, leading to a commodification of carbon. In similar veins, a number of commentators have pointed to ‘neoliberalisation’ of the environment (Castree, 2008). Adam Bumpus and Diana Liverman (2008; see also Liverman, 2004), for example, discuss the role of carbon-offset schemes in providing opportunities for ‘accumulation by decarbonisation’. This focus on carbon reduction, While (2008) argues, is “linked to, but abstracted from a sense of natural limits”: in other words the wider issues of ecological crisis and the complex science surrounding climate change are – like in Whitehead’s (2003) discussion of the region – restructured so as to be politically legible and technically manageable. This could also be couched in terms of the debate around critiques of liberal democracy and non-human space. Climate change forces recognition of the physical limits of space, but because of liberal democracy’s entanglement with the capitalist market logic, it is abstracted to the point that it can fit in with existing economic discourses. A number thus becomes reified as a way of bringing about action; somehow as more effective than the central fear that the biosphere – a meta-network that we cannot live without – is likely to alter to the point that lives are at risk if no action on carbon emissions is taken. This rationalisation of complex processes then allows for the development of distinct spatial moralities:

Perhaps all the morality of mankind has its origin in the tremendous inner excitement which seized on primeval men when they discovered measure and measuring, scales and weighing ... With these conceptions they climbed into realms that are quite unmeasurable and unweighable but originally did not seem to be.

Nietzsche, 1880 in Elden, 2006 p1

‘Carbon control’ may therefore be seen as a continuation, extension, and partial re-imagining of weak ecological modernisation logic. For example, it sees a potential turn away from loose, incentive-based ‘smart growth’ policies based on partnership and consensus, to more authoritarian, target-based modes of governing, but still bound within a wider sense that businesses will perform an ecological switchover if it is seen to be a profitable enterprise: hence the popularity of market-based cap and trading systems.

National and Supranational Carbon Control

Key staging posts in the early shifts towards carbon regulation took place through supranational agreements, such as the Kyoto Protocol in 1997, with related emissions targets for the EU and its member states, the launch of the European Climate Change Programme in 2000 and in 2003 the birth of the EU Emissions Trading Scheme, which extended beyond state bodies to all ‘large emitters’. These mechanisms in reality made very little headway in global carbon reduction, particularly owing to the amount of ‘hot air’ in the system following the collapse of former Eastern Bloc economies, the general ‘loose and baggy’ nature of the targets (see Barrett, 1998; Brabiker *et al.*, 2002; Kerr, 2007), and the system of ‘grandfathering’ carbon credits in emissions trading (see Tickell, 2008). However, they did represent a gradual move towards taking carbon reduction ‘seriously’ as an issue to be dealt with internationally and most national governments signed up to Kyoto have since designed and implemented their own climate change strategies, as well as the infamous non-signatory, the United States.

In the UK a number of policy developments and related instruments were implemented between 2000 and 2007, including those outlined in Table 5, below.²⁹ For While, Jonas and Gibbs (2010) 2006 represented a ‘tipping point’ in the shift towards the new political paradigm of carbon control, with 2007 pinpointed as the year that carbon control began to be ‘mainstreamed’ within political decision-making in the UK. This culminated in the passing of the Climate Change Act in November 2008, which committed the UK to a minimum 80 per cent reduction in CO₂ emissions by 2050.

Table 5: Policy Developments in the UK 2000-8

<i>Year</i>	<i>Policy instrument</i>
2001	Climate Change Levy (CCL): business energy use tax
2001	Climate Change Agreements: CCL discounts for businesses in vulnerable sectors
2002	Energy Efficiency Commitment: mandatory targets for gas and electricity suppliers with more than 15,000 customers to assist customers with domestic energy efficiency
2002	UK emissions trading scheme: voluntary emissions trading for businesses
2002	Renewables obligation: electricity suppliers obliged to supply proportion of energy from renewable sources
2003	Energy White Paper: emphasis on increasing renewable energy production and supply
2004	PPS22 on Planning for Renewable Energy: includes introduction of regional renewable energy targets
2006	Stern Review on the Economics of Climate Change
2006	Draft PPS on ‘Planning and Climate Change’ (CLG)
2007	Energy White Paper: commits UK to 60% CO ₂ e reductions by 2050
2007	Carbon Reduction Commitment: mandatory emissions trading for non-energy intensive commercial and public organisations
2008	Creation of Department of Energy and Climate Change
2008	Climate Change Act receives Royal Assent: commits UK to CO ₂ e emissions reductions of at least 80 per cent by 2050

Sources: Lorenzoni, O’Riorden and Pidgeon, 2008 and While, Jonas and Gibbs, 2010.

²⁹ See Chapter 12 for further detail on the Climate Change Act and the implications for sub-national governing arrangements

The UK was the first nation to adopt a “legally binding” (HM Government, 2008) emissions target in 2008, but in some respects lagged behind other EU nations, particularly in terms of energy production. Although a shift from coal and oil fuelled power to gas in the 1990s resulted in some reductions in energy production-related emissions, the UK struggled to make progress on renewable energy targets and price rises in the 2000s led to some shifts back to coal power (National Statistics, 2005). As a whole, electricity generation in the mid-2000s accounted for around a quarter of the UK’s greenhouse gas emissions, compared to eight per cent in France (Szarka, 2008). Irene Lorenzoni, Tim O’Riordan and Nick Pidgeon (2008) outline a number of failures in the national level policy implementation of the Labour government in the 2000s. First, they argue that the government focused on incremental change through market mechanisms in deference to business-led lobbying and electoral preferences (in that order); investment in technology and infrastructure was hampered by a lack of regulatory mechanisms that reflect the “true price” of carbon (*ibid.* p119); and targets were undermined by “ineffective policy measures, poor reporting, auditing reviews which are persistently ignored, and repeated upward revisions in carbon emissions scenarios” (*ibid.*). Second, they argue that departmental ‘silos’ and conflicting interests led to a lack of consistency in policy articulation and implementation. Lorenzoni, O’Riordan and Pidgeon conclude that there is a need to build a more effective programme of government that utilises a range of governing strategies to change public attitudes through a fundamental re-imagining of the goals and ordering of governing: “there needs to be a new vision of what a low-carbon sustainable society and economy should look like and a clearer view of the changes in policy and institutional design necessary to get there” (*ibid.* p121).

Carbon ‘Regionalisms’

In analysing trends in carbon reduction policy, While (2008; 2010; While, Jonas and Gibbs, 2010) focuses on the socio-economic impacts of potential future outcomes: for instance the growth of alternative forms of economic development, or even ‘non-development’ pursued by different localities or regions in order to make best use of their carbon budget; or more draconian, regressive measures that may favour certain spaces or scales over others. Whilst sustainable development policy has generally been

led through light-touch approaches to policy implementation at sub-national level, this argument suggests that 'carbon control' is perhaps more likely to see stronger policy interference from above. As such, direct regulation through targets and budgets are seen as likely to come to the fore in policy.

As with national and supra-national carbon reduction programmes, taking climate change seriously requires a change in the spatial imaginations of sub-national governing actors, with a need for locales and regions seen as spaces of carbon flows (While, 2010). This includes a shift in the logic of calculation towards the calculus of carbon spaces. Such calculative strategies may take a range of forms, from outward-facing regionalisms or urbanisms as part of a spatial branding strategy, to inward-facing approaches of reimagining and recalculating spaces.

While there has been a recent profusion of popular and academic research that focuses on these issues at international and national levels (see, for example, Leggett, 2005; 2006; 2009, Dessler and Parson, 2006; Monbiot, 2006; Kerr, 2007; Porritt, 2008; Tickell, 2008; Giddens, 2009), beyond While and colleagues' tentative exploration there have been very few specific explorations of sub-national climate change politics, particularly those focused on either (a) strategies of 're-imagining' political spaces as carbon spaces (rather than sectoral policies); (b) regions as spaces of governing carbon; or (c) the scalar politics of (a) and (b).

In terms of outward facing strategies, Mike Hodson and Simon Marvin (2007) have carried out some work relating to climate change governing in London, focusing on the development of a process of 'strategic glurbanisation', through which London's governing elites attempt to brand the city as a 'national exemplar' in terms of developing a low carbon economy based on hydrogen fuel. This has clear links to the literature on 'sustainable regionalisms' discussed above, but hints at the potential for a more aggressive economic focus in low-carbon strategies. There has been little, if any, emphasis on more comprehensive practices of re-viewing sub-national space however, particularly in terms of the politics of re-imagining and re-calculating sub-national spaces within the aegis of multi-level or multi-scalar governing arrangements.

More widely, some work has begun to explore the scalar politics of governing carbon. These publications are, however, largely centred on developing research questions for future exploration. For instance, a short essay from Mike Hulme (2007) and an even shorter ‘complement’ to this from Ian Bailey (2008) both introduce the role of cultural specificities in the politics of scale involved in climate change governing, and call for greater scrutiny of the scaled processes of the techno-political processes involved in measuring and controlling carbon levels. In line with the carbon control thesis, Hulme contends that the idea of climate has been de-humanised and divorced from the variegations of space to develop a ‘homogenous climate’ discourse: Bailey takes this on to discuss ways in which knowledge is controlled at different scales of governing. The politics of knowledge is highly important in the development of a new policy domain, particularly one with the complexity of climate change, and is something that is explored in more depth in Chapter 12, on the deployment of local carbon reduction targets. More generally, Bailey calls for “greater exploration of how climate politics operates within, and transcends, international, regional, national and local governance scales” (p420).

The region has remained largely absent from these debates, however, leaving a number of unanswered questions. For instance, where do (or did) regions fit in strategically within global, national and local carbon ‘regimes’? Was there a role for the regions beyond simply ensuring that their internal operations meet with (supra-)national regulations? If regional organisations did have a role, was it chiefly as mediators between the national and local – and what were the politics involved in these processes – or were there wider mechanisms available by which they could influence climate change mitigation? And, finally, what overlaps, continuities and differences were taking place in the purported transition from ‘sustainable development’ to ‘carbon control’ as the *leitmotif* of environmental policy at the regional level?

Three sets of critiques may be aimed at the literature emanating from political and economic geography circles outlined above. Firstly, theories of governing are largely absent, or engaged with only implicitly. Much of the work is based within forms of neo-Marxist and neo-Gramscian thought, with Bob Jessop's theories of meta-governance and strategic selectivity (Jessop, 2003) often invoked, but are not developed in depth to explore processes of governing more explicitly. Harriet Bulkeley and Michele Betsill (2005 p58) highlight a key weakness in current understandings of the implementation of 'sustainability' policies, however they might be defined:

...the lack of engagement between those concerned with the analysis of urban governance and those whose focus is on sustainable cities has ... led to a relatively impoverished conception of the governance context in many accounts of urban sustainability.

There is therefore a weakness in understandings of *governance* and *power*. In this vein, the most interesting and potentially fruitful avenues of exploration are those that have attempted to conceptualise the different types of strategies being taken to achieve carbon reduction within different spatial boundaries. Harriet Bulkeley and Kristine Kern (2006), for instance, traced the different 'modes of governing' used by local authorities in the UK and Germany to achieve climate change goals. This work provided insights in attempting to conceptualise and trace the specific forms in which power can be exercised, as will be discussed in the next chapter. These explorations did not, however, explicitly trace out the exercise of power as it translates through different actors in the development and implementation of policy, although Bulkeley and Kern (2009) do make a start with this in viewing the ways in which transnational climate change networks work to influence national and international governing processes. More recently, Bulkeley (2010) also attempts to tie this body of work with multi-level governing theories, but does not go beyond simply modelling the relation of local governing actors to others acting 'from above'.

Second, and related to the above, there is a tendency to focus only on the relationship between national government and a particular sub-national entity, rather than relationships between sub-national actors. It is worth also noting the role of the EU in

attempting to embed environmental agendas into regional policy. Jenny Fairbrass and Andrew Jordon (2004) assert that the EU has:

... created some of the strongest and most progressive environmental policies of any polity in the world. This remarkable achievement has been accomplished with the involvement of a variety of state and non-state actors at different levels of governance, ranging from the local to the global.

p147

The Treaties of Maastricht and Amsterdam, for example, gave legal status to prioritising environmental issues within European policy (Cohen, 2008). While much European policy feeds through national government before reaching sub-national institutions, literature on policy integration has highlighted attempts to implement sustainable development agendas as part of ‘cross-cutting’ or ‘horizontal’ themes in EU regional structural funds programmes (*cf.* Taylor, Polverari and Raines, 2001; Wells *et al.*, 2004; Gore, 2005; Cohen, 2008). Findings from this body of work have not been radically different to those discussed above, but are still important to recognise. Continuing a familiar theme, Tony Gore (2005, p1), for example, suggests that policy co-ordination “may reflect a neoliberal concern to obtain control over complex or ‘wicked’ issues by attempting to insert connective strands into an institutional structure that remains fundamentally unchanged”. In a similar study, Sarah Cohen (2008) also found that “incremental changes to achieve the integration of environmental concerns within structural fund programmes are likely to be unsuccessful” (p12) for the same reasons.

Finally, while there has been some emphasis on ‘bottom-up’ forms of governing, including studies of particular local climate movements – such as the Transition Towns movement – (see North, 2009), there has been less emphasis on ‘formal’ governing actors working to by-pass traditional state hierarchies by joining policy networks, increasingly operating across boundaries. This has included signing up to international agreements – for example, LA21 – or various sustainability and climate change networks – for example the Nottingham Declaration and the C40 Climate Leadership Network – even if the take up for some of these initiatives has been “patchy” (Jonas and While, 2007 p129). A range of transnational local authority climate change networks operate, and have been explored by Harriet Bulkeley and Michele Betsill (2005; Betsill and Bulkeley, 2008), including the ways in which these networks

influence their members, but also aim to influence policy at different hierarchical scales of governing. This opens up two areas of interest, first in exploring partnership-based regionalisms as being one of many potential policy networks for local and regional actors to participate with. Here, attempts at legitimising regional governing organisations come to the fore. Second, some analysis of the different strategies that can be taken by governing organisations and networks to influence the policy process is important to show spatial governing as not simply a top-down process of cascading authority, but as a more complex process involving a range of actors at different scales and across different networks. These critiques – particularly in terms of asserting theories of governing within geographical perspectives – come to prominence in the following chapter, and are explored further in the empirical analysis later on.

Conclusion

The physicality of space was not explicitly considered in the political construction of the English regions; in particular human interaction with non-humans. Nonetheless, environmental issues have slowly gained currency as legitimate policy themes and as a result sub-national governing organisations in England *are* increasingly implicated in struggles around recognising and dealing with the linkages between economic development, welfare issues and environmental concerns (Gibbs and Jonas, 2001). Engagement with the ‘politics of scale’ at regional and local levels of governing point to two intertwined issue that stifle attempts at developing sustainable pathways even where there is will to do so. Firstly, there has been a distinct lack of steering from national, and supra-national, levels of governing, whilst economic agendas *are* often closely monitored from above, particularly in the UK. This points to a second major problem faced by sub-national policy makers: a lack of autonomy to develop their own distinctive policy agendas. In response, governing institutions operating at regional and city-regional levels attempted to develop alternative forms of governing based on ‘network steering’ and discursive (city-) regionalisms to foster action on sustainability; although these inclusive approaches almost inevitably became couched in, and potentially subsumed by, economic imperatives.

If, as Gibbs and Jonas (2001), as well as Whitehead (2003), contend, local governing arrangements are “crucial” in implementing sustainable development policies, then there is also a question of tensions or partnerships between regional and local scales: attempts to deal with ‘wicked’ issues such as environmental sustainability “involve a series of interactions between actors in different policy frames, a sequence that has to be repeated at each level as the package feeds down the policy chain” (Gore, 2005 p1). Aidan While (2008, 2010; *et al.*, 2010) contends that increasing concern for carbon reduction policies will potentially result in greater spatial and scalar tensions than seen in previous incarnations of eco-state restructuring. Investigation of the politics of space and scale in this emerging policy area thus becomes a key research agenda: not only between national and regional or local scales of governing – as has been the dominant focus to date – but also between the different sub-national scales of governing.

A key research agenda emerges then in empirically analysing the extent and forms of shifts to an era of ‘carbon control’, in particular in attempts to re-imagine the region as a carbon space. This potential new phase of eco-state restructuring brings forward a new set of questions concerning scalar politics and governing strategies. For example, how is the governing of carbon management being scaled: that is, which institutions and levels of governing are being privileged in new governing arrangements, and how do these arrangements differ from previous modes of governing sustainability? Similarly, to what extent and in what ways do emerging trends in governing climate change differ from practices and policies for meeting sustainable development agendas? And in what ways are the multiple politics of space and scale being played out within these emerging practices?

In terms of analysing these questions, stronger linkage to theories of governing would help to give depth to the existing literature in this area. It is to this issue that the next chapter turns. In particular, there is a need to focus on the specificities of scalar politics and the exercise of power: that is, a need to understand how resources are mobilised to attain political outcomes and the strategies that are employed beyond ‘broad brush’ theorisations of neoliberalism; scalar hierarchies versus network collaborations; and ‘metagovernance’.

This account has so far explored debates around ‘the region’ and non-human space, bringing forth a set of research questions focused on the ways that governing actors work to ‘construct’ political spaces and how actors have attempted – or might attempt – to develop new spatial imaginaries around notions of ‘the environment’, sustainable development, or – more recently – carbon ‘flows’. In developing new spatial boundaries – either in terms of territory or scale, or including and excluding certain constituent elements from that space – the ‘practice’ of space was outlined as crucial in Chapter 2. Essentially, this means focusing on the specifics of *how* and *where* actors seek to build spatial formations. This has to some extent been underplayed in literature concerning both the governing of sub-national space and of ‘the environment’. The previous chapter thus concluded with a critique that suggested a need for greater emphasis on theories of governing and the ways in which power is exercised in order to more comprehensively analyse the ways in which policy – and space – is produced and enacted.

In order to effectively explore these practices, a framework that is specifically concerned with conceptualising and tracing power is required: this chapter explores the work of John Allen and Harriet Bulkeley in an attempt to adopt and develop a framework that effectively meets these requirements. Harriet Bulkeley’s ‘modes of governing’ (MoG) approach attempts to engage with critiques of contemporary discourses of both power and governing. In terms of power, it attempts to draw attention to the particularities of power as it is exercised; in particular the heterogeneity of its manifestations. Viewed in terms of theories of governing this approach may be seen as attempting to develop the work of Bob Jessop and others into an approach more sensitive to calls from neo-Foucauldian scholars for a greater emphasis on the specificities of power. A more specific critique of governing theories relates to the theoretical lexicon used. In particular, the term *governance* is critiqued as being ambiguous and, in certain interpretations, a teleological misrepresentation of a trend as an endpoint.

Here, I outline a framework that takes Bulkeley's approach as a starting point for developing a more theoretically consistent, analytically flexible and spatially sensitive approach to analysing governing practices. In terms of the 'howabouts' of power I take Bulkeley's MoG framework and re-work it through Allen's work regarding the analysis of specific power modalities. I suggest a focus on the technologies of governing in order to highlight the 'horizontal' fluidities between governing modes. In determining the 'whereabouts' of power a turn towards theories of multi-level governance (MLG) is useful, although I briefly note that this model would perhaps be better termed multi-site governance to more clearly capture the heterogeneity of actors and relations involved, and their spatial natures. While Bulkeley's concern has been for analysing the multi-level practices of governing as well as the specific forms of governing, these approaches have not been explicitly combined in her work.³⁰ The MoG framework is therefore re-worked and expanded to develop a more flexible 'general-theoretic' approach for analysis. Crucially, while Bulkeley and colleagues' work has been quite static in its analysis of governing 'constellations' this expanded approach is concerned with highlighting the ways in which power is translated, mediated and potentially subverted across scales of governing. This aspect of governing practices is given too little emphasis in governance or governmental literature as a whole. Similarly, the MoG approach has tended to focus on analysing top-down governing strategies, although elements of it have been drawn from in work by Bulkeley with Kristine Kern on transnational governing networks: I briefly offer ways in which 'governing from below' might be analysed more fully using the re-worked 'multi-site power modalities' framework.

Lost Geographies of Power

Any discussion of governing processes invariably requires a discussion of power. Indeed, power is everywhere, and embodied in everything (Foucault, 1975). This can be problematic in itself. As Murray Low (2005 p83) notes, "[power] is both one of the most readily digested concepts in the world ... yet curiously difficult to specify when

³⁰ Although Bulkeley (2010) does work with both frameworks, the analysis does not go so far as to effectively entwine the two.

we actually focus on it”. Without an understanding of what power *is*, or of what it is constituted, it may be argued that any understanding of its effects will be ultimately lacking. And yet, as noted in the previous chapters, it is an issue that has not been sufficiently ‘de-constructed’ in much contemporary work regarding the region, or on political processes more generally. John Allen (2003; 2004; 2006) has gone further, arguing that geographical study as a whole has drifted away from exploration of power in itself as an object of enquiry. Specifically, he argues that,

I think that we have lost sight of the *particularities* of power, the diverse and specific *modalities* of power that make a difference to how we are put in our place, how we experience power ... I want to bring such differences and distinctions back to the fore, not only to underline the kinds of confrontation that power can and does take, but also to weave them into a more geographically curious dialogue of power.

Ibid. p2

In order to ‘reclaim’ the concept, Allen depicts a reinvigorated approach to power. This can be distilled to three core points. Firstly, there is a need to alter the lexicon of power. Most significantly, power should not be seen as something that may be ‘held’ or ‘stored’; power is something that is *exercised*. So, although we might agree with Michel Foucault that power is ever-present, and (potentially) coming from everywhere, power is not a ‘thing’, but a “relational effect of social interaction” (*ibid.* p5). In using this definition, we then need also to be more aware of the distinction between resources – or capacities – and power. Resources may determine the level, and form, of power we are able to exert in a particular circumstance; that is, they affect our ability to act. They do not, however, determine whether or not power is exercised. A lump of coal is a resource, but it does not *possess* the power that it produces when combusted. Similarly, it would be wrong to say that individuals or institutions ‘hold’ powers. This may seem a largely semantic issue, but for Allen this is central to the ensuing discussion: if we can move away from power as a nebulous phenomenon - “a shadowy force lurking in the murky recesses” (2003 p9) - held by certain individuals and organisations, we can begin to also look at the specificities of power. We move towards exploring power more clearly as something heterogeneously applied and mediated through relationships and material encounters in particular contexts.

This brings the second key point into focus. Drawing on the work of Max Weber and Hannah Arendt, Allen criticises Foucauldian works of often theorising power through a dualist domination-resistance dialectic. Instead, he points out the manifold ways - or modalities - in which power can be exercised:

... power is never power in general, but always power of a particular kind, I take such acts as domination, authority, seduction, manipulation, coercion and the like to possess their own relational peculiarities ... A world of difference separates dominant relationships which restrict choice and close down possibilities from those which, for instance, secure assent, manipulate outcomes, impute threats or seduce through suggestion and enticement.

2003, p5

It would be easy to take a leap from here to take a stance where there are seen to be “as many forms of power as there are types of relationships” (Sheridan, 1980 in Allen, 2003 p99). To do so, Allen warns, would be to drift back into a position where power is again seen as a singular, nebulous force; to lose sight of the ‘particularities’ of power once more. Although Allen does not say so outright, it is therefore implicitly deemed necessary to have some level of abstraction, or theorisation, of the various modalities of power. In other words, there is a need to walk a careful line between power as a singular thing because all power is the same, and power as a singular thing because power is exercised in so many different ways that it is seen as an all pervasive force separated from specific relationships. Allen thus speaks of a number of different general modes of power. First, he talks of two general forms of relational ties through which power exerts itself. These are instrumental ties, which are held over you and used to gain leverage; and associational ties, which are “more like a collective medium enabling things to get done or facilitate some common aim” (p5). Instrumental ties are always at someone else’s expense, while associational ties are enabling for the benefit of all those taking part: “power is exercised either *over*, or *with* others” (*ibid.* emphasis in original). From this starting point, Allen refers at various points to six modes of power: domination, coercion, seduction, inducement, manipulation and authority. Allen does not at any point argue that these comprise a comprehensive typology of power; although they do appear to form a strong basis from which to begin.

The two preceding discussions lead to Allen’s final – and overarching – concern: the ‘lost geographies’ of power. That is to say, Allen wishes to assert that power is “always already spatial” (p102). This may be seen as something as a truism, in the same sense

that one might point out that everything is spatial, just like everything is temporal, but this would do an injustice to his argument. Like Doreen Massey (2005) and others (see Chapter 2), Allen's concern is not just that space is 'always there', but that contemporary notions of networks and flows (cf. Castells, 1998; Latour, 2005), reification of 'global' forces, and the above discussed arguments regarding 'all-pervasive' power have resulted in scant attention being paid to the effect that space has on the ways in which power is exercised and experienced:

People are placed by power, but they experience it at first hand through the rhythms and relationships of particular places, not as some pre-packaged force from afar and not as a ubiquitous presence.

Allen, 2003 p2

As an example of this, Allen (2006) explores the place-specific manifestations of seductive power in the Sony Centre, Berlin. Here, the production of 'ambient' space is used to develop an apparently open environment that in fact represents a seductive presence that closes options, depicting this expression of power as less reliant on continual small scale interactions than conventional practices of domination might. At the same time, however, this localised seduction may also be seen as a translation of other forms of power as they move across scales of practice: the fact that the Sony Centre is placed in a culturally highly significant public place³¹ may be seen as a manifestation of the domination of certain multi-national firms over policy-makers and wider discursive logics in society. Similarly, as Murray Low (2005, p83) points out, "Different modalities of power have different spatial characteristics or 'reach', and thus different degrees of effectiveness over wider scales". Low suggests that domination is most effective when there is minimal spatial distancing, involving frequent interactions, while seduction may be less so.

Allen's framework is certainly "compelling" (Low, 2005 p84) and draws out a range of research questions pertinent to this research project. His call for renewed emphasis on the particularities of power has resonance with the aim here to view the different strategies and practices of governing. It also provides a potential lexicon through which to analyse these processes and the overarching aim of rediscovering *lost geographies of*

³¹ The Sony Centre is on Potsdamer Platz, previously the cultural and commercial heart of Berlin, which was decimated by the construction of the Berlin Wall in 1961.

power is something central to both the understanding of space outlined in Chapter 2, and the ‘politics of scale’ discussed in Chapters 3 and 4. What Allen does not do, however, is link his ideas to specific theories of governing: while it is useful to develop a wider understanding of power, this can only be utilised as an analytical framework if incorporated within a framework that takes into account the governing process. Serendipitously, Harriet Bulkeley (2010; *et al.*, 2005; with Kern, 2006 and 2009; with Watson and Hudson, 2007; with Betsill, 2008) has made a start at developing a framework that does attempt to do such a thing, to which I will shortly turn.

First, however, it would be useful to take a look at two dominant sets of approaches to analysing governing processes: institutional governance theories, particularly those of Jessop; and neo-Foucauldian governmentality: for Bulkeley *et al.* (2007, p2734) “neither account adequately addresses the complexities of how authority is attained, maintained and exercised, with the practice of governing”. Instead they develop a ‘modes of governing’ approach, which takes on elements of both sets of approaches; in particular Jessop’s regulation approach and recent ‘moderate’ interpretations of Foucault (*cf.* MacKinnon, 2000; Murdoch, 2000).

Governance

In the eyes of many scholars, recent years have seen a fundamental shift in the forms, structures, processes and spaces of governing. This is largely owing to a sense that previous ideas of hierarchical, state-centric, *government* are no longer sufficient to describe the processes by which institutions exercise power in light of changing scalar patterns of governing (see Chapter 3), including a less clear sense of scale - as practice and category - and hierarchy being intrinsically linked, and increased involvement of non-state institutions in governing activities. As a result, there has been a concurrent rise in the use of the term *governance* to refer to governing actors, institutions and practices. At the same time, one might argue that recent notions of governance also show recognition of the fact that governing practices were never reducible to set hierarchical relationships between specific state institutions and society. This avenue of work has branched into various fields – of which, three areas of most relevance to this research are discussed below – and has often been fruitful in providing a better

understanding of the way state actors interact with others. Specifically, in developing their 'modes of governing' framework, Bulkeley *et al.* acknowledge that:

...recent debates on the changing nature of the state and the emergence of new forms of governance provide a useful starting point for the development of a framework for analysis ... [of] a heterogeneous policy milieu.

Bulkeley *et al.*, 2005 p15

Furthermore, these debates suggest that it is no longer possible to take for granted the context within which policy making is taking shape and being implemented. In fact their approach attempts to supplement rather than supplant governance approaches by developing a more plural approach, which fills in some of the gaps identified in their reading of governance literature to date. The work of Jessop on governance and institutions (*cf.* Jessop, 1990; 1997; 2003; 2005) has been particularly influential.

Jessop, SRA and Institutional Turns

Situated within a broader 'regulation' school of thought, Bob Jessop's Strategic Relational Approach (SRA) to theorising society, institutions and governance has proved popular for those attempting to research sub-national governing practices. Indeed, the preceding two chapters have been shot through with references to those who explicitly use Jessop's approaches (*cf.* Lagendijk, 1997; Sum, 2004), others who draw selectively on his ideas (*cf.* Haughton, Counsell and Vigar 2008), and yet more who implicitly engage with some of the wider understandings of the world he espouses (*cf.* While, Jonas and Gibbs, 2010; Gibbs, 2006). Jessop describes his approach thus:

The SRA is a general theoretical framework for addressing structure and strategy at various scales of social life from its micro-foundations to its most general macrostructural dynamics ... It regards the state neither as a unitary political subject nor as a passive instrumentalizable thing but as *a complex social relation* ... It treats the state as a relatively unified ensemble of socially embedded, socially regularized, and strategically selective institutions, organizations, social forces, and activities organized around (or at least involved in) making collectively binding decisions for an imagined political community .

2005 p50. Emphasis in original.

Jessop takes a critical realist approach in developing this theory. Critical realism is a philosophy of science primarily based on a particular understanding of ontology. This is

based on the existence three stages of 'reality'. For critical realists the 'empirical' level of reality makes up only those things that can be readily observed. In order to understand these observations, one must delve to the level of the 'real', which is the realm of potentiality: the structures and powers of objects. In between the real and the empirical domains lies the realm of the 'actual' (Sayer, 2000). This refers to what happens if and when those powers are activated. In a wider sense Jessop is concerned with the role that analysis of institutions can play in understandings of structure and agency.³² Jessop argues that, rather than taking a dualist structure-agency dichotomy, a more fruitful avenue is to examine structure in relation to agency and agency in relation to structure. That is, he takes a dialectical approach to their relations.

Jessop draws from Nicos Poulantzas in considering the state as "a system of *strategic selectivity* and the nature of political struggle as a field of *competing strategies* for hegemony" (Jessop, 1990 p221, original emphasis in Uitermark, 2005 p139). This, for example, allows a view of the different ways in which the state can work for different purposes, and develop different forms of 'selectivity'. Antonio Gramsci has also been a key influence in Jessop's SRA, which attempts to look at the strategy-structure dialectic in decision-making (Uitermark, 2005). The SRA argues that it is impossible to draw an ontological line between the two: they are co-constitutive.

There are many strengths to this approach. The focus on 'strategic selectivity' is particularly interesting. In simple terms, this concept posits that, "some actors and institutions have the ability to formulate, secure and implement specific policies, while others do not" (Gibbs, 2006 p203). The strategic selectivities of structures thus "reward actions that are compatible with the recursive reproduction of the structure(s) in question" (Jessop, 2001 p1225). For Jessop then, institutions only matter in terms of their "structurally inscribed strategic selectivity: *institutions select behaviours*" (*ibid.* p1226, emphasis in original). At the same time, however, individuals may - through skilful or reflexive action - reconstitute institutions. The SRA thus attempts to situate institutions within a broader, and richer, social world: they should be analysed as

³² The term institution is used here to be consistent with Jessop's terminology. The meaning of the word institution is vague, and often represented in different ways by different writers, particularly when scholars talk of institutions being inscribed with particular forms of cultural logics. Therefore, when carrying out my own analysis, the term institution has been used sparingly, and when it is used, is to be understood as a direct synonym for organisation, or – loosely speaking – a particular network.

“complex emergent phenomena, whose reproduction is incomplete, provisional and unstable, and which coevolve with a range of other complex emergent phenomena” (*ibid.* p1230). They are always in formation and always exist in relation to any number of other heterogeneous formations.

An especially cogent analysis relates to Jessop’s contention that “every mode of governance fails” (2003, p16). That is, the strategies taken by governing organisations will always in some way, at some point, not achieve the desired outcomes. Jessop thus highlights three strategies that are used to mitigate for this:

- Developing a flexible repertoire of response: effective governance often requires a combination of mechanisms oriented to different scales and temporal horizons. “In this way strategies and tactics can be combined to reduce the likelihood of failure” (p16): “Because of the infinite variety of perturbations that could affect a system in a complex world, one should try to maximize its internal variety (or diversity) so that the system is well prepared for any contingencies” (p17).
- A reflexive orientation about what would be an acceptable level of failure.
- Self-reflexive ‘irony’ in that participants in governance recognise the likely failure of their actions, but proceed as if success were possible (p16).

Jessop, 2003 pp16-17

The first of these points can be easily related to Allen’s preoccupation with the multiple modalities of power: Jessop offers an explanation as to why multiple modalities are required in order to effect changes in others’ behaviour. Governing institutions need to use a range of strategies in order to minimise the risk of failure. Jessop’s extensive discussions of institutions of governance thus promise to provide a potentially rich analytical approach. As noted above, his work has been influential on much recent work investigating sub-national environmental policy (*cf.* Whitehead, Jones and Jones, 2006; Haughton, Counsell and Vigar, 2008). Much of this work has not, however, taken much time to engage with these theories in depth, beyond employing certain elements of the theoretical lexicon used in the SRA.

One notable exception to this is in David Gibbs’ (2006) attempt to outline a framework for ‘Environmental Economic Geography’ based around linking ecological modernisation approaches – which he accuses of lacking a “theory of power relations”

(*ibid.* p200) – with those taking a regulationist starting point. Gibbs argues that approaching the governance of environment-economy relations through Jessop’s SRA helps place emphasis on the discursive and material processes involved in developing and implementing environment policy, including the interplay of structural and strategic elements within those processes. This in turn allows the researcher to reconceptualise ecological modernisation to understand that the “focus upon ways of integrating economic and environmental aims in some developed states suggests a process of strategic selectivity at work” (*ibid.* p203). These principles have been also taken on in his work with Aidan White and Andy Jonas (White, Jonas and Gibbs, 2010) on eco-state restructuring.

There are, however, a number of critiques of Jessop’s work. Justus Uitermark (2005), for example, outlines a number of key problems with both SRA and its application in concrete analysis. First, he argues, despite a concern for the interrelationships between institutions, Jessop has not taken this further to explore relationships between different *actors* working at different scales of governing. Second, Uitermark picks on Jessop’s “notorious hesitancy” in translating his theoretical ideas into empirical research: “in fact there is a large discrepancy between the formal methods of SRA and Jessop’s actual analysis” (*ibid.* p141). In particular, Jessop has not focused on how institutions may have come into being through trial and error processes rather than through a simplified process of ‘strategic selectivity’. Similarly, one might wonder where the unintentional – that is, ‘non-strategic’ – exercise of power might come into these analyses. These issues highlight the difficulty of operationalising Jessop’s approach, which may in themselves point to a need for either adaptation of the SRA, or finding an alternative, complementary, approach. Two further critiques are potentially of more fundamental importance, however.

One critique relates to Jessop’s approach to structure and agency: despite his attempts to overcome the problems taken in other structure-agency approaches, there are still grounds to take issue. The problem is that Jessop continues to work with the notions of ‘structure’ and ‘agency’ as somehow necessarily interrelated.³³ As with the spatial

³³ This is not an attempt to wade in and ‘solve’ the ongoing and seemingly intractable debates around structure and agency – and structure-agency issues are essentially dependent on the research subject –but instead to highlight a small number of specific issues relating to some conceptualisations of the terms.

polymorphy approach he developed with Neil Brenner and Martin Jones (2008), Jessop fails to take into account the non-human element of all (social) relations: everything is a 'structure' (or network) and is entirely determined by structure; we are only ever talking about the ways in which different structures relate to each other, and the ties that hold them together.

Structure is a necessary factor, while agency is contingent. Sometimes it is there, at other times it is not. In some accounts, Jessop prefers to talk of a structure-strategy dialectic, which would be a marginally preferential account: this allows a more acceptable understanding of actions taken within particular spatio-temporal constraints rather than grander notions of individual humans as remaining somehow separate, and fundamentally different, to the other types of networks that shape them. This also highlights a danger when talking about 'structure' and 'agency', or even 'structuration' that the terms can be taken to mean two different things: a scale of activity – for example, the 'individual' against the 'organisation' –and the ability of actors to act. The two should not really be conflated, but often seemingly are. As the recent focus on the 'social construction' of space has shown, scale – in terms of size, or even position in a chain of geographic hierarchies – does not necessarily equal an increased ability to ensure that others do what you want them to.

A final critique, which is perhaps of most direct relevance to this research, is that “the microphysics of power has remained well out of the orbit of not only Jessop’s work but the body of regulationist writings as a whole” (Uitermark, 2005 p142): it tends to underplay, or ignore, “the places where power makes itself actually felt”. That is, “the body and the institutional setting that surrounds it” (*ibid.*). This is acknowledged by Gordon MacLeod, who in propounding Jessop’s approach, adds:

Not that this is in any way to deny the persistence of serious gaps and unexplored lacunae in the regulation approach. For instance, thus far it has yet to successfully bring into play a whole series of questions relating to consumption ... the micro-physics of governmentality ... the discursive construction and performativity of political-economic regimes, or the ways in which they take on gendered sets of power relations ... and questions around subjectivity.

MacLeod, 2001 footnote 22

It tells of generic governing strategies – or technologies – and of the organisation of

institutions, but not of the forms of power exercised. Jessop is keen to develop a nuanced understanding of institutions, and notes a preference for understanding “powers in the plural” (2004 p5), yet continues to talk of power as ‘domination’ (*cf.* Jessop, 2001). Here lies the crux of the issue. Institutional approaches to governance – including Jessop’s SRA – often appear to either take a singular notion of power or conflate it with the use of particular technologies (see Modes of Governance, below). So, for instance, Jessop talks of ‘strategic selectivity’, but does not show how this operates in practice, or how this might operate in different ways through different mobilisations of resources.

As a result, although Jessop’s work is extremely useful, it is difficult to operationalise as an analytical framework, being as it does not focus – or has not focused – on what he might term the ‘concrete-complex’ issues of power. The SRA, including Jessop’s institutional approach to governance, remains pertinent to the research reported in this thesis and provides much by way of considering the role of state and non-state institutions, as well as different spaces of governing. It is felt, however – in line with Bulkeley *et al.* – that in order to more thoroughly engage with the specificities of power, a different approach is required.

Multi-level Governance

One potential option is a closely related approach: that of Multi-level Governance (MLG). This model attempts to account for shifts in the spaces and scales of governing as well as the actors involved (Bache and Flinders, 2004). Jessop (for instance, 2005) has in fact contributed to this field, in emphasising the ‘placing’ and ‘scaling’ of (governing) institutions. As well as understanding institutions as being relational artefacts in a broad sense, they also need to be ‘put in their place’. First, an institution needs to be defined, located, and thematised; then its operation and reproduction through routine actions must be understood. Within this, Jessop is overtly concerned with the position of institutions in time and space, and the effects that they have on institutional operations: power relations between institutions set in different spatio-temporal contexts are crucially important to the functioning of individual institutions. In other words, the *whereabouts of power* is an important agenda.

MLG (coined by Marks, 1993) as a model or theory of governance arose chiefly out of a recognition of these issues. Although not explicitly concerned with issues of geography, a need to acknowledge the fact that governing institutions are increasingly embedded within wider institutional systems is a core focus. MLG is chiefly concerned with the idea of a move towards *governance* as opposed to *government* (Rhodes, 2000), the simultaneous understanding of fragmentation, whilst at the same time increased interconnectivity in society (Gamble, Kelly and Kelly, 1996) and a critique of the “false dichotomy” (Bache and Flinders, 2004 p3) caused by the traditional academic separation of domestic and international politics. These suppositions have appeared particularly salient in relation to the EU and as such MLG has become popular in disciplines analysing governance in Western Europe; especially, as befits this discussion, at the local and regional levels.

Bulkeley *et al.* (2007), however, suggest that there remains contention about whether MLG ought to be called multi-level *government* instead. In part this is because, for Andrew Jordan (2001 p193 cited in Bulkeley *et al.*, 2007), “it remains unclear whether multi-level governance is a general feature of the EU or a phenomenon confined to particular sectors and/or levels”. Similarly, while there is evidence suggesting that, in the case of environmental governance, forms of multi-level governance are increasingly significant and that this governance – at least at the local level – involves new partnerships and networks between state and non-state actors, elsewhere *government* retains dominance: Richard Cowell and Jonathan Murdoch (1999 p663) found that planning for housing and for minerals retain strong governmental characteristics, with strong national-to-local ‘chains of command’ “which ensure that a ‘dominant line’ ... is disseminated to a multitude of local decision-making bodies”. In line with this it is important to remember that policy domains are not bounded units: environmental governing is also intertwined with other areas, such as housing, or economic policy, and so if *government* is still found in these areas then it is still important to recognise this.

Bulkeley’s critique is based on a particular understanding of governance, however, and Lisbet Hooghe and Gary Marks (2004) partly overcome this issue by outlining two models of MLG. Type I MLG continues in line with ‘nested’ approaches to scale, whereby governance institutions take a hierarchical lineage: “a system of continuous

negotiation among nested governments at several territorial tiers” (Marks, 1993 p392 in Bache and Flinders, 2004). This model sees general-purpose jurisdictions operating at a limited number of levels. This form of governing aims to cover whole systems, with ‘non-intersecting’ memberships (that is, strictly hierarchical). Type II MLG, however, emphasises the mixture of instrumental, hierarchical approaches and network-based; partnership working, as well as forms of market governance. For example, David Counsell and Graham Houghton (2006) discuss the planning system in England, noting how rigid hierarchical systems of formal planning have been reshaped, but still provide the skeleton of the formal planning system. They are now overlain with a range of other informal and formal ways of working, involving links to other policy sectors and to new scales of planning with less rigidly defined statutory roles; this they term “mutant planning”.

Despite the focus on ‘multi-level’ practices, MLG approaches still tend towards viewing issues relatively ‘statically’, without explicit focus on how the MLG process brings about translations and fluidities as governing programmes move across levels or even forms of governing. To take the discussion back to the initial points made by John Allen, another key issue is that while MLG approaches help to bring an added understanding of where, or by whom, power is exercised, they do not bring about understanding of the different forms of powers, or strategies, that are being exercised. The approach acts as a way of modelling institutional patterns rather than developing a ‘theory of relations’. In this sense the ‘modes of governance’ approach may offer some insights (see below).

A second critique might be that the notion of ‘levels’ in governing presupposes fixed ‘scales as categories’ in governing. While in practice this may often seem the case, an approach in line with the spatial propositions put forward in Chapter 2 would want to emphasise the contingency of relations, as well as the heterogeneity of actors. Indeed Type II multi-level governance places emphasis on the blurring of distinctions between traditional hierarchies between actors. As such, multi-level governance would perhaps be better labelled with a moniker that more properly signals these factors. Multi-site governance might be a good starting point, although I will retain the term ‘multi-level’ for the remainder of this thesis to avoid confusion.

Bulkeley and Kern (2006) suggest work on modes of governance has been a useful starting point in engaging in the plural means of governing in the EU. Jonas and Gibbs (2003) and Treib, Bahr and Falkner (2007) each take a modes of governance approach to their respective studies. Jonas and Gibbs write of modes of governance in relation to economic and environmental governance at the local level in England. This approach takes regime theory as its starting point and focuses on interaction between economic and environmental discourses and the role of different institutions at various levels within this process. Rationales, the location of power and the implementation of specific policy instruments were explored only implicitly.

Treib, Bahr and Falkner take a more formalised approach in developing a typology for governance modes based on synthesis of research carried out by governance scholars across the EU. They begin by segmenting governance into policy, politics and polity; and concern themselves with developing a typology for the policy dimension based on those previously attempted by NewGov (2005) and Knill and Lenschow (2003), arguing in particular that:

It seems wise ... to begin by looking at (changing) modes of governance in terms of policy instruments without simultaneously taking into account what kind of actors were involved in, and what kind of institutional conditions structured, the production of these policy instruments

Treib, Bahr and Falkner, 2007 p20

From this starting point, Treib, Bahr and Falkner develop a typology for the policy domain based around four modes of governance organised on axes of 'implementation' and 'legal instrument': coercion (rigid implementation, legally binding); targeting (rigid implementation, non-binding); framework regulation (flexible but binding); and voluntarism (flexible and non-binding).

Table 6: Modes of governance framework

<i>Implementation</i>	<i>Legal Instrument</i>	
	<i>Binding</i>	<i>Non-binding</i>
<i>Rigid</i>	Coercion	Targeting
<i>Flexible</i>	Framework regulation	Voluntarism

Source: Treib, Bahr and Falkner (2007)

As stated, however, this approach specifically limits examination to one particular aspect of the policy process: in this instance approaching policy instruments as modes of governance. This does not help to develop sufficiently plural understandings of governing practices or a thorough understanding of the ways that particular policies actually take shape.

From governance and government to 'governing'

The issues raised as to whether certain relationships should be labelled government or governance, or Type I or Type II multi-level governance, opens up a separate critique of the concept of governance. For Bulkeley *et al.* (2007), there remains an issue of lexicological confusion with all approaches that refer to governance. First, and most commonly, governance is used in contrast to government. This is seen as the dominant approach by Bulkeley *et al.*, with governance used to label only interactions that involve non-state actors either through self-governing networks or in conjunction with state bodies: it is argued that there is a shift from government to governance in progress (*cf.* Stoker, 2004; Wilson, 2003). Governance in this way signifies “a change in the meaning of government, referring to a new process of governing; or a changed condition of ordered rule; or the new method by which society is governed” (Rhodes, 1996 pp652-3 in Stoker, 1998 p1). For instance, Rod Rhodes (1996) posited the notion of a move from a state apparatus characterised by *government*, to one better described as *governance*. Rhodes (2000 p6, in Newman, 2001 p11) argues that this shift has now resulted in governance becoming “the defining narrative of British government at the start of the

new century, challenging the commonplace notion of Britain as a unitary state with a strong executive". As discussed in Chapter 3, this purported shift incorporates the various ideas about 'territorial re-scaling' and the idea of the 'hollowing-out' (Jessop, 1997), 'filling-in' (Jones and McLeod, 1999), or 'de-concentration' (Goodchild and Hickman, 2006) of the nation state. This includes the involvement of new quasi- and non-state actors in steering society and the development of new steering strategies: in particular the rise of network governance.

Second, and related, the term is used in reference to multi-level governance, as discussed above. Finally, it can be seen broadly as the 'instituted' process of steering society, which can involve diverse collections of (institutional) actors not necessarily limited to state institutions. Gerry Stoker (1998) points to this as the traditional use of governance; "a synonym for government" (p1). This interpretation would allow for the form of analysis that Bulkeley *et al.* aim for. This recognises (a) the plurality of governing relations and arrangements, which vary within and across particular contexts (as highlighted by Jessop, 1997; Pierre and Peters, 2000); and (b) the multiple ways in which states govern, which may include multiple modes simultaneously, both in organising the conditions for network governance ('metaheterarchy'; Jessop, 2002) and in (re-)developing different modes of governance (meta-governance; *ibid.*).

In contrast to the third interpretation, Jessop (2003) attempts to develop some conceptual clarification in delineating government, governance, the state and the market as particular concepts meaning different things. This is brought about partly from an acute awareness of the issues that the different applications of governance theory bring about: "It is being deployed for quite contrary, if not plain contradictory, purposes and its meaning often varies markedly by context" and "the very popularity of the term increases the likelihood that those who use it will talk past each other, leading to ill-founded misunderstandings and pointless disagreements" (*ibid.* p4). Instead, Jessop attempts to pin down governance as something akin to governance *versus* government. Here societal co-ordination is separated into three key modes: the 'anarchy' of the market; hierarchical government; and heterarchic governance (*ibid.*). Similarly, the state might be seen as "government + governance" (2004, p52).

Each of these interpretations are of particular relevance to the above discussion of the particularities of power; the governance thesis suggests that there is a need to move beyond analysing traditional governmental hierarchies of authority towards exploring plural governing modalities, through plural methods, with different spatial manifestations. However, for Bulkeley *et al.* (2007) the term governance is now so bound up with multiple meanings that it is no longer a helpful term in itself. Instead, they choose the term ‘governing’ as a catch-all term, similar to the second definition of governance outlined above:

[C]onsidering the modes of governing which shape and orchestrate ... policies and practice provides a basis for an analysis of the role of authority and other modalities of power as well as the institutional arrangements and networks through which governing takes place.

ibid. p 17

This can throw light on the underlying dynamics of policy making, as well as the specifics, and on the ways in which problems are defined and policy is made through discourse, networks and coalitions that traverse traditional state-society boundaries. Bulkeley *et al.* argue that taking on board recent neo-Foucauldian notions of governmentality may offer a route to a more holistic and robust analytical framework: it is in this sense that the theoretical grounding to the approach moves beyond semantic clarification of the meaning of governance.

Governmentality

Danny Mackinnon (2000) states that the recent purported shift to governance is a product of wider strategies of social regulation and control, as outlined by Jessop as well as, for example, Gordon MacLeod, Martin Jones (*cf.* MacLeod and Jones, 2006) and Neil Brenner (*cf.* 1999, 2004). However, Mackinnon draws on neo-Foucauldian writings on ‘governmentality’ – as opposed to the prevalent neo-Gramscian state theory – arguing that local state restructuring is a “product of the ascendancy of neo-liberalism as a distinct political rationality” (*ibid.* p395). This approach focuses on sets of specific practices and technologies which allow actors to introduce, enact and legitimise strategies of reform:

Notions of governmentality support a focus on the *how* of government, on the specific mechanisms, techniques and procedures which political authorities deploy to realise and enact their programmes.

Ibid. p295

This, for Foucault, should be interpreted as ‘the conduct of conduct’, through which political programmes are defined by the underlying ‘rationalities’ that shape their development. This in turn also draws attention to the specific techniques employed by the state in the way it both represents and intervenes within different domains. Mackinnon, along with Bulkeley *et al.* (2007), sees this neo-Foucauldian emphasis on specific mechanisms, procedures and tactics in contrast to a preoccupation with abstract principles of rule found in ‘traditional’ political theory. This also contrasts with analytical and empirical accounts of governance, which have tended to focus more on (changing) institutional arrangements as opposed to the production of policy or knowledge.

Indeed, there is an emphasis specifically on the importance of knowledge and expertise in providing an “intellectual machinery” (Mackinnon, 2000 p296) of ordering procedures and explanations that “construct and frame reality in ways that allow government to act upon it” (*ibid.* p296); analysis of governmentalities requires attention on the ways in which knowledge and technologies are employed as well as the governed entity and the way it is perceived (Bulkeley *et al.*, 2007). Analyses of governmentality therefore concentrate on two aspects of government: governmental rationalities and governmental technologies. *Governmental rationalities* define both the objects and the nature of government: “in effect, rendering reality governable through the collecting and framing of knowledge” (*ibid.* p2736). *Governmental technologies* are the visible outcomes of rationalities, permitting “their extension through time and space” (Murdoch, 2000 p505). Technologies tend to be “mobile, stable, and capable of aggregation, so that they allow governing to take place ‘at a distance’ from governing agencies” (Bulkeley *et al.*, p2737).

Thus, while the concept of ‘modes of steering’, or modes of governance, is often expressed in general and abstract terms around policy instruments – as evidenced in the work by Treib, Bahr and Falkner – governmental technologies encompass both policy instruments (regulation, market mechanisms, benchmarking and so on) and material

infrastructures (for example, particular instruments or forms of service delivery). Nonetheless, these approaches are not without their – in some ways fatal(ist) – shortcomings. David Kerr (1999) offers summary of a key problem with governmentality-based approaches:

....while this work addresses important issues, it does so in a way that limits its critical and emancipatory potential. Governmentality is seen to be based on a top-down and dualist conception of power, one that externalizes and marginalizes contradiction and struggle to become a theory of social reproduction rather than of transcendence. Governmentality therefore has to be subject to critique and reconceptualized as a social form of struggle; that is, in terms of negative dialectic of movement and transcendence grounded in the subjectivity of labor.

Ibid. p173

This – in simpler terms – suggests that although these approaches intend to focus on the individual spaces and struggles of power, they in fact often reduce the actor to conduits, or recipients of top-down imposition of authority. This also extends to a neglect of ‘government from below’; geographical variation in government and the roles of institutions and networks in mediating regimes of practice; and little consideration of the multi-scalar nature of governmentalities and of the possibilities of multiple centres of authority and calculation (Bulkeley *et al.*, 2007).

Modes of Governing

In short then, for Bulkeley (*et al.* 2005; 2007; with Kern, 2006) the shift to governance remains incomplete, or is over-exaggerated:

Rather than subscribe to an analysis which posits a wholesale shift from ‘government’ to ‘governance’ ... we consider the multiple modes through which the local state has sought to govern.

Bulkeley and Kern, 2006 p2237

Governance-based approaches – broadly defined – would therefore benefit from more plural understandings of governing; in this respect Bulkeley’s (*et al.*) approach draws strongly on Jessop’s regulation approach, combined with elements of Treib and others’ work on ‘modes of governance’. There is also an issue of lexicon: the multiple

meanings of governance as a term allow too much potential for confusion between its different understandings. Similarly, many forms of governing are grey areas of hierarchical *government* and heterarchic *governance* (and mixtures of the two), as Jessop has highlighted in the past.

A second main sticking point for Bulkeley *et al.* is that, although a focus on changing institutional relations – including those of re-scaling – is valuable,

...it is important to recognize that institutional change does not necessarily suggest a change in authority ... and hence that authority is not the only mode of power deployed in governing. Rather than seeing 'government' and 'governance' as necessarily fixed or exclusive entities, it is therefore necessary to unpack the means through which governing power is exercised and orchestrated in particular contexts.

Bulkeley *et al.*, 2005, p17

In this respect then, approaches that use governance theories would benefit from sensitivity to the neo-Foucauldian governmentality approaches outlined above. By introducing a focus on specific rationales and technologies, as well as institutional relations, a 'modes of governing' approach would therefore – for example – help to highlight politics of scale or space and points at which rationalities (etcetera) are conceptualised and mobilised more clearly than broader governance-based approaches. In other words this approach would on the surface seem to be potentially capable of highlighting both the whereabouts and 'howabouts' of power involved in governing society.

The modes of governing (MoG) approach is thus highlighted as a way of integrating approaches of regulation (including those that specifically relate to metagovernance), modes of governance and governmentality to develop a plural understanding of governing, which focuses on a mode of governing as:

... a set of governmental technologies deployed through particular institutional relations through which agents seek to act on the world/other people in order to attain distinctive objectives in line with particular kinds of governmental rationality.

Bulkeley *et al.*, 2007 p2739

A mode is defined by its objectives, with a set of components that include:

- A governmental rationality, and associated objectives and programmes
- Governing agencies
- Institutional relations between the agencies involved
- Technologies of governing
- Governed entities (human and non-human)

Notions of rationalities and technologies thus draw on neo-Foucauldian governmental approaches, while the continued interest in institutional relations – and the lexicon used – draws on Jessop's approach to the state. Having made these distinctions, there is, however, acknowledgement that modes do not necessarily exist as discrete entities. This is an analytical tool in order to find a way of constructively engaging with different components of governing that give a particular mode a degree of internal logic. Similarly a mode of governing is a dynamic 'constellation': rationalities are configured through sets of relations, which in turn provide the means through which technologies are deployed. Governmental technologies may also act to reshape rationalities.

By maintaining the importance of institutional and individual roles in the policy process beyond those at the head of traditional chains of hierarchy the modes of governing approach also retains the sense that policy may be reshaped by institutional 'interference'. Similarly, in the subsequent analyses of modes of governing – on municipal waste, and local climate change protection – there is recognition of multi-level governing processes through identification of the institutions and agents involved.

Although this approach appears to offer a starting point for developing plural theories of governance there are a few areas that deserve further thought. Some of these are fairly minor: there are, for example, grounds for concern that the notion of 'governing' as opposed to 'governance' is perhaps overly-semantic in its defining differences to approaches that do use this terminology. While there is a need to ensure that this

approach is seen as properly distinct from the Modes of *Governance* framework there is also a need to bear in mind Ann Markusen (2003) and Arnoud Lagendijk's (2003b) call for 'subtle' as opposed to grand critique of theories/paradigms and a need to engage from within 'islands of discourse' (Purcell, 2002). The question here is whether Bulkeley *et al.* do remain within this realm, or whether they should engage more constructively from within the 'governance' paradigm instead of partially removing themselves from it.

There is a second issue here in that Bulkeley *et al.* (2005; 2007) do not explicitly spell out what they mean by *government*: governance is explored as an alternative and presumably government is used to mean hierarchical 'chain-of-command' governing via use of 'strong' power – that is, legally/statutorily binding with little leeway for agencies to adapt/negotiate these – which is not necessarily excluded from most 'governance' analyses: more that they are seen to be achieved in a more complex manner than perhaps previously conceived. For Bulkeley (and Kern 2006 p2237), *governing* is understood through Gerry Stoker's (2004 p22) description as: "the processes that create the conditions for ordered rule and collective action within the political realm", again something described in theories of metagovernance by Jessop. I would argue that the stress on processes of 'governing' could have the effect of distracting from the central tenets of MoG, and potentially closing it off from certain audiences. I will, however, continue with the terms used by Bulkeley and colleagues for purposes of consistency.

A third question asked of the MoG framework – put forward by readers of early drafts of this chapter – was whether it allows for 'critical' analysis of governing practices and relationships. In other words, it can be used to map the process of governing, but can it uncover the 'real' structures and politics involved? Some sympathy may be had with this criticism: the framework is not explicitly a 'critical' approach. It does not start with a particular stance on what it aims to uncover. But that should not be seen as a failing of the framework; it is a strength. The MoG approach is concerned with uncovering precisely how governing rationalities are conceived and implemented and via which actors they are mobilised. A thorough exploration of these processes will inevitably then expose the power relationships, disjunctions, contradictions and 'politics' of the governing process.

There are two more fundamental issues, however. The first of these relates to the extent that the framework is actually concerned with capturing the ‘dynamism’ of governing constellations. Applications of MoG to date have actually been quite static in their analysis of governing practices. As such, the framework would benefit from reconfiguration towards a focus on *technologies*, with an emphasis on the ways in which specific power modalities – conceived within a re-worked set of governing modes – are operationalised, as well as the fluidity between different modalities. Second, and linked, the application of MoG can be said to have not fully delivered on its aims to explore the particularities of power within a multi-level context, both through its conception of governing modes and its utilisation in practice. In sum, the approach offers a good starting point for analysis, but requires a reasonable amount of further development in order to gain sufficient utility for application as a robust theoretical and analytical framework.

Unpacking modalities

Re-working MoG requires first that the initial conceptions of governing modes are unpacked, simplified and then expanded. As an analytical approach MoG has been used in two studies from which work has been published, both of environmental governing at the local level: an exploration of municipal waste management (Bulkeley *et al.*, 2005; 2007) and also of local climate change protection (Bulkeley and Kern, 2006). In both cases four MoGs were found, but different typologies resulted. In the case of municipal waste, the governing modes found were sector-specific: disposal, diversion, eco-efficiency and ‘waste-as-resource’. These would be likely to alter from case to case, which potentially makes wider application of MoG beyond particular spheres of governing difficult. In the case of climate protection, however, the modes are less context-specific, relating instead to broad governing *strategies*, and as such provide a better starting point for other work on MoG.

As noted, four key modes of governing are found to be utilised by local authorities in both the UK and Germany. These are as follows:

- Self-governing: the capacity of local government to govern its own activities. Relies on processes of organisational management.
- Governing by provision: the shaping of practice through the delivery of particular forms of service and resource. Accomplished through practical, material and infrastructural means.
- Governing by authority: the use of traditional forms of authority such as regulation and direction which persist despite reforms. Takes place through use of sanction.
- Governing through enabling: facilitating, co-ordinating and encouraging action through partnership with private- and voluntary-sector agencies, and various forms of community engagement. This works through persuasion, argument and incentive.

These seem like a promising starting point for work on the process of governing; and sufficiently broad to be potentially transferable to other governing sectors and spaces. It is worth, however, unpacking the four modes used in Bulkeley and Kern's study in order to potentially develop a more general-theoretical understanding of different ways in which governing actors might interact with others to achieve a desired outcome. This approach takes the initial typology and transforms it through reference to Allen's more general theory of power. Specifically this requires re-working modes so that they more accurately reflect expressions of power.

First, to develop a more theoretically consistent approach, the 'self-governing' mode is removed. Governing the self in this typology has been used to mean governing an organisation 'from within'. This still requires a range of different strategies and tactics, including elements of governing by enabling, authority and provision. As such, self-governing is an issue of who is governed – the governed entity – rather than how they

are governed. Similarly, governing by provision should be seen more as a form of enabling rather than as a governing mode in its own right.³⁴

Next, I suggest expanding governing by authority to a wider notion of ‘governing by constraining’ in order to take in wider forms of power: governing by authority is only one form of power that involves direct intervention to achieve change. There is, for example, a difference between ‘authority’ and ‘domination’, outlined by Allen (2004). Authority requires an understanding, and some agreement from both sides that one is subordinate to the other; domination, on the other hand, is based around an imposition of a particular form of conduct so that submission is the only possible action. Governed entities may also be coerced into action – involving threats of force, or other sanctions to exact compliance – which is again different from authority. Finally, working from Allen’s power modalities, I have added a new governing mode: that of governing by co-option. By this I mean methods by which governing agencies attempt to enlist other entities to a particular cause through various methods of persuasion that are neither directly authoritarian, nor straight-forwardly ‘enabling’. This leaves three broad modes of governing – enabling, constraining and co-opting – under which John Allen’s six key power modalities fall, plus Bulkeley and Kern’s ‘provision’ element. I have also added an eighth power modality not explicitly outlined by Allen or Bulkeley: facilitation. By this I mean the ways in which governing entities may enable others to achieve goals by, for example, bringing groups of people or institutions together to share materials or information. Table 7, below, shows the revised categorisation of governing modes, which run broadly speaking from instrumental ties at the top end, down to purely associative ties at the bottom. Rationalities, technologies and institutional relations are not affixed to particular modalities here: these remain contingent on the way in which they are mobilised (although some technologies will lend themselves more towards particular modalities than others).

³⁴ Although this could be contested in the sense that provision of specific services can act to reduce the range of options available, provision is taken here to mean provision of information or services that would not otherwise be made available (although, see modal fluidity, below).

Table 7: Initial revision of modes of governing framework³⁵

<i>Governing Mode</i>	<i>Power Modality</i>	<i>Rationality</i>	<i>Technology</i>	<i>Institutional Relations (e.g.)</i>
<i>Constraining</i>	Domination			
	Coercion			
<i>Co-opting</i>	Authority	e.g. reduce regional carbon emissions	Targets	Hierarchy
	Manipulation		Partnerships	Heterarchy
	Seduction		Discursive strategies	Network
	Induction		Financial incentives	Market
<i>Enabling</i>	Provision		Infrastructure provision	Metagovernance
	Facilitation		Knowledge sharing workshops etc.	

Modal Fluidities and Translations

Although a single rationality is given in the table above, in reality a range of different rationalities will thread through the different modes and specific technologies, which in turn will rely on a whole other set of rationalities, assumptions and knowledges: as discussed in Chapter 3 – albeit in a different lexicon – the way in which these are developed and deployed in the governing process thread through each of the other components and as such are crucial in understanding the way in which regional actors develop and implement modes of governing.

This also draws attention to other issues relating to the fluidity of governing modes. In focusing primarily on general modes of governing, the MoG approach could be accused of not going far enough in uncovering the specificities and complexities of power. This can be overcome to some extent by re-thinking the potential modalities used by governing entities, as detailed above. A second way of re-framing the approach is through re-ordering the focus of the framework. I propose that a focus on the specificities of governing should instead begin its focus on the *technologies* of governing, from which analysis can then identify the particular forms of power being exercised. This therefore moves away from being strictly a ‘modes of governing’

³⁵ In this and the following table governing agencies and governed entities are omitted, partly for reasons of space, but also because simply presenting a list of potential actors does not really add anything to the discussion at this point.

framework towards an approach that is more expressly interested in the exercise of power modalities in governing practices. This revised typology is shown in Table 8.

Table 8: Technology Centred Power Modalities

<i>Governmental technologies</i>	<i>Power modalities (examples)</i>	<i>Institutional relations</i>
Targets	Coercion, authority, induction	Hierarchy, heterarchy, network, market (anarchy), metagovernance etc.
Partnerships	Seduction, facilitation	
Discursive strategies	Seduction, manipulation	
Financial incentives / taxes	Induction, coercion	
Infrastructure provision	Provision	
Knowledge sharing networks	Facilitation, seduction	
Regulation / legislation	Authority, coercion	
Behavioural 'nudges'	Manipulation, induction	

This framework more clearly highlights the different 'fluidities' between modes and potential conflicts that might arise within the governing process. As an example of internal fluidity, the same technology might be used to different ends: for instance, depending on the entity it is aimed at, it might be more constraining, co-opting or enabling. There are also definite ambiguities in identifying technologies as specifically 'enabling' or 'constraining'. Technologies may be presented as enabling or empowering, but also contain elements of authority. For example, funding for projects may be tied to meeting specific targets. In the same way a technology often cannot be described as belonging to just one mode of governing; it can require different forms of power in order to make the technology work. For instance, a combination of associative enabling approaches and instrumental authoritarian or coercive approaches might be required. Similarly, the effect of the technology may transform across modes. For instance, its 'use' in an enabling mode might be as technology, but when translated across to focus on a different governed entity it becomes a rationale for action. As I show from Chapter 8 onwards, a target might work as a technology when the focus is on other institutions, but when the focus is on the self, it may become a rationale for action.

Utilising this approach for research on regional actors' roles in governing carbon management relies in particular on the adaptability of the approach for use beyond simply analysing the different modes used in governing a locale in relatively static manner, including the increased need for awareness of governing from 'above', 'below', and across networks that this entails. However, rather than pose additional problems, this instead brings some added routes of exploration; for example, tracking the way in which technologies and rationalities translate across networks. Moving the study to a scale of governing that was more overtly involved in multi-site processes also highlights some theoretical issues that Bulkeley and colleagues have not dealt with in depth as yet.

Viewed within a multi-level (or multi-site) framework, institutional arrangements give some indication of the 'types' of governance, as outlined by Hooghe and Marks (2005). In such arrangements, regional governing institutions potentially act as recipients and mediators of governing processes, as well as exercisers of power in their own right. As such, Bulkeley's approach may be seen as overly static in its initial form, focusing as it does on the ways in which power is exercised within individual organisations and networks. More recent articles by Bulkeley, (2010; with Kristine Kern, 2009), do look at multi-level governance and draw on elements of this framework, but do not successfully entwine the two models together, or thoroughly engage with the multiple manifestations of the 'politics of scale' involved in governing across different networks.

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In taking a general focus on governing bodies as the 'source' of power and other actors simply as recipients, MoG studies have yet to explore in any depth the 'whereabouts of power': that is, where power lies within governing processes; where the initiation of new rationalities and technologies of governing takes place; and how governing processes affect the implementation of new rationalities and technologies across different scales. In particular, the 'fluidities' of power may be highlighted as technologies translate across different institutions and scales: they may be transformed, or subverted, by mediating or recipient entities. Similarly, a particular technology –

³⁶ Bulkeley has also focused on multi-level governance in the past, but not relating it to modes of governing: see Bulkeley and Betsill, 2005

however implemented – may work to catalyse the development of new institutional frameworks, norms and arrangements; in turn becoming a rationale for action and the development of new governmental technologies. A fourth area worth discussing briefly is the prospect of analysing bottom-up governing through the MoG approach: although I do not dwell on this in too much detail in my analysis, it is still worth mentioning as a potential way of utilising the approach.

Modal translations

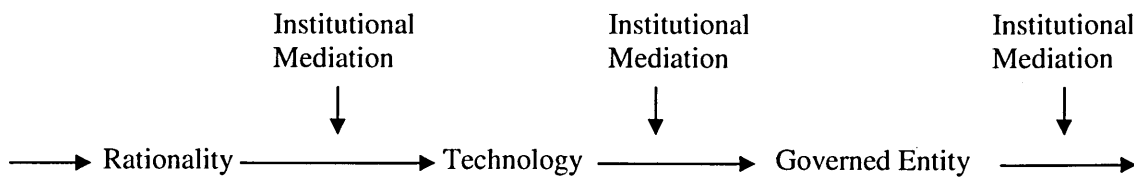
Building on the issues of modal translations discussed above, the first area to pick up on is that of the ‘vertical’ fluidity of modes. As technologies move between different governing networks they may be transformed, or subverted, by intermediary or recipient entities. For instance a technology may be initiated nationally, or supra-nationally, and then potentially watered-down or ‘souped-up’, or its guiding aims subverted as it travels between governing entities. Similarly, the role of different governing institutions with regard to a particular technology may differ across scales. For example, regional institutions may act as mediators in the implementation of an authoritarian technology, whereby their role is to act more as enablers through processes of facilitation of meetings between different parties or provision of the materials, skills and knowledge to help achieve governmental aims. They may also act as ‘co-opters’ in attempting to get other entities to sign up to particular technologies or rationalities, including ‘seduction’ through discursive persuasion; manipulation of facts, discourses and people; and potentially inducement, through offering other incentives to comply. At the same time, regional institutions may use the resources available to them through statutory governmental technologies to meet their own agendas.

Component fluidity

A particular technology, however implemented, may work to catalyse the development of new institutional frameworks, norms and arrangements; in turn becoming a rationality for action and the development of new governmental technologies. Indeed, when a technology is implemented across scales, or institutions, the intention is that it

becomes a rationale for action in the institution or individual(s) previously labelled as the governed entity. Successful governing – that is, a mode that translates a particular rationality into the desired action – would result in a cycle of governing as it is mediated through different institutions as it travels from, for example, a supra-national organisation to the individual.

Figure 2: Transformation of modes across governing and governed entities



Significantly, however, the process will rarely simply cascade through the different scales or sites of governing: there are likely to be dead-ends, diversions and subversions along the route. Furthermore, as in the case of carbon management, political factors within institutions and individuals at each point in the process play an important part.

Bottom-up Governing

Finally, up to now the MoG framework has been mostly applied in viewing top-down processes of governing. It may, however, be possible to use the framework for viewing attempts by entities to achieve bottom-up governing; or at least for acknowledging the fact that power can flow in more than one direction. This is particularly pertinent in the case of regional institutions: for example, regional assemblies were partly dependent on the ‘buy-in’ of local authorities to achieve their aims. The types of power they are able to exercise may be fewer than those with greater levels of resources, but bottom-up governing might attempt to impose particular rationalities, shape or introduce governmental technologies through a range of ‘modes’. For instance, local authorities often lack the direct authority of national government, but they may be able to constrain governmental action through coercion – by threatening to refuse to recognise governmental authority, for instance – or through manipulating information and people

to achieve their own aims. They may also employ more associative measures, such as attempting to seduce governing agencies through powers of persuasion, as identified by Bulkeley and Kern (2009) in their study of trans-national local authority networks, where they noted the influence of these networks on European governing networks.

Conclusion

The two key issues here relate to the effect of emergent 'carbon control' discourses on the rationalities and technologies of governing; and to the emerging role of regional governing organisations within emerging patterns of spatially governing carbon management. In this context, the Modes of Governing framework opens up – or helps to clarify – these issues somewhat, by helping to focus on the specific ways in which new carbon management policies and strategies are being developed and implemented; and how governing institutions may attempt to draw others into their own set of logics and practices. The approach retains some flaws, however, and in particular requires greater consistency in terms of conceptualising modes; emphasis on the fluidity of power modalities; and emphasis on the importance of exploring ways in which governing programmes or technologies translate across different actors. In other words, the 'dynamic constellations' that form modes of governing need re-working in order to be seen as such. By re-framing the approach through taking on more of John Allen's thesis on the 'lost geographies of power' the subtleties of power can be opened up further to give a potentially richer understanding of governing processes; especially when combined with a more flexible approach that takes into account the multi-level and multi-directional exertion of power. More minor quibbles relating to the use of language of the Modes of Governing approach remain, but they do not ultimately affect the utility of the approach, more its reach to other audiences. A similar point may be made of Multi-level Governance. The term Multi-level is problematic in both its geographic insensitivity and its lack of focus on different types of power. The latter is overcome by combining it with a re-worked MoG approach, while the former is perhaps more of a semantic issue that one relating to the merits of the model itself.

Although many of those exploring the theory and practice of governance, government, or governing do touch upon spatial concepts, in particular – as noted in Chapter 3 –

scalar debates (*cf.* Brenner, 1999; Jessop, Brenner and Jones, 2008), the relationship between the two has not perhaps been fully explored. Simply put, governing practices should not be seen as synonymous with spatial practices. It is tempting – instinctive perhaps – to view scalar practices or relationships as authoritative practices or relationships, for example. This is not necessarily the case. At the same time, however, authoritative relationships can be built upon – and can also shape – scalar relationships. But scales may also be ‘practiced’ through other means: for instance, a regional body acting as a conduit for forms of provision; local authorities working together ‘as a region’ to influence and interact with central government; or local authorities working together as a ‘scale-based’ trans-national network. In other words, governing practices are also always spatial.

In direct relation to this research, the re-worked MoG framework allows a focus on the development of new spatial rationalities for governing carbon emissions, the specific ways in which this takes place and the effect of multi-level institutional relations in this process. It will also aid a focus on the implementation of particular spatial technologies, including the effect of recent instrumental techniques in the form of emissions targets. This approach also opens up a number of methodological questions about how best to explore power and governing processes ‘in action’, which the next chapter aims to address.

In the process of carrying out any investigation a variety of ‘clamps’ must be put in place to delineate what the study is and is not, and what it aims to achieve. The first five chapters have outlined some of the theoretical clamps put in place for the study: for instance in outlining a specific area of academic interest for the study, specific research questions, and a framework for investigating these questions. There has also been some spatial delineation: it is a study that focuses on sub-national governing, specifically in the English regions. This chapter moves on to outline the methodological approach for the research, culminating in a final insertion of the spatial and temporal clamps that determine the specific sites for the study.

In bridging the theoretical exploration and empirical analysis, this chapter outlines the rationale behind and practicalities of a case study approach for the study of climate change policy in the English regions. In doing so, I will take a look at recent debates within human geography, in particular regional studies, around theory development and issues of methodological ‘rigour’. The main focus of this part of the discussion will relate to the debate on ‘fuzzy concepts’ initiated by Ann Markusen (1999) and subsequently critiqued to varying degrees by Ray Hudson (2003), Arnoud Lagendijk (2003) and Jamie Peck (2003). This also links into wider debates about the ‘relational approach’ (*cf.* Yeung, 2003) to social scientific enquiry.

Taking these issues on board, a ‘methodologically sensitive’ case study approach is outlined, including discussion of the rationale behind the choice of case studies. An approach is taken using comparative case studies to account for some of the concerns about the transferability and rigour of data taken from a single case study. Case studies were chosen through a degree of purposive sampling, whilst acknowledging that cases should not necessarily be chosen on the basis of their apparent ‘results potential’.

Underlying Assumptions

The philosophy of critical realism has been a popular underlying approach to critical regional and governance studies in recent years, not least because Bob Jessop's SRA builds from a realist framework. I will not engage in too much depth on this issue here, but the previous chapters outline an approach to relational interactants that both sit alongside and also implicitly criticise realist or critical realist approaches to research. Most problematic is the fact that realists have worked from an assumption that the non-human realm (however conceived) is somehow intrinsically separate from 'social' activity, and must therefore be studied differently. As Latour (1999; 2005) ably demonstrates, the non-human and human, the material and social, cannot be effectively separated.

Nonetheless – and perhaps ironically, given the claims by some that there is no well-defined realist methodology (see Pratt, 1995; Yeung, 1997) – methodological lessons can be drawn from realist research approaches, particularly in terms of offering practical and pragmatic solutions to difficult methodological issues. Given also that theorists taking a realist standpoint – including Jessop (2002a) and Anthony Giddens (1995) – have been influential in regional studies in recent years it seems also pragmatic to begin with the realist standpoint as the norm from which to deviate.

This research, like many realist research projects, is based around a case study approach and answers questions of the 'middle range'. These two sets of issues are worthy of unpacking in order to both explore the potential pitfalls and achieve an approach that acknowledges – and, where possible, overcomes – these potential problems.

Research Questions

The methodology and methods used in research should be those *appropriate to the study* (Sayer, 1992). As such, a return to the original research questions is helpful here. The research began with a quite straightforward question:

- How is carbon management being governed in the English regions?

Then, an interest in the political construction of regions led to a second question:

- Specifically, how are practices of governing being used to re-imagine regions as ‘carbon spaces’?

In order to analyse this it was necessary to delve into the specific ways in which governing practices were utilised to do so:

- What are the specific spatial practices involved in doing so?

Finally, the ‘carbon control’ thesis suggests that, as states become ‘serious’ about climate change, the methods to govern carbon will take on ‘mainstream’ governing logics, including more instrumental carbon reduction measures. This leads to the final question:

- How have these practices changed over time?

Approaching these issues requires a relatively intense study of relationships between actors, and the techniques employed to develop these relationships.

Case study methodologies

In deliberating about how best to begin to explore the questions outlined above, the recurring themes were of the complexity and heterogeneity of actors, data and events. This led to the conclusion that, to quote Flyvbjerg (2006 p219), “[i]t was clear to me

that to understand a complex issue such as this, in-depth case-study research was necessary". More simply, this research essentially follows the doctrine of Kenneth Burke (1945) in that it aims to explore 'scene, agent, agency, purpose, and act': this requires that a 'scene' must first be constructed in order to then explore the other four components.

The basic idea behind a case study approach is that one, or a small number, of cases are studied in detail, using whichever methods are deemed appropriate for the study. As Keith Punch (1998 p150) states, a case study "... has a holistic focus, aiming to preserve and understand the wholeness and unity of the case", while a case is defined as "a phenomenon of some sort occurring in a bounded context" (*ibid.* p152).

This project involves carrying out one in-depth study alongside two comparator studies, and as such on the surface most closely matches what Robert Stake (1995) calls a collective case study, although in reality this is only one element of the study: it is also instrumental in that it attempts to give insight to a particular set of pre-identified issues, and intrinsic in that it attempts to bring a better understanding of the case(s) in itself. The rationale behind the choice of the specific cases will be discussed further on in this chapter. It is first useful to discuss some of the potential problems associated with a qualitative case study approach, particularly in relation to recent debates concerning methodology in critical regional studies and policy research.

The main strength of a case study is, as Punch (1998) points out above, that it allows for a deep investigation of a particular issue in a particular context. So, detailed understanding of the processes, mechanisms and actors involved is possible through use of a range of intensive research methods. Criticisms have been directed at the application of case studies, however: not necessarily of the validity of methods of investigation used within case studies – although these have been explored – but of the validity of case studies in abstraction and theory development.

Ann Markusen's (1999) debate piece critiquing the 'sloppiness' of much research within what may be loosely described as critical regional studies highlights a number of methodological concerns, in particular relating to case study analysis, which have been a fixture of a number of subsequent direct and indirect responses (*cf.* Hudson, 2003; Peck, 2003; Lagendijk, 2003; Yeung, 2003; Markusen, 2003). The core arguments revolve around lack of 'empirical rigour' within contemporary research. In making these points, Markusen draws the reader to think more deeply about their epistemological positioning as much as more specific methodological issues: particularly the potential ambiguity of realist approaches to 'truth' and 'knowledge', with attendant methodological issues; and the temptation for agency to be lost in theory development.

Before exploring these methodological challenges it is useful to dwell for a moment on the issues of epistemology. One criticism of Markusen, as highlighted by Ray Hudson (2003), is that her approach to defining non-'fuzzy' concepts – those that are precise and empirically testable – relies on the replicability and empirical testing of theories. In response, Hudson suggests that Markusen is bound in part by an unreflexive positivist standpoint: as Jamie Peck (2003 p729) states, it is a "fuzzy old world". But perhaps part of the 'problem' with the conceptualisation of theory can be attributed to the fact that much contemporary regional research does share roots in realist philosophy, or at least some vague Kantian conceptions of truth and knowledge. From this viewpoint, neither purely Humean-empirical, nor Cartesian-rationalist approaches to knowledge or truth are deemed sufficient on their own. At the same time, there is a belief in some form of objective truth – the realm of the 'real' – and a resistance to proclaiming all concepts to be inherently chaotic. Methodologically, wide-ranging, extensive approaches to research are deemed incapable of uncovering causal mechanisms, while deep study of the minutiae of particular phenomena are often seen as conducive to overly descriptive outcomes, insufficient to develop robust theoretical outcomes. Researchers are thus trapped between a desire to *explain* on the one hand and recognition of complexity, uncertainty and contingency in the 'real-world' on the other. This makes the process of abstraction difficult, and is perhaps one reason why regional research has often led to broad-brush descriptions of middle-range processes at the meso-level, with the case

study often being a default research strategy. This is a challenge for all realist scholars and I will not – nor could I – attempt to solve it here: instead I argue for *methodological realism* on pragmatic grounds of time, resources and research scope. Challenges more specific to case study approaches then flow from these wider concerns, in particular those of empirical rigour; agency; ‘generalisability’; routes to abstraction or theory development; and replication of studies.

Empirical rigour

Although this chapter is mostly concerned with the use of case studies in a wider sense, it is important to touch on the issue of ‘empirical rigour’ *within* a case study: that of ensuring that the data collected and analysed is representative and rich enough to allow a thorough and deep understanding of the case itself. Whilst one cannot always account for the researcher’s ability to extract the right information, strategies can be employed to create the best possible environment for this to happen. As a case study approach is based around the thorough examination of one, or a small number, of cases, the key to achieving this lies in as much immersion within the case as is practically possible. In particular, this requires triangulation of various data collection techniques using a wide variety of sources. Analytical ‘tools’ are also important in making sense of the data: again it is useful to use a range of approaches where possible and appropriate.³⁷

³⁷ See Chapter 7 for a discussion of the data collection and analytical methods deployed during the research process and the problems encountered along the way.

Markusen (1999) argues that a further problem with much contemporary theorising is that theory is divorced from agency, in particular those that combine fuzziness with an emphasis on process. Ray Hudson (2003) counteracts this with a suggestion that the notion of process *requires*:

...a specification of the links between actors, agents and structures, [and so] I have difficulty in conceptualizing process as an *alternative* to the specification of these links.

Ibid. p744, emphasis in original

Methodologically this requires the researcher to follow lines of enquiry that recognise individuals as producers, and shapers, of formations as well as being produced and shaped through them. As noted previously, it can be unhelpful to distinguish individuals as somehow separate from the notion of structures³⁸: a better way might be to consider the fixedness, size and resources of different networks – including individual humans – in assessing their ability to effect change. It is important to treat the relationship between actors and networks, or conduct and context, as questions in themselves, contingent on the gaze of the study and – depending on the way in which they are conceptualised – not always entirely interdependent.

In theory development this requires deliberation over who or what the ‘generators’ are and how they may shape others: in the case of this research this might be about understanding who or what determines an organisation’s approach to governing carbon management, in particular in terms of relationships between different governing organisations.

Generalisation

The ability and relative importance of being able to generalise from case studies is perhaps the most visited concern relating to case study research. A number of scholars of political and economic geography have attributed certain perceived failings of the

³⁸ And where theorists such as Jessop and Giddens have attempted to overcome this, they have failed to do so.

'new regionalism' (see Lovering, 1999; Harding, 2007) and regional studies in general (Markusen, 1999; 2003) to an over-reliance on single-case studies and a lack of attention given to contextual factors in determining the course of events. In other words, "...authors of qualitative accounts often fail to make the case that a particular case study is representative and that the findings from it are generalizable" (Markusen, 1999 p872 in Peck, 2003).

This fits with a wider conception of case-studies as "unable to provide reliable information about the broader class" (Abercrombie, Hill and Turner, 1984 cited in Flyvbjerg, 2006 p220). For Bent Flyvbjerg (*ibid.*), this interpretation, "if not directly wrong, is so oversimplified as to be grossly misleading". In support of this rebuttal, Jamie Peck (2003) presents Clyde Mitchell's (1983 p207) argument that while case studies may not invoke statistical inference, instead:

...the inferential process turns exclusively on the theoretically necessary linkages among the features in the case study. The validity of extrapolation depends not on the typicality or representativeness of the case but of the cogency of theoretical reasoning.

Similarly, as Flyvbjerg (2006) points out, all knowledge is context-dependent: any theorisation is defined within a particular context. Nonetheless, there remains some doubt about the ability to infer from a singular case to a theory applicable for the population; for example, Mitchell's statement may for some infer too much reliance on rationalist 'reasoning' as opposed to interrogation of empirically observable events.

One of the key strengths of the case study approach is the ability to focus on the richness and uniqueness of individual cases, but there is a danger on the other hand of becoming overly concerned, for example, with the peculiarities of place in a geographical enquiry as opposed to the causative mechanisms that may be more fully developed by a comparative study of more than one case. Indeed, without study of other cases how can one deduce which facts are peculiar to a particular place and which are not? Alan Harding (2007) highlights this issue in a critique of recent debates on city-regions, arguing that they have often been hampered by reliance on independent case studies, which has led to studies making simplistic, singular conclusions to processes that are being shaped in different ways in different places. In doing so Harding draws attention to works by Eugene McCann (2007) and Pauline McGuirk (2007) of Austin

(Texas, USA) and Sydney (Australia) respectively which show quite different ways in which city-regional agendas are developed, including the involvement of different actors and rationales.

While Markusen and Harding both appear to argue for a shift to more positivist informed approaches to research³⁹ there is a clear issue to be confronted in terms of theory development and the 'generalisability' of research findings as well as, therefore, theory testing. An initial point to make is that any case study-based research has to be clear about its limitations: as with all research strategies there are some sacrifices to be made. Similarly, any research has to take into account the context within which the data is collected and the type of research questions being asked. In the context of this research, the in-depth case-study method offers the overriding advantage of facilitating the development of an in-depth understanding of practices, interactions and the mobilisation of interests that, it is felt, outweigh any potential disadvantages in terms of widely applicable theory development: the important point is that methods should be appropriate to the research question(s).

There has also been some exaggeration of the issue of generalisation or theory development, partly as a result of a largely false distinction between inductive and deductive approaches – as Markusen herself remarks (2003) – which is linked to an apparent misinterpretation of processes of abstraction: this may be overcome by viewing research as a *retroductive* process (see Lawson, 1998; Sayer, 2000; and Downward and Learman, 2007), which I will now outline.

Retroduction

It is true that certain studies may incline towards induction or deduction, but in reality no research is a pure example of one or the other. In simplistic terms, nobody conducts their research in a theoretical vacuum, whether intentionally or otherwise. Nor is a purely deductive approach generally possible, because both the hypotheses or theories to be tested and the cases chosen to test them will on the whole have been chosen with

³⁹ Although Markusen (2003) does refute this in her response to Peck

some degree of prior examination of the cases involved so as to determine the appropriateness of the study. It is in fact important to recognise the relationship between theory or 'the general' and the concrete-complex issues on 'the ground'. Failure to do so inevitably leads to research findings that are partial and incomplete. In other words, the process of lazy abstraction bemoaned by Markusen and others is not one found in 'good' research, 'critical' or otherwise. As Peck (2003) states:

In theoretically informed intensive research, conceptualisation occurs through abstraction and through continuous dialogue with concrete cases, selected on the basis of their potential elucidation of the relationships in question, not according to the frequency of their occurrence or their statistical representativeness.

Ibid. p730

The process of abstraction – isolating in thought some necessary aspect of an object that contributes to the world of experience – is perhaps more constructively set within a wider method of *retroduction*. Retroduction involves moving a discussion “from a description of some phenomenon to a description of something which produces it or is a condition of it” (Bhaskar, 1986 p11). The process of doing so is set out by Balihar Sanghera (2008) in the following steps:

1. In order to explain observable phenomena, social scientists must attempt to discover appropriate 'mechanisms': links or causal factors.
2. Since these causal factors will typically be unavailable to immediate or prior observation, we first construct a model of them, often drawing upon familiar sources (academic or otherwise).
3. The model is such that, were it to represent correctly the link between an event and an outcome, the phenomena would then be causally explained.
4. The model, as a hypothetical description of actually existing entities and their relations, is tested by examining its further consequences.

This demonstrates a clear dialogical relationship between empirical data and theory informed abstraction, or comparison to other sources of evidence. This method of theory generation, according to John Roberts (2001), dispels many misleading conceptual dualisms in geography; for example the ability to jump from the concrete to the abstract, the empirical to the theoretical, or the local to the global. Movement between concrete findings and abstractions involves degrees of concreteness. In many ways this sums up the realist approach to social science: truth, knowledge, abstractions,

or spaces cannot be easily classified; all answers are approximations and belong somewhere on a sliding scale from ‘probably’ to ‘probably not’.

Replicability

The issue of replicability of case studies highlighted by Markusen (1999, 2003) is perhaps not one that is immediately applicable to a stand-alone piece of research. However, an important part of carrying out ‘good’ research is being clear about the methods and approaches being used and the way in which they might affect or shape the research findings. This allows for critical evaluation by others, but also if desired, the use of similar methods in other studies to test or develop the findings. This is not such a straightforward process as through a standardised model of data collection and analysis, particularly as interpretation of data in qualitative studies can sometimes come down to the interpretation of minor nuances in texts as opposed to large scale standardised testing. However, it is important to at least attempt clarity and regularity of approach, while bearing in mind that contextual factors, including access to information mean that each case may need variations on the approach taken.

Selecting Cases

The Yorkshire and Humber region was chosen as a central case study for this research, with the North East and South West selected as comparator studies. This section outlines the rationale behind these choices.

For a single piece of research the case study approach is too intensive to allow for replication on a large scale by one researcher. However, the use of a comparative case study approach may ameliorate some of the potential concerns over the ‘generalisability’ or theory-development potential of a single case study. While research would ideally be based on intensive exploration of all members of a population, in reality this is rarely possible. In the case of this study, the population – English regions – stretches to just

eight cases (plus London).⁴⁰ But the complex nature of the cases; the number of actors and organisations involved as well as the relationships with other actors and organisations; the methodological approach taken within the case study; and the time and resource constraints with the research mean that it is only practical to study one case in real depth, with selective use of comparator data to fix this within a wider context. The approach taken here, therefore, took a sample of three English regions – one in-depth study, and two comparator studies – selected based on a survey of the population to identify some basic characteristics of the governing of carbon management in the English regions. Using comparators also allows for a broader base for discussion of ‘national’ policy developments.

While it is important to spend time thinking about choosing case studies to ensure some level of representativeness, it is impossible to pick an *ideal* case; and indeed there is an argument to suggest that cases could be picked on an entirely random basis. Yin (2003) argues that case study selection should be based on extensive screening of cases, including pilot studies. Others are more relaxed, however: Stake (1995) argues for making choices based on those which seemingly offer the best “opportunity for learning” and Mitchell (1983) similarly argues for choice based on the ‘explanatory power’ of the selection. In the end I chose a core case study region as an “exemplary case” (Yin, 2003 p13), with comparators chosen to reflect different political and spatial contexts across the regions. I was, however, keen not to be overly prescriptive in selecting cases: deliberately selecting cases just because they meet the criteria you want carries a clear danger of skewing the research to meet a certain agenda. As such, just a small range of criteria were used in determining case study choices.

Firstly, as my interest was in governing carbon management I felt it would be useful if at least one of the case studies had some existing specific institutional infrastructure and a strategy for governing climate change. As it happened, all eight regions fulfilled this to some degree. Yorkshire and the Humber, however, had the longest history of specific institutional arrangements and strategies – including a regional carbon emissions target – relating to climate change (see Table 23 in Annex 1). Furthermore, the Regional

⁴⁰ London has been omitted as a standard case for various reasons; most importantly because of its different governing structures and resources, and the fact that it may be more accurately represented as more of a city-region or even city-state than a region in the sense that the other eight Government Office regions do.

Climate Change Partnership in that region was about to begin writing a second iteration of its climate change action plan at the time that my fieldwork was due to begin. This seemed to offer a point of entry where stakeholders were likely to already be in a reflective mood regarding regional efforts to govern carbon emissions, thus allowing research “while the dust is still flying” (Latour, 2005 p23). As such, Yorkshire and the Humber seemed a good choice for the main study.

To a large extent any other region would have sufficed to serve the purpose of providing comparative evidence. In the end, some criteria were placed on the selection of two comparators, but these were deliberately fairly loose in order to retain a sense of ‘randomness’. In using the North East, I have chosen a region with a similar geographic, political and economic context to Yorkshire and the Humber – including a shared Environment Agency ‘region’ – but with a more recent turn towards carbon management issues at the regional level. These two regions share an industrial past, with economies built on ‘carboniferous capitalism’ in the form of coal mining as well as energy intensive secondary industries in iron, steel and ship manufacturing, engineering and energy production. Unsurprisingly these regions have the two highest per capita emissions in England.

The North West could equally have provided a useful comparator in many of these respects, and after the selection of the case studies the region took a lead through the RDA network on developing a low-carbon economy. Despite the deliberately loose criteria, the choice of the North East can be justified in several respects. First, at the time of choosing the case studies the North East was in the process of developing its first climate change action plan; as with Yorkshire and the Humber, this proved to be a useful point at which to engage with policy actors. Second, the selection of the North East helped to reflect a ‘non-exceptional’ case against the Yorkshire and the Humber’s relatively early adoption of technologies aimed at the spatial governing of carbon. Third, it was felt that a shared Environment Agency region would provide extra scope for comparison.⁴¹

⁴¹ As it turned out, however, the Environment Agency proved to have little involvement with governing carbon management at the regional (NUTS 1) level.

The South West provided the final case study, offering a contrasting position to that of the North East, with a history of political interest in environmental issues, a more politically contested regional history and a much less carbon-intensive economy, reflecting both the greater proportion of rural land in the region and its less intensively industrial past. It produced the second lowest per capita emissions of the English regions in 2007. Table 9 compares the three regions' emissions levels and sources.

Table 9: Population, GVA and CO₂ Emissions in Case Study Regions, 2007

	<i>Pop, (000s)</i>	<i>GVA Per Capita (£)</i>	<i>Industry & Commercial (kT)</i>	<i>Domestic</i>	<i>Road Transport</i>	<i>Total</i>	<i>Emissions Per Capita (t)</i>
North East	2,565	15,460	21,143	6,021	5,098	32,183	12.6
Yorkshire and the Humber	5,177	16,670	27,060	12,302	11,585	51,273	9.9
South West	5,178	18,235	15,360	12,238	12,116	40,766	7.9

Source: National Statistics (2009) and BIS (2010)

Note: This table omits emissions from LULUCF (Land Use, Land Use Change, and Forestry), which means that the total cannot be derived from the three sets of emissions shown.

Yorkshire and the Humber

Yorkshire and the Humber is perhaps the oldest of the administrative regions in England, having been – as the three Yorkshire Ridings – a distinct territory since the Eighth Century (Gore and Jones, 2006). Geographically, it was historically bounded by the North Sea to the East, the Pennines to the West; Tees estuary to the North and – broadly speaking - the Humber Estuary to the South. The current incarnation also includes North and North East Lincolnshire, which lie just to the South of the Humber, but not Middlesbrough, south of the Tees.

Administratively, the region was divided into four sub-regions: North Yorkshire; West Yorkshire (Leeds city-region); South Yorkshire (Sheffield city-region); and the Humber

(Hull city-region). The populations of each of these sub-regions have historically drawn on their natural resources for economic purposes: fishing and port industries in the Humber estuary; coal mining and steel production in South Yorkshire; agriculture in North Yorkshire; and textiles in West Yorkshire. In addition to these traditional industries the region is home to a number of large power stations, including Drax, the largest coal-fuelled power station in the UK. In 2007, Yorkshire and the Humber was responsible for the production of around 18 per cent of the UK's electricity (YHRA, 2007). A period of economic restructuring took place over the thirty years up to 2007, with the main industries of the three core cities and their hinterlands being largely decimated in the 1970s and 80s, preceded by years of gradual decline. In 2008, Yorkshire and the Humber had the second lowest GVA of the English regions, with GVA per capita 17 per cent lower than the English average (BIS, 2010).

Despite the period of restructuring, emissions levels in the region reflected its industrial heritage: per capita carbon emissions for the region were the second highest in England for the years covered by the research, and industry and commerce represented a higher proportion (46 per cent) of emissions than any region except the North East. At the same time, recycling of household waste was the lowest of all regions in 2007/8 (National Statistics, 2010).

The institutional development of Yorkshire and the Humber broadly followed that of each of the English regions, with statutory bodies formed through national initiatives: Government Office Yorkshire and the Humber in 1994; Yorkshire Forward (the RDA) and the statutory Regional Chamber (later Assembly) in 1998. Aidan While (2000 p334) describes the regional arrangements as “fairly weak” during the 1980s, then taking greater prominence in the 1990s as the regional agenda became more visible in EU and national politics:

Although a regional local government association, planning conference and public-private body (the Yorkshire and Humberside Partnership) had been formed in the 1980s, these partnership organisations largely failed to secure consistent high-level support across the region — not least because of the diversity of interests and rivalry between sub-regional areas.

ibid. p334

The region then “emerged in the mid-1990s as one of the most active English regions” (While, 2000 p330). In 1996 a new regional local government association was formed, calling itself the Regional Assembly for Yorkshire and The Humber, and in March 1998 became the first to establish a regional chamber. A plethora of other regional organisations arose alongside the statutory bodies, including the Yorkshire and Humber Regional Forum, a body constituted by members of the voluntary and community sector; the Regional Environment Network; and the Yorkshire and Humber Faiths Forum (Gore and Jones, 2006). By the end of the research period, the region had produced its second Regional Economic Strategy (RES, Yorkshire Forward 2005); a second Regional Spatial Strategy (RSS, YHRA, 2008); and three sustainable development strategies (YHRA, 2000 and 2003; Yorkshire Forward, 2008).

A number of research studies have noted regional actors in Yorkshire and the Humber (Y&H) as being relatively progressive on sustainable development agendas. Paul Benneworth, Conroy and Roberts (2002) - in a review of sustainable development in the regions - noted Yorkshire and the Humber’s Regional Sustainable Development Framework (RSDF) as being clearer, more focused and exhibiting a greater level of regional sensitivity than other regions’ strategies. Similarly, Steven Smith and William Sheate (2001) found that Y&H had been more thorough in the sustainability appraisal of Regional Planning Guidance than other regions.

Yorkshire and the Humber region also has the longest documented history of climate change policy and was the only region to have a specific ‘aspirational’ target for GHG emissions reduction in 2007. This target was first iterated in the 2003 RES and provided an area of particular interest for the research, as it represented an early attempt to reconfigure, or re-calculate a region as a ‘carbon space’. A Regional Climate Change Executive Group was formed in 2004, which included the employment of a regional climate change co-ordinator for two years from 2004-6 - and again from 2008 onwards - and a Regional Climate Change Action Plan (RCCAP) was published in 2005. In 2009 the Executive Group was renamed as a ‘Regional Climate Change Partnership’, and the second iteration of the RCCAP was published.

The North East provides a useful comparator to Yorkshire and the Humber for various reasons. First, like Yorkshire and the Humber it is stereotypically seen to have a strong regional identity. Nonetheless, Dave Byrne and Paul Benneworth (2006) note that the North East region may in some ways be seen as both the birthplace and graveyard of regionalism in England. The Campaign for a North East Assembly was formed in 1992 (Tomaney, 2002), but although popularly understood as a uniquely culturally defined region, when given the opportunity to vote for elected regional government in 2004 78 per cent voted against. The reasons for this are manifold (as discussed in Chapter 3), and include the unpopularity of the Labour government at the time, and wider distrust of ‘politicians’ (Shaw *et al.*, 2006) but as Byrne and Benneworth (2006) note:

Part of the problem is that although regional identity is strong in the North East of England, identity is complex, and simple narratives of ‘Geordie pride’ inevitably fail to catch the complexity⁴²

p108

The two regions also share a relatively similar path of industrial development and decline, with the North East economy historically based around coal mining, iron and steel production, shipbuilding, heavy engineering, chemicals and port-related activities. In 1931, just over 10 per cent of the region’s population worked in either coal mining, iron and steel production or shipbuilding. In 1971 these industries still represented six per cent of the population, but by 1991 this figure had fallen to just one in every hundred residents (*ibid.*). In 2008, the North East had the lowest GVA per capita of the English regions (BIS, 2010).

Reflecting the nationally-led regional agenda, the North East had more or less the same organisational make-up at the regional level as Yorkshire and the Humber. This

⁴² Living in Newcastle at the time of the referendum while carrying out research on regional economic development in the North East I spoke informally with academics and policy makers as well as friends and family in the region about their feelings towards the referendum. Two sets of problems seemed prevalent amongst both policy and ‘lay’ communities which hampered the argument for an elected assembly. These were: (1) internal opposition to the hegemony of Newcastle as representative of the North East, with a concomitant concern that an elected assembly based in Newcastle would increase this hegemony; and (2) policy actors and academics felt that the argument for elected assemblies were too couched in economic development debates – which were overplayed by proponents – and not enough in cultural and democratic terms that ‘ordinary people’ could relate to.

included a shared institutional boundary in the shape of a joint Environment Agency region: the North East Environment Agency region covers Yorkshire and the Humber and the North East. This provided a shared context for discussions with actors from the Environment Agency, as well as national policy actors. Although it does not feature much in terms of carbon management policy the North East is also a constituent region of the Northern Way strategy, along with Yorkshire and the Humber and the North West.

By virtue of the two regions' similar economic paths, the North East also had a record on carbon emissions similar to that of the Yorkshire and Humber. It had the highest per capita carbon emissions of the English regions across the study period as well as the highest proportion of emissions from industry and commerce. In contrast to Yorkshire and the Humber, however, the North East was one of the last regions to set up a regional climate change partnership and develop a related action plan. The North East employed a nominally independent 'climate change co-ordinator' to head the North East Climate Change Partnership, who stayed in post for the length of the research period. An RCCAP was developed in 2007 and published in autumn 2008.

On the broader subject of sustainable development, the North East was seen to be 'doing its bit', but was relatively slow in implementing its principles in practice. For instance, Benneworth, Conroy and Roberts (2002) found that:

In the North East, the UK Sustainable Development Roundtable had inspired the establishment of a regional round table, although this achieved little beyond assembling those with some interest in the topic ... [and] early RDA working documents largely overlooked sustainable development, but in the later stages of the process, One North East (ONE) co-opted experts into its strategy team to ensure the subject received appropriate coverage.

p207

This builds on the notion of governing actors in the North East being comparatively late adopters of carbon management principles, and as such, the North East offered a potentially contrasting approach to Yorkshire and the Humber within a similar geographical, political and economic context.

South West

The South West was chosen as a region with different environmental pressures as well as economic and political context. The region as a whole has been a disputed territory by its inhabitants, with separate territorially based environment groups such as the Cornwall Alliance. Indeed, for Amer Hirmis (2006 p204), the region lacks spatial legitimacy: “As a coherent regional entity ... it appears to lack a unity of purpose and appears to fall into John Lovering’s (1999) category of ‘unfortunate regionalism’”. This follows analysis by Bernard Deacon (2004) of the construction of a ‘regional agenda’ in the South West, which noted a marked divide between the political-economic project of those working to ‘construct’ the region and the South West’s cultural identities:

In the regional discourse of peak institutions of the new regionalization the image of the South-West as rural, maritime and diverse, cohering around a politically and economically driven project or regional construction, is seen as separate from cultural identity, the self-identification of inhabitants. When identity is found, it is found at a different scale.

Ibid. p219

Identity based politics were evidenced in the Cornish Constitutional Convention – a body that argues for Cornish devolution – and *Mebyon Kernow*, a political party standing for Cornish autonomy. Cornwall is also recognised as a member of the League of Celtic Nations.⁴³

In essence, the South West “lacks a strong sense of common identity or effective regional institutions” (GOSW, 1997 in Deacon, 2004). For some, however, this diversity was a positive attribute, and regional strategies, briefings and respondents to this research often made play on this: the idea being that the diversity was a regional strength, and also led to a more pragmatic and functional regional approach. The region also has a different political make-up in terms of its elected representatives. For instance, while the North East (93%) and Yorkshire and the Humber (77%) featured predominantly Labour MPs, the South West had much more even split of 16 Labour, 21 Conservative and nine Liberal Democrat MPs in 2007. The South West therefore offered an opportunity to approach the issues from a slightly different perspective to the other two regions and thus, hopefully, allow richer exploration of the issues involved in the research.

⁴³ This includes Wales, Scotland and Ireland (including Northern Ireland), as well as the less widely recognised territories of Cornwall, Brittany and the Isle of Man.

In terms of the environment and sustainable development, the South West's regional bodies have tended to be seen as more holistic and integrative in their approach, which perhaps reflects a deeper political commitment to environmental issues within the region: for instance, as a stronghold of the Transition Towns movement. Benneworth, Conroy and Roberts (2002) found that the South West RDA was the only RDA to fully address the conflicts brought about in trying to effectively integrate environmental, social and economic aims into the RES, but also acknowledging that "the South West lacked the institutional mechanisms to ensure that all three were core concerns" (*ibid.* p207). Like the other two regions, the South West was in the process of developing an RCCAP at the start of the research period.

Regional organisations

Each of the three regions had the same four 'core' regional bodies in operation – plus the Environment Agency – as shown in Table 10, below.

Table 10: Core regional bodies and year of incorporation in the three regions

<i>RDA</i>	<i>Regional Assembly</i>	<i>Regional Local Government Association</i>	<i>Government Office</i>
Yorkshire Forward (1999)	Yorkshire and Humber Assembly (1998)	Local Government Yorkshire and Humber (LGYH, 2006 ⁴⁴)	Government Office Yorkshire and the Humber (1994)
ONE North East (1999)	North East Regional Assembly (1999)	Association of North East Councils (1999 ⁴⁵)	Government Office North East (1994)
South West RDA (1999)	South West Regional Assembly (1999)	SW Councils (2008 ⁴⁶)	Government Office South West (1994)

The only real difference between the three was the relationship between the Regional Assemblies and the corresponding regional local government association. In Yorkshire

⁴⁴ Previously Yorkshire and Humber Association of Local Authorities (1999-2006) and Yorkshire and Humber Regional Assembly (1996-99)

⁴⁵ Previously (pre-1999) North of England Assembly of Local Authorities

⁴⁶ Previously (pre-2008) South West LGA

and the Humber, the Regional Assembly incorporated the Yorkshire and Humber Association of Local Authorities (YHALA; previously known as the Yorkshire and Humber Regional Assembly), but in 2006 YHALA opted to split from the Assembly and form Local Government Yorkshire and Humber (LGYH) in a bid to develop an “independent voice for the region’s councils” (Barnsley MBC, 2005). A similar story is found in the North East. Between 1999 and 2004 the Association of North East Councils (ANEC) and the North East Assembly (NEA), although formally separate bodies, worked as one. Following the referendum in 2004, however, ANEC officially severed ties with the NEA and there was evidence of attempts by ANEC to marginalise the NEA between then and the dismantling of the Assembly in 2009 (Linford, 2005). Similarly, the referendum result also led to ONE North East (the RDA) taking on a more aggressive ‘leadership’ strategy in the region, which also led to marginalisation of the Assembly (Shaw *et al.*, 2006).

Temporal clamps

Analysing policy in action also requires the setting of temporal boundaries. This is pragmatic in terms of keeping a research project manageable, but in this instance also allows focus on a particular ‘moment of change’; identified here as a shift in governmental behaviour in relation to both carbon management and regional governing structures around 2007. The research period also covered the final term of the New Labour government. The research account in the following chapters focuses on two ‘waves’ of carbon management practices, which roughly follow a chronology of pre-2007 and post-2007 actions. The research largely covers the years 2005-09.⁴⁷ Pertinently for this research, 2005 marked the publication of the first regional climate change action plan in England, in Yorkshire and the Humber.

⁴⁷ The regional target for Yorkshire and the Humber was introduced in 2003, but most of the analysis concerns 2005 onwards.

Even after the application of temporal and spatial clamps a large, amorphous area of potential exploration still remains, especially in researching such a broad realm as carbon reduction policy. The investigation is partly exploratory, and the research account in Chapter 8 begins with an overview of the various policy practices being employed at the regional level up to 2007. Some further narrowing of focus helps to put the spotlight on specific sets of issues. Returning to the research questions, the key interest was in the way in which regional actors attempted to 're-imagine' the region, especially through re-calculating it as a carbon space. This leads to interest in practices that attempt to build a view of the region as a space in itself as opposed to sector specific approaches. Each region had attempted to do this to some degree through the use of climate change partnerships and either had or were in the process of developing a climate change action plan for their region. Yorkshire and the Humber also had an aspirational target for the region, which had been in place since 2002. In 2007 and 2008 all the Government Offices for the Regions were involved in agreeing Local Area Agreements with Local Strategic Partnerships, including for many a spatial carbon emissions target: this showed a third set of spatial practices that regional actors were involved in relating to the calculus of 'carbon spaces'.

In order to more thoroughly get to grips with the mobilisation of strategies and practices of governing it is necessary to focus on relationships between various sets of actors. These need to be capable of shedding light on each of the stages of governing traced through the MoG framework: development of governing rationalities; development and implementation of technologies; relationships between actors; and the effect on the governed entity. In particular, there was an interest in scalar practices and relationships between 'scaled' actors. Four sets of relationships tend to be at the forefront of regional activity: statutory regional actors with other statutory regional actors; statutory regional actors with non-statutory regional actors; regional actors with local authorities; and regional actors and national governmental actors. Analysing these specific sets of

relationships gives a rounded picture of the politics involved in governing regional policy from ‘above’, ‘within’ and ‘below’.⁴⁸

The nature of governing at the regional level often required that regional actors acted in partnership, in particular where statutory roles were shared amongst different actors within different organisations, as was the case with sustainable development and carbon management. This is particularly important in trying to develop a shared regional ‘imaginary’ on a particular issue. The analysis in Chapter 9 – of ‘first wave’ practices – partly focuses on the development of broad-based climate change partnerships, which attempted to gain ‘buy-in’ from each of the core regional organisations. Here it was important therefore to identify actors at the regional level that were involved in carbon management policy.

Statutory regional bodies also interacted with non-statutory regional constellations, which pre-2007 included regional local government associations, as well as regional environment forums and regional representatives of environmental charities such as Friends of the Earth. Analysing these relationships is important in establishing the extent to which governing networks extended beyond the regional ‘troika’, and also give important ‘outsider’ insights on the workings of regional governing.

The relationship between regional and local authority actors receives much of the emphasis in Chapters 8-12. In terms of ‘first wave’ practices, the emphasis is on the extent to which local authorities engaged with regional actors in policy formation and implementation as well as the way in which regional technologies ‘translate’ across scales. Local authority actors are seen as important indicators of the success of the broad-based ‘regionalisms’ developed by regional actors. The analysis of ‘second wave’ practices focuses on the forms of engagement and the politics that arise as regional actors become involved as a mediating force between local and national government. Finally, the relationship between regional actors and national government is an important step in developing a ‘multi-level’ perspective on the research, and especially in exploring the context for the development of regional governing technologies.

⁴⁸ A full list of respondents and data sources can be found in Annex 2 and the process of carrying out the research is discussed in depth in the following chapter.

Conclusion

This chapter has tackled two sets of methodological issues. First, it set out the theoretical basis for a comparative case study approach. The aim here has not been to set out a specific and immutable philosophical ‘standpoint’. Most clearly however, it might be said to sit somewhere in the realm of ‘methodological realism’: one that does not necessarily share all of the ontological or epistemological standpoints of Bhaskar, Sayer *et al.*, but which nonetheless sees merit in the pragmatic approach to research methodologies that have developed from within this tradition.

I have outlined the rationale for a case study approach, in particular by addressing some of the concerns raised in recent years regarding their use in regional studies. While some of the concerns have been rejected, they have highlighted other issues worthy of discussion. For example, while *generalisability* is not necessarily the aim of case study-based research, some degree of *corroboration* and investigation of issues in other contexts is a useful strategy to adopt.

For the second task, I set out the basis for the specific case study choices, including a brief description of some of the characteristics of the chosen regions; the organisational structures; the specific governing technologies of interest; and the relationships to be studied. This work is at least partly an exploratory piece of research, as little research has been published at the time of writing which focuses specifically on English regions and carbon management policy. As such, this chapter gave only contextual information: the overview of regional carbon management policy was a research task in itself and is outlined in Chapter 8. Yorkshire and the Humber offered insight to two sets of governing technologies that other regions either had not, or were only just beginning to offer. The South West and North East offered some ballast to this selection, giving an insight into experience of regions where carbon management policy was still ‘in the making’ – including different approaches to policy – and to give wider context to the situation in Yorkshire and the Humber, the English regions as a whole, and the national policy picture.

Having determined the case study approach, the next research task was to deploy a set of methods to effectively explore the research questions: embarking on the process of ‘real world’ research and all the potential for excitement, frustration and general messiness that this entails. This chapter therefore follows on from the previous methodological chapter in exploring the ‘reality’ of the research process. This concentrates on the deployment of specific research methods and reflection on the process of gathering evidence. In terms of methods, some time is taken to discuss the theoretical and practical considerations in making strategic choices, as well as the tools then used to analyse the data. This includes a short discussion of discourse analysis and Bruno Latour’s (1999) notions of ‘programmes’ and ‘anti-programmes’. Particular attention is given to the most ‘open’ point of research gathering: carrying out semi-structured in depth qualitative interviews. As part of this I engage with the particular issues faced when attempting to access and interview policy ‘elites’, strategies taken to ameliorate any problems, and reflection on the success of these strategies.

Setting up the Study

Yin (2003) outlines six sources of evidence for a case study: documentation, archival records, interviews, direct observations, participant observation and physical artefacts. Each of the six sources of evidence were utilised at some point in the study, but in-depth semi-structured interviews and documentary evidence were the most used sources of data. This was in part pragmatic: for example, it was easier to get people to agree to an interview than to set up a more embedded method of study. Documentary evidence – although not always easy to get hold of – is a useful source for analysing the ‘programmes’ (Latour, 1999; 2005) and discourses that actors present to others, as well as some indication of historical decision-making processes.

Documentary evidence was important to the study in that regional action plans provided the basis of a large section of the study, while archived material also acted as a useful data source. The majority of these were sourced through the internet, but on occasion they were provided by or requested from individuals or organisations: on the whole they were co-operative with these requests, although some information did appear to have a habit of going ‘missing’.⁴⁹ Published versions of strategies also count as physical artefacts, as did the buildings that house the different organisations I visited: these were useful indicators of particular organisational cultures and even, in part, the extent to which ecological considerations were embedded within the organisation.

It was initially hoped that interviews and documentary evidence would be augmented by at least one period of ‘embedded’ observation of a regional governing organisation’s climate change activities. This was to allow for ‘submerged’ empirical analysis to gain access to the deeper levels of decision-making and organisational cultures. Although there are any number of different problems that may arise relating to ethics and positionality as a result of taking such an approach, it would have allowed an opportunity to essentially get ‘under the skin’ of the issues I was hoping to explore. Martyn Hammersley (1992 p241-42), notes that:

...there are independent and unknown realities that can come to be known to the researcher getting into direct contact with them, for example through participant observation.

Unfortunately, I was unable to persuade any individuals or organisations to agree to this form of observation. By way of compromise, I was invited along to a number of board meetings, workshops and policy groups, of which I made full use. A list of the events I participated in or observed can be found in Annex 3

In-depth interviews

Observation proved to be a useful means of getting a sense of prevailing power relationships, underlying organisational politics and particular policy issues. Attendance at workshop and consultation events also provided a means of viewing discussions of

⁴⁹ See the discussion of regional targets in Chapter 9.

policy from outside the 'inner circle' of governing actors. These events were particularly useful for informal discussions with various people to probe around some of the research questions I was dealing with. They were not, however, ideal for directing the shape of discussions to specifically deal with the issues I was interesting in exploring. Focus groups provide a useful means for doing this in a group setting, and two of these were carried out, but it proved difficult to get groups of people together in one place at one time. Similarly, the dynamics of focus groups mean that the leader has, to some extent, to take a back seat: shaping, but not directly forcing the issues. There is also potential for certain opinions and issues to be skirted over in a group environment to avoid conflict, or for people 'outside' mainstream groups or viewpoints not to attend.

Many of the events at the heart of this research are quite specific and require more direct questioning to uncover the decision-making processes involved as well as some of the nuances around regional practices. In order to get a deeper understanding of political issues it was also important to speak to people individually to get their own perspective on events. As such, in-depth semi-structured interviews provided the means for generating the bulk of primary data. In total, interviews were carried out with 62 people working within national government, regional organisations, local authorities and other 'social, economic and environmental partners' (SEEPs) across the three case study regions, with people based in Yorkshire and the Humber comprising roughly half of the sample. An anonymised list of interviewees can be found in Annex 2.

A purposive sampling approach was taken and potential research participants were initially identified through taking the names of people attending board or partnership meetings; listed on organisational websites; and through speculative emails to organisations. Interviews were then used to generate further contacts through identification of 'key players' and people with 'something to say' by respondents. Identifying potential research participants was relatively straightforward, especially once a few interviews had taken place. There was an element of stratification to the sampling: it was important to ensure that certain key organisations, people and places were represented within the study. Beyond this, there was a potential population of hundreds who could have informed the study, but in the end a pragmatic response was taken on grounds of time, and perhaps more importantly, the law of diminishing returns.

This is neatly summed up by the character 'Engleby' in Sebastian Faulks' novel of the same title:

By noon the story had fallen into place. You can tell when this has happened because you stop writing. The first person you interview, you can't move the pen fast enough, because it's all new to you. Gradually returns diminish. When your pen is still, and you can pause to help the interviewee out with the names of his own colleagues he's momentarily forgotten, you're there. The blank page is the story done.

'Engleby' in Faulks, 2008 p137

While I never reached the point in interviews of having nothing new to write, there did come a point at which themes were repeated often enough within interviews for clear patterns to emerge and facts to be, if not one hundred per cent verified, then at least established to a reasonable degree of certainty.

Accessing, engaging and recording respondents

Carrying out an in-depth interview is a sociological experience in itself, with potential repercussions for the quality and validity of research findings. This is reflected in the wealth of academic literature that has been dedicated to the process of accessing, engaging with and recording interviewees. Of particular relevance in this research is the work that covers researching 'elite' actors.⁵⁰

The rise of semi-autonomous regional governing structures and the allied 'democratic deficit' (Tomaney, 2000) led to the rise of a regional policy elite that was also often untouched by democratic or popular scrutiny. This should not necessarily be taken as a normative statement; nonetheless the last decade witnessed a growing body of powerful and influential people with little outside understanding as to their roles, strategic decision-making or motivational forces. A range of issues have been identified as being associated with interviewing elite actors. In particular, the themes of access, power, openness and feedback – as identified by Welch *et al.* (2002) – are worthy of discussion,

⁵⁰ Broadly defined as "an informant ... who occupies a senior or middle management position; has functional responsibility ... has considerable industry experience and ... possesses a broad network of personal [and professional] relationships" (Welch *et al.*, 2002 p614).

alongside ever-prevalent concerns surrounding positionality, situatedness and reflexivity.

Qualitative Interviewing With Elites

Beverley Mullings (1999) argues that very few geographers have recognised the way in which in-depth interviews can be too highly affected by issues of power, positionality and subjectivity to be sufficiently rigorous or ethical to be valid: as Mullings (1999 p339) states, using this method “requires a recognition of the relationships of power played out during the interview process and the effect that researchers have on the final outcomes”. Kevin Ward and Martin Jones (1999) offer an alternative approach in suggesting that, while an interview between a junior researcher and a member of a policy elite may suggest a fairly clear and fixed locus of control, this ignores the subtleties of research, control being also related to issues such as questionnaire design and the use of mechanical scenarios to illustrate outcomes. They argue for a more ‘fluid’ reading, as control fluctuates around a “constellation of *potential* positions” (*ibid.* p304). In a similar vein, Welch *et al.* (2002) contend that there is a dominant view that those with higher status are more likely to give accurate and powerful data, but that a number of concerns remain regarding the validity and reliability of data from elite sources. One of the key issues at stake is the importance of the relationship between researcher and researched. To be simplistic, it is an unavoidable fact that the way in which the interviewee responds to questions will influence the outcome of the research (Woods, 1998). As Allan Cochrane (1998 p287) states:

The acknowledgement of difficulties entangled in the process of studying local elites is important, particularly those associated with the dangers of ‘surrendering’ to the agendas of the elites in the process of gaining cooperation.

I am aware, for example, that sometimes during previous research projects, I have allowed myself – sub-consciously – to be swayed by the agendas of some interviewees. For instance those with more forceful views perhaps found greater prominence within my work, especially those who were capable of speaking in succinct ‘sound-bites’ convenient for use in written outcomes. It may not be possible to entirely eliminate such issues, but it is useful to explore the strategies that may be available to minimise them.

The first hurdle in carrying out elite research is negotiating access. Without access to information, no research can be carried out: this draws immediate attention to the relative lack of power that the researcher can exercise. Access, or lack of, can cause a fatal stumbling block to any proposed research, but can be particularly problematic when dealing with elite groups. Luck, connections and particular circumstances at the time often play large parts in determining access (McDowell, 1998; Parry, 1998) and access to elites is regarded as particularly difficult because they “establish barriers that set their members apart from the rest of society” (Hertz and Imber, 1993 p3). Furthermore, the threat of access being withdrawn will remain, which may also have an effect on the way that questions and responses are shaped (Rubin and Rubin, 1981).

Accessing respondents for this project was – on the whole – not too difficult. Once a contact name had been established, an initial email was sent to the potential interviewee. More often than not no response was received, so the email would be followed up with reminder emails and phone calls after a suitable period of time had passed: usually about a week after the first email. Few people outright refused to take part in the study, although a number did engage in various diversionary tactics – for instance, cancelling meetings at short notice, arguing that they would not be of much help to the study, or suggesting alternative contacts – which in one or two instances meant that it was not possible to carry out interviews. This problem was most acute with employees of RDAs. These organisations were the only source of refusals and also of people continually cancelling and asking to re-organise meetings. This was mentioned to other respondents, who suggested – for instance – that “you have to understand that these people are very busy, and don’t always have time for this sort of thing”. This is understandable, but at the same time reflects a sense of a ‘closed shop’ given off by some representatives of RDAs in all three regions and feeds into to some of the issues of accountability discussed throughout the rest of this research account. On a couple of occasions I was able to circumvent these problems by corralling evasive respondents at meetings that I attended: here I was at least able to engage in a few minutes of informal discussion on particular issues. Similarly, I had no problems with respondents granting access on the

basis that certain conditions relating to the use of the research would be met, except at moments when specific comments were stressed as ‘off the record’.⁵¹

Once the issue of access has been negotiated, most concerns within elite interviewing literature continue to relate to issues of power and control. Qualitative research is dependent on developing successful working relationships between researcher and respondent, which can prove problematic if there is a significant power imbalance involved (Welch *et al.*, 2002). In many cases, the main problem lies in the researcher being in control, with attendant fears of ‘leading the witness’ (Schoenberger, 1991; Hertz and Imber, 1993; Woods, 1998). Elite interviews are, however, likely to favour the researched in terms of control (McDowell, 1998; Mullings, 1999; Hughes and Cormode, 1998; 1999). As such, the negotiation of trust is equally important, but a different approach must be taken: the researcher may be forced to change their outward persona in order to appear respectable and perhaps sympathetic to the respondent. As part of this process there is the risk of “surrendering to the object of study” (Woods, 1998 p2114): elite interviewees are often “professional communicators” (Fiuz and Halpin, 1995 p68), highly capable of putting across nuanced and persuasive arguments.

Another problem associated with the loss of power is that the interviewer may find themselves as a ‘supplicant’ (McDowell, 1992; Welch *et al.*, 2002), “requesting time and expertise from the powerful, with little to offer in return” (McDowell, 1992 p214). As such, the researcher may find it hard to ask critical or demanding questions. At the same time, elite interviewees are likely to have a more honed ability in dealing with questions, as well as being bound to organisational politics (Welch *et al.* 2002). Albert Hunter (1995 p153, cited in Sabot 1999 p335) neatly sums this problem up in warning “[n]ever underestimate the elite’s capacity for secrecy”. Added to this question of honesty is the fact that in many situations, the information being sought may be sensitive or valuable and thus not readily divulged (McDowell, 1998).

It is important, therefore, to recognise that many of the problems and issues are a result of the positionality of the interacting parties. In fact it may be said that all research depends on the positionality of the researcher and his or her informants (McDowell,

⁵¹ ‘Off the record’ comments, frustratingly, were often the source of the most interesting and contentious responses.

1998); something which Pam Shurmer-Smith (1998) engages with in discussing how the experience of research continuously evolves through specific encounters and is shaped by matters such as dress, the researcher's past, gender, age, ethnicity and temporal and spatial locations. Interviews also rely on the participants' interpretation of processes, which the researcher must then comprehend for themselves, thus resulting in a 'filtering' of knowledge (Schoenberger, 1991; Mullings, 1999).

Much of the debate surrounding situation and positionality refers to the merits of being an 'insider' or 'outsider'. For example, researchers studying a group to which they have a prior connection may have an advantage in that they are able to comprehend and empathise more easily with respondents. Equally, however, 'outsiders' may have the advantage of being seen as unbiased or naïve, thus being more likely to gain access to more sensitive information (Ward and Jones, 1999). The irony to this is that arguably it is the 'inside' researcher who can make more use of the information, being more capable of drawing insights from data. Thus, as Sabot (1999 p344) states, "those who could best understand are given least, and those who can understand least are given most!" Nonetheless, it should be recognised that no individual is likely to consistently retain insider status, nor hold on to the notion of being a complete outsider (Cochrane, 1998), instead this status will fluctuate according to a range of circumstances and positionalities.

A look at gender continues this theme. Herod (1993) argues that gender of the researcher and researched can have an immediate bearing on results; for instance, Schoenberger (1991 p217) believes that her position as a woman made her appear less threatening to the elites she was dealing with, "or presumed to be a better audience for the recounting of exploits". However, she also states that "on the other hand ... my male colleague probably does not have to deal with paternalism, flirting or skepticism about his ability to grasp technical subjects". Some researchers have also suggested that when women are interviewing women, a shared empathy makes the procedure both pleasant and easy. However, McDowell is keen to disabuse the researcher of this notion, having found in her own work that many of the women interviewed were extremely forceful and had neither the time nor inclination to share sisterly values. Others have argued that, while gender matters are important, they are perhaps secondary to other positional factors (Sabot, 1999; Mullings, 1999; Oinas, 1999).

Within my own work, when I have been in the situation – as a young(ish) male researcher – of interviewing older women, I have often found them to be more frank about their opinions and also occasionally adopting a maternalistic attitude, with offers of assistance and guidance. Age is also a factor here. Welch *et al.* (2002) believe that this can be an ambiguous matter, with different reactions from different respondents. For example, they cite cases where there is a large gap between the ages of the elite and the interviewer. In such circumstances some elites have exploited the age difference, by expressing impatience at having to deal with ‘irrelevant’ issues, while in other cases elites adopt a maternal or paternal attitude, as I have experienced myself.

It is worth briefly mentioning feedback as a particular way in which researching elites may differ from other subject groups. While many texts suggest caution when sending reports to non-elites, as there is the potential to cause alienation, Thomas (1993) argues that follow-up work with elite informants can be particularly useful, as they may be willing to engage directly with verifying findings. It may be necessary, however, to present the findings in a different manner than traditional academic styles, with perhaps some censorship of details (Welch *et al.* 2002). I have presented provisional findings to groups of respondents – and people ‘outside’ the study – on three occasions, which provided very useful feedback, had informal discussions with various participants on a number of occasions and used the second round of interviews to verify some of my initial thoughts arising from the first set of interviews.

Interviewing Strategies and Reflections

The goal in interviewing should be collaborative dialogue that engages the respondent in working through the research problem. In this way the respondent contributes to shaping the context without controlling it. Having acknowledged the various problems that are associated with elite interviewing, I will now outline some of the ‘strategies’ taken in carrying out the research to overcome these challenges. Schoenberger (1991) identifies the key to a productive interview as strong preparation and this is perhaps the most fundamental interview strategy. I ensured that I was well informed about the organisation prior to the interview, the idea being that I would be able to engage fully in

discussion with the interviewee, but also so that the respondent will be reassured to know that I had at least some understanding of the issues under discussion and would also appear able to assess the validity and accuracy of the information being offered.

There are a number of other, fairly basic, strategies that can be adopted. For instance Richards (1996 p202) suggests altering dress to appear respectable, but unthreatening:

As a male interviewing a top civil servant, I wore corduroys, a white shirt, tie and a black blazer, and carried a battered old briefcase with me. If I had turned up in a pin-striped suit and a filofax under one arm, it may not have created the right impression!

My wardrobe is relatively low on pin-striped suits, and my desk bereft of filofaxes, so the latter option was never really available to me. Nonetheless, I did feel that dressing in a particular way tended not only to create an image to other people, but also to make me feel more, or less, at ease in carrying out the interview. Usually this meant smart trousers and an open-necked shirt: somewhere between the corporate attire of regional governing organisations and the slovenly day-to-day wear of a PhD candidate.

A further set of strategies relate to representation (Shaffir, 1991). Research involves playing games to gain and maintain access, and even if we retain separateness there is still the possibility of betraying the trust of the researched. As such, elite interviews, as with all qualitative work, raise the question of how much to reveal about the purpose of the research, one's values and beliefs as well as how to present oneself to the interviewee. McDowell (1998) claims that it is often best to maintain as much honesty as possible about research aims. Covert observation may sometimes be appropriate, but there is a danger of collecting sensitive information that interviewees may not otherwise have wished to reveal.

In dealing with interviewees I tried to be open about my research aims and to openly discuss any thoughts or initial findings I had. This seemed as much a practical way to approach the research as an ethical issue: openly discussing my research seemed a useful way of eliciting opinions from respondents. This tended to work well and in fact led to some of the more interesting discussions that I had with respondents. This kind of approach is, however, perhaps best suited to research where – like mine – the issues under examination are not particularly contentious and all concerned are to some extent

removed from the subject matter: interviews did not generally include detailed questioning of individuals' personal lives, for example, and the subject matter was not of immediate 'life or death' concern for interviewees. This also perhaps says something in advance of the analysis in later chapters about the level of profile and scrutiny attached to carbon management policy in the regions at the time of the research.

Experiencing interviewees

Each person I interviewed approached me with different aims and different reservations about the research. It was not always spoken, but these fears and ambitions underlay the discussions that we had. In carrying out the interviews, I seemed to come across four general categories of respondent: 'pragmatists', 'collaborators', 'agenda-pushers' and 'defensive strategists'. Each of these presented different sorts of challenges to myself as the researcher, but also played important roles – beyond the direct 'data' that they provided – in the research process.

The Pragmatist

The first of these 'archetypes' I have labelled 'the pragmatist'. Respondents within this category would often describe themselves initially as someone "who likes to get things done", and often point to a scientific or engineering background as a grounding element of their approach to policy: "I come from an engineering background. We identify the problem and we find the solution" (Former Policy Director, Y&H).

These respondents were not confined to any particular type of organisation, but tended to present themselves as an outsider to the policy 'world': interlopers who expressed frustration at "the stuffy, dithering, meeting after meeting way of doing things" (Policy Manager, North East). In actual fact, these people represented a perhaps a third of the interviewees, across various levels of responsibility within organisations, so were not really as 'outside' the policy process as they intimated.

A key challenge with respondents identified as pragmatists was to convince them of the validity of my research – in some cases just to gain access – in order to gain their trust and elicit in-depth responses to my questions. On several occasions I was asked questions by Pragmatists similar to the following: “but, what exactly is the point of your research? What we need is something that will help us pinpoint specific actions on specific issues” (Policy Executive, Y&H). In several cases this included challenging several of the basic premises behind the research. While this presented a challenge, it also prompted several periods of reflection on the relevance of my research to the people it aimed to study and helped me think more carefully about the research questions and indeed the intended outcomes.

The Collaborator

A second group of respondents were ‘collaborators’. These respondents approached the research with some enthusiasm, and would often suggest conducting the interview in a more informal setting: “let’s meet for coffee, somewhere away from the office so we can have a proper chat”.⁵² Again, this group of people were not confined to one type of organisation, although more respondents from ‘SEEPs’ did exhibit the traits of this category.

Collaborators were, on the surface, open with their opinions and were keen to question ‘mainstream’ views on particular issues. In particular, they were keen to assist in research in other ways where possible; for instance: “You should definitely speak to xxxxxx; he’ll be able to tell you just what you need” (Local Authority Officer, South West). This made collaborators an important source beyond their ability to contribute directly to research findings. On the other hand, the danger in interviewing this type of person is that the researcher may be taken ‘off guard’, and may become unduly influenced by the collaborator’s points of view. In many ways, the collaborator works much more effectively as a manipulator: they can seduce you down different avenues;

⁵² On one occasion, a collaborator drank several bottles of strong Belgian lager in the time it took to conduct our interview, which potentially opens a number of questions about ethics and the validity of findings! Just to set any concerns aside I also interviewed the respondent again on another occasion – where alcohol was not imbibed – when I was able to check that the interviewee was happy with previous comments they made.

and induce with promises of access to data, events, and people. I hope that I managed to avoid this in presenting my findings, but this does draw out another issue in terms of selecting quotations. Collaborators, in being open in their discussions, often provided ‘good copy’ in that statements that they made would give a genuine opinion backed up by wider context: ideal for quoting within the findings. It therefore becomes important to reflect on whether analysis is being swayed by the availability of well-phrased soundbites, something which there can be a – conscious or otherwise – temptation to do. Again, I have tried to avoid this as far as possible, except where such quotations are illustrative of a wider body of evidence.

The Agenda-pusher

‘Agenda-pushers’ made up the third category of respondents. I came across a number of these – although perhaps fewer than I anticipated – and they tended to either sit within areas of relatively high responsibility within governing organisations, local politicians, or representatives of external pressure groups. In some ways these interviews were the most interesting, as they elicited some of the more contentious statements and also a more stark glimpse at the “politics large P” (as many respondents referred to organised political machinations) within the policy process. These respondents were clear from the outset about their strong views on a particular set of issues, which would then be pushed forward throughout the interview. Interestingly – to me, at least – these respondents almost without fail adopted a maternal or paternal attitude towards me as the researcher in expressing kindly interest in the research – and on two occasions my overall wellbeing – and then attempting to ‘enlighten’ me as to the realities of policy making: “this is perhaps something you have yet to experience, but let me tell you...” (Policy Director, Y&H).

These interviews were often interspersed with comments that set the respondent apart from other actors and interest groups – “what *they* don’t understand is...”; “of course, *they* will tell you... [But they are lying]” – and on countless occasions the phrase “off the record...” being used before making a damning statement about people working for other organisations (never an admission of personal failings), despite knowing full well that what they were about to say would unavoidably influence my research. These

interviews were particularly interesting in terms of analysing the way in which particular ‘facts’ were constructed and deployed during the interviews, but presented a number of difficult challenges. These respondents were, on the whole, the most ‘elite’ of the people I spoke to in the course of the research, and as such posed a number of the challenges discussed above. First, there was a clear understanding – on their part – that they were in control of the interview process. Interviews almost always took place within the respondents’ own office (as opposed to a separate meeting room), and I was often subject to a reasonably lengthy wait in the reception area beforehand. Interviews were then often repeatedly interrupted by telephone calls and requests from colleagues, which could disrupt the flow of discussions. More challenging was the ability of agenda-pushers to manipulate conversation and simply deliver a monologue on a particular issue for ten or fifteen minutes at a time without allowing space for questioning, clarification or steering the conversation in different directions. I’m not sure that I was always successful in overcoming this obstacle, although on some occasions this led to collecting some interesting material that would not have been covered had I been able to shape the interview more directly.

The Defensive Strategist

I have labelled the final category of respondents ‘defensive strategists’. This group of respondents were most common amongst – but not exclusive to – people working for RDAs and were by far the most difficult group of people to engage with. These respondents posed problems for the research both in terms of access and in conducting interviews. The two most common characteristics of this group of respondents were fear and distrust: ‘what is it you want from me? What are you aiming to do with what I tell you? What’s that you’re writing down? Can I see your list of questions?’ There were, perhaps, legitimate reasons for these concerns. I was there ostensibly to ‘get to the bottom of things’ in relation to work that they may have been closely involved in and had a sense of ownership over. On a small number of occasions potential respondents simply refused to take part in the research, while some others agreed to meet but then failed to respond to requests to arrange a specific time or date to carry out the interview. On each of these occasions the people in question had first requested a detailed breakdown of my research aims and questions.

When defensive strategists did agree to meet, they were very cautious in their responses to my questions, and seemed careful to stick to the official ‘party line’ on most issues. This provided some difficulties in attempting to elicit more thought out responses, or discussion of ideas or challenges beyond issues that directly related to the respondents’ job. The phrase “above my pay grade” was used on a number of occasions, even by quite senior members of organisations. In order to get round some of these issues, I did find myself – not entirely consciously at first – drawing on my previous employment within a regional governing organisation to present myself as more of an ‘insider’: this included mentioning previous work and people that I had worked with, as well as some of the problems I had faced in my previous role, in order to create some level of trust between the respondent and myself. This strategy appeared to work reasonably well with people in Yorkshire and the Humber, which is where I had previously worked, but less so in the other two regions. In the South West, I was more able to draw on the role of ‘ignorant outsider’, whilst also effectively ‘swapping’ information about Yorkshire and the Humber and the North East in return for a more open discussion on the South West.

Other Ethical Considerations

It is important to briefly note a few of the more ‘standard’ ethical considerations that were taken before embarking on the research process. The research proposal had to be approved by the research ethics committee at Sheffield Hallam University, which included agreement that the research would not raise significant ethical problems, and met ethical requirements of the University’s research ethics policy.

In advance of carrying out interviews, respondents were contacted in writing to make sure that they were happy for their interview to be recorded and for materials to be used in my thesis and any later publications. This included agreement that all names and specific job titles would be anonymised. Specific organisations have been referred to where necessary to provide context to statements, but this has been avoided where possible. Respondents were given the opportunity to view interview transcripts, although in practice only a very small number took up this offer.

Analysing the data

Analysis of data began from the start of data collection. Documentary evidence was essentially analysed from the moment an initial scan of the text was made as decisions were made about the relevance and significance of material. Interview material took a slightly more drawn-out process. Before a more formal analytical process was carried out, interviews had been analysed a number of times: responses were analysed during interviews – this is necessary in order to shape further questioning – then from notes immediately after interviews to consider any particularly noticeable points or themes, then again during transcription.

Coding and Separating

Once interviews had been transcribed they were read through as a whole and further comments noted. A further level of analysis came through the use of NVivo qualitative data software. This involved thematic coding of data – including documentary and interview materials – across a number of themes that had been identified in the previous readings, plus new themes that were identified through the process of re-reading the texts. This was a useful process in testing out the initial theories and themes I had developed from reading through the text by quite simply seeing how much data there was to support the different arguments. This led to some reorganisation of my thoughts and changing some of the focal points of the research.

A final form of coding was carried out in terms of identifying the types of data being presented across the different themes. This was essentially a heuristic exercise to work through processes of legitimisation on the one hand, and the more prosaic ‘non-strategic’ politics of governing on the other. Fairclough (2005 p7) talks of the “partly discursive” nature of texts, which leads potentially to separating texts into ‘discourse’ and ‘events’ or ‘facts’. I have taken a slightly different route, which recognises that all facts are essentially constructed, in the sense that all facts have to be ‘legitimised’ before they are accepted as such – as discussed in Chapters 2 and 3 – so instead separated information into ‘opinions’ and ‘programmes or anti-programmes’, as outlined by Bruno Latour (1999; 2005).

Programmes and anti-programmes were particularly important in the analysis of discursive attempts to legitimise particular governing rationalities and technologies. For Latour, programmes and anti-programmes (or, in older texts, ‘modalities’) concern the way in which ‘stories’ are built that take us away from, or bury, the original claims or evidence: “the claim is decoupled from the scientist; i.e. the claim gets to look more and more like a fact” (Valkenburg, Achterhuif and Nijhof, 2003 p466). For instance, in *Pandora’s Hope* (1999 p93), Latour approaches the acceptance of the possibilities for energy from nuclear fission, moving from through the following points:

- (1) “Joliot [the pioneering French scientist] claims that each neutron liberates 3 to 4 neutrons, but that’s impossible; he has no proof...”
- (2) “The Joliot team seems to have proved that every neutron liberates three neutrons, that’s very interesting”
- (3) “Numerous experiments have proven that each neutron liberates between 2 and 3 neutrons”
- (4) [As a general statement of fact] “Each neutron liberates 2.5 neutrons”

Frederic Joliot, the scientist, engaged with both human and nonhuman elements to create acceptance for his initial theory. This was modified along the way as it came into contact with ‘anti-programmes’, that is, actors and actants that worked against his initial hypothesis. Building such programmes is inherent in all attempts to build a consensus view.

In this research, documentary evidence and interviews were analysed for attempts to build ‘programmes’ and ‘anti-programmes’ surrounding imaginations of the region as a carbon space, and the attempted legitimisation of regional organisations as actors to govern this space. This is explored in most depth in Chapter 9 and 10, but elements of this are seen in Chapter 12, as extra-regional governing practices worked to shift the terms of the discursive programmes that actors had previously attempted to build.

A final point to make relates to the role of writing as an important part of the analytical process. I found that attempting to draw together the empirical research and matching it to elements of the theoretical framework at different points within the research process was the best way for me to effectively deal with the research material and think properly about how to present empirical findings. Working papers were written at various stages of the research, developing thoughts on themes and analysis, which included presentation at conferences and papers prepared for publication (see, for example, Eadson, 2008). These papers also proved a useful way of eliciting feedback from people not directly involved in the research – for instance, peers, conference delegates and referees – which proved invaluable in working towards the final analysis in chapters 8-12.

Final Reflections

This chapter outlined the process of carrying out the research, with particular attention given to generating primary data. Although there is a clear temptation to engage in a *post-hoc* rationalisation of decisions made in the research process – and this project was certainly not an entirely linear process – in reality the development of a methodological framework, choosing methods and carrying out the research proved to be relatively straightforward: for example, I did not experience any major access problems or encounter any serious ethical dilemmas. This is perhaps reflective of the relatively ‘mainstream’ methodological approach taken to the research, and the research subjects, but these choices were not made purely for convenience. They were in part made for pragmatic reasons, with regard to time and resources, but also in part through necessity – as was the case in not experimenting with ethnographic approaches – and in part because the methodology and methods chosen just seemed to be the most appropriate approaches to take. I have justified these choices over this and the preceding chapter.

The next chapter moves on from the process of ‘setting up’ the study and turns to analysis of the evidence gathered through the different techniques discussed above. This first empirical chapter focuses on regional organisations’ attempts at governing carbon

management up to 2007. This overview uses the broad power modalities framework adapted in Chapter 5, in order to set a baseline context for the ensuing analysis in Chapters 9 onwards.

The following four chapters are concerned with empirically exploring the ways in which regional governing actors were involved in governing carbon management. This first chapter gives a broad overview of the different sets of power modalities being employed by regional actors around 2007. I then move on in Chapters 9-12 to discuss more specific spatial practices, aimed at re-imagining, re-calculating and re-connecting the region as a carbon space through associative and instrumental ‘meta-technologies’.

Despite recent political and academic attention, climate change is still very much an emerging policy domain. This was reflected in both the form and extent of power exercised by regional organisations. Over the research period, carbon management moved from a marginal issue tied in with sustainable development discourses to becoming – rhetorically, at least – an issue discussed across all policy realms; and one that was potentially supplanting sustainable development as *the* ‘cross-cutting’ policy theme. This was not simply a sectoral issue; each scale or level of governing was awakening to the task ahead. Significantly, there was some awareness of a need to *re-imagine* governed territories as carbon spaces. At the same time, however, there remained a high degree of uncertainty as to the means through which the spatial governing of carbon should be achieved.

What makes it a particularly interesting topic of investigation is precisely this uncertainty about *who* should be doing *what* in terms of governing action on climate change. This draws out questions about carbon management as a ‘wicked issue’ in itself, but also around the extent to which dealing with carbon emissions challenges the interests of dominant networks and discourses. This uncertainty was no more pronounced than at the regional level, where governing organisations were in the midst of a period of institutional – and existential – flux between 2005 and 2009.

This chapter will first provide an overview of governing carbon management at the regional level in 2007. This includes an initial comparative overview of quantitative trends in carbon emissions in the three regions, which is followed by a broad overview of the different types of power being exercised in the governing process and the types of institutional interactions that took place within this. The following chapter (Chapter 9) will then continue to look at ‘first wave’ actions in the regions, utilising the more broadly conceived framework of multi-level power modalities. First wave actions were not strictly chronological, in that they took place at different times across the regions: more accurately they reflect a certain set of technologies, power modalities and institutional relations that were utilised as regional actors took early steps in developing an understanding of the region as a carbon space. Nonetheless, these actions broadly sit within a wider pre-2007 framework when considering the rationales behind technologies and when set within the context of national government action. Chapter 11 discusses the issues raised in the analysis of first wave actions within the framework of spatial and governing legitimacies outlined in Chapter 2. Chapter 12 will then move on to explore a second wave of developments in spatialising carbon emissions, with the introduction of more formalised roles for some regional actors, greater levels of spatial monitoring – including spatial targets – and a concurrent splintering of regionalist activity on carbon management.

In exploring these processes, a number of issues come to light. The initial overview notes that up to 2007 activity was confined to a small number of high profile ‘enabling’ schemes through provision of funding and limited authoritative action, alongside more prosaic activities such as provision of knowledge or evidence and facilitation of good practice sharing. Further themes emerge in exploring the more ideologically ambitious approaches to re-imagining and re-calculating the region as a ‘carbon space’. Most evident in first wave actions were questions surrounding governing and spatial legitimacy of regional actors, which were in part both a cause of and caused by a lack of co-ordination of climate change action at the regional level. In the second wave of activities some co-ordination took place, with a shift in the role of regional organisations with regard to governing carbon management as they became more strongly bound to centralised instrumental programmes. As a result the region took on an increased role as a mediating force between local and national government; either through direct negotiations on Local Area Agreements, or through various enabling and

facilitating measures to aid local actors to meet national requirements. At the same time, however, a degree of splintering and fragmentation of regional carbon management activities around specific themes and interests took place as regional actors envisaged the ‘carbon region’ through a range of different lenses.

Carbon Emissions in the Regions

Using Defra statistics on carbon emissions – these are the only emissions figures available for all of the regions – it is possible to make a rough comparison of Yorkshire and Humber’s progress against the other English NUTS 1 output areas. The first set of available figures are from 2003, with the most up to date being 2008. Admittedly this short time period does not allow for a comparison of recent changes against historic trends. To compound this, owing to changes in methodology only the figures for 2005 to 2008 are directly comparable (see Table 11, below). Although this section is concerned with action up to 2007 it is worth including 2008, partly owing to the small data set, and partly to highlight trends in emissions across the time period considered for this analysis as a whole.

Table 11: Per capita CO₂ emissions (tonnes) 2005–2008

<i>Region</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>Change</i>
London	6.2	6.3	6.1	6.0	-0.2
East of England	8.2	8.1	7.9	7.6	-0.6
South East	8.2	8.1	7.9	7.6	-0.6
West Midlands	8.3	8.3	8.2	7.9	-0.4
South West	8.3	8.2	8.0	7.8	-0.5
North West	8.8	8.6	8.5	8.3	-0.5
East Midlands	9.4	9.2	8.9	8.6	-0.8
Yorkshire and the Humber	10.3	10.2	10.0	9.6	-0.7
North East	12.9	12.6	12.4	12.2	-0.7
Mean	9.0	8.8	8.7	8.4	-0.6

Source: National Statistics (2010)

To place these figures in some perspective, it would be useful to first compare them to other NUTS 1 level emissions across the EU. Unfortunately such data is not available as yet. However, brief comparison to the per capita carbon emissions of other EU States' United Nations Framework Convention on Climate Change (UNFCCC) reporting – with the caveat that the methodologies are not directly comparable – gives some indication of where individual regions are placed within a wider context. For example, Yorkshire and Humber's emissions level of 10.2 tonnes per capita in 2006 was broadly comparable to that of the Slovenia (10.3) and the total for the EU (10.4). At 12.6 tonnes per capita in 2006, the North East's emissions were broadly comparable to the Netherlands (12.7) and the South West to Portugal (7.9) or Hungary (7.8, all figures from European Environment Agency, 2009).

Across this period, aggregated UK local authority emissions fell by 6.4%, although almost half of this reduction – 3.0% – came in 2008 when the UK recession was beginning to take hold, thus generating a 'default' fall in energy usage (DECC, 2010). Each of the regions experienced a reduction in per capita emissions over four years, with East Midlands, Yorkshire and the Humber and the North East experiencing the highest reductions. The West Midlands and London achieved the lowest level of reductions. As with England as a whole, the majority of emissions reductions in Yorkshire and the Humber took place in 2008. This reflected a marked reduction in industrial and commercial emissions, most likely linked to a fall in GVA for the region for that period. The South West and North East took a steadier path in terms of emissions reductions. Nonetheless, none of the regions experienced a relative change in carbon emissions that was sufficient to dramatically alter their position compared to other regions and – London withstanding – there was not a great deal of variation in reductions over the four years.

Another way to look at this is through indexing regional per capita emissions to the national average (Table 12, overleaf). Here, data for 2004 is included as the methodological changes make less difference to comparative data than to raw data.

Table 12: Indexed per capita CO2 emissions by region, 2004–2008

<i>Region</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>
London	74.3	69.2	71.2	70.5	71.4
East of England	92.1	91.6	91.6	91.3	90.5
South East	91	91.6	91.6	91.3	90.5
West Midlands	93.1	92.7	93.8	94.7	94.0
South West	95.2	92.7	92.7	92.4	92.9
North West	95.2	98.3	97.2	98.2	98.8
East Midlands	107.8	105.0	104.0	102.8	102.4
Yorkshire and the Humber	114.1	115.0	115.3	115.5	114.3
North East	137.1	144.0	142.5	143.3	145.2
England (mean)	100.0	100.0	100.0	100.0	100.0

Nb. Regional figures measured against the mean for England (London included so that figures can be seen to add up).

Sources: AEA Environment (2005) and National Statistics (2010)

In Table 12, above, a very slight increase in Yorkshire and the Humber's emissions relative to the rest of England can be seen across the five years, but on the whole, relative performance barely altered. The South West's performance has remained more or less static for the four directly comparable years, and the North East marginally improved in 2006 before rising again between 2006 and 2008.

Of course, this is a very crude analysis. It does not allow for structural pressures that different regions might face at different rates: for instance, a change in fuel usage for a particular industry, or different levels of economic growth more generally. It does suggest at the outset, however, that the three study regions, and Yorkshire and the Humber more specifically have not achieved emissions reductions that go beyond national trends or cannot be at least in part accounted for by changes in economic output levels. This is important to note as the analysis turns to the general types of policies introduced by the three regions: as is shown in the overview below, there are some general themes of governing that spread across Yorkshire and the Humber, North East and South West.

Prior to embarking on analysis of spatial ‘meta-technologies’ in the following chapters, it is helpful to set the scene with a brief overview of the various ‘lower level’ technologies employed by regional organisations at the point of embarking on the research in 2007. As outlined in Chapter 5, Bob Jessop (2003), in his writings on *governance failure*, suggests that individuals and organisations aim to mitigate for the inevitable failure of each governing strategy by employing a range of different approaches: in effect, they attempt to spread risk. This was the case with regional organisations’ strategies for governing carbon; on the surface, at least. In practice, the strategies employed were heavily skewed towards those that represent a lower political risk and require less organisational upheaval. In particular, they tended to shy away from utilising their statutory resources to exercise authority over others, and instead tended towards more associative enabling and co-optive strategies. On the whole, regional action on climate change was largely piecemeal, uncoordinated and lacking a guiding approach to action. It was also inconsistently applied, even where statutory resources were in place. Table 13 gives an overview of the types of activities undertaken by statutory regional organisations as of 2007.

Table 13: modes of governing carbon management in the regions in 2007

<i>Mode of governing</i>	<i>RDA</i>	<i>Regional Assembly</i>	<i>Government Office</i>
Constraining	Funding restrictions	Planning guidance Scrutiny of RDA	Scrutiny of RDA and RA
Co-opting	Funding allocation Regional Strategies	Regional Strategies Regional Networks	
Enabling	Funding allocation	Knowledge/evidence provision Facilitation of networks	Knowledge/evidence provision

Constraining

Uncovering ways in which regional institutions governed by constraining is not particularly straightforward. Nonetheless, regional organisations did in theory possess some statutory resources that could be used to bring about carbon action through authoritative means.

In 2007, Regional Assemblies were responsible for regional planning guidance through the RSS, which provided some loose authority over local authorities and other delivery agencies, depending on the consistency in which they were applied. As stated by the Regional Yorkshire and Humber Assembly (2008a):

The Assembly is being asked to comment on those developments that would be of “major importance” or would “impinge on” the implementation of the Regional Spatial Strategy (RSS) or a ‘relevant regional policy’ ... The Assembly is also expected to respond to requests for pre-application discussions for any such developments.

By way of example the draft RSS for the South West (2007) proposed using planning controls to concentrate growth in cities and towns, while ‘Policy G’ includes the following requirements:

...That all new and refurbished buildings achieve the requirements of BREEAM and Eco-homes, very good standard, or at least Level 3 above minimum building standards in the emerging ‘*Code for Sustainable Homes*’ ...

...That all larger scale developments and, in particular, urban extensions, are designed and constructed to meet the top Level 5 of the emerging ‘*Code for Sustainable Homes*’, including carbon neutrality.

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Under the Planning and Compulsory Purchase Act (2004), Regional Assemblies were required to provide an opinion on the “general conformity” of local Development Planning Documents (DPDs). Of the three study regions, this was most prevalent in Yorkshire and the Humber. DPD revisions there included submissions from Scarborough and Craven, where greater detail on renewable energy was requested, and Doncaster, where the whole approach to sustainability was brought into question. On the whole though, these interventions were limited, and minor. Regional Assemblies also held a statutory role to scrutinise the work of RDAs; this can include scrutiny of

RDAs' performance on climate change, as was later the case in Yorkshire and the Humber, when an inquiry on Meeting the Climate Change Challenge was held. Stemming from this, a report was published in 2008 (YHA, 2008b) detailing a range of recommendations for Yorkshire Forward's activity on climate change.

Governing through constraint at the regional level tended to take more ambiguous forms than through direct control or intervention. For instance, conditions placed on funding can turn what is in an enabling action in one policy domain into a constraining action in terms of carbon management. Nonetheless, RDAs had limited control over the constraints that they placed on funding, particularly through ERDF, which is largely determined through EU and national programme guidelines. Internally, RDAs could use sustainability or environmental appraisal of projects, which included some analysis of carbon impacts. This was not regularly taken up by RDAs: in Yorkshire and the Humber, for example, only one of 88 approved projects underwent a sustainability appraisal in 2007 (this rose to eight in 2008). Even with their own Single Pot funding RDAs sometimes found it difficult to attach additional carbon reduction-related conditions:

The barriers to you doing it are partly political, because RDAs are still under pressure to be business-level organisations, and if you get a bunch of businesses saying that 'look, they're just being too tough on this stuff', there is a risk about whether you're perceived to not be having a business-run agenda. And then ... as you know in Yorkshire we used to be eight out of nine regions for economic performance, and so it's not in a strong base position ... So there's a background of 'if we're too stringent, might we lose some investment that we might have gained, that might go elsewhere instead'. So some of that holds it back.

Yorkshire Forward Executive

Here, the limits to the integration of carbon management into dominant economic rationales are clearly outlined, with pressure from both national and local actors to ensure that the economy comes first. At the same time, it is clear that – in terms of constraining actions, at least – carbon management as a distinct policy paradigm was not being fully taken on by regional actors: it had not become a sufficiently legitimate policy theme for concerted authoritative action to take place.

Enabling

Contrastingly, governing through enabling was perceived as the most prevalent mode of governing found at the regional level, and respondents emphasised this as the primary role for regional institutions:

It's facilitative; providing a policy framework role. And ... you might be able to invest in some of the enabling things, like Yorkshire Forward, the Regional Development Agency here is investing a significant sum in research to understand the potential for carbon capture and storage.

Former regional policy director, Y&H

This is not necessarily because enabling measures were seen as the best strategies for achieving objectives. A key issue related to the resources available to regional actors; and to the extent to which they performed a particular function with regard to other scales of governing. In other words, there was an understanding that regional action was limited by the existence of a form of fiscal federalism (Oates, 1972), which was tacitly agreed rather than necessarily based on formal agreement.

It comes down to what is relevant and what is possible through regional activity ... [the received wisdom is] essentially regional activity should be invisible; its purpose should be to enable, facilitate and lobby to help other organisations deliver rather than interfere.

Regional policy officer, SW

This may have been the case across a range of policy sectors and not confined to carbon management.

Direct monetary provision for carbon management was on a much smaller scale than, for instance, economic development. Instead, dissemination of knowledge and the development of partnerships to share and develop carbon reduction strategies were the most evident technologies in use. That is not to say that monetary provision was entirely absent, although the amounts were relatively small. Through Single Pot and EU Structural Funds, as well as specific Research and Design grants, such as the national Grants for Research and Development and the EU Framework Programme 7, RDAs worked to develop climate-related agendas around which a case for economic development could be built. In particular, this has meant funding for a limited number

of projects that developed new or embryonic technologies for renewable energy and emission sequestration. Figures for specific levels of funding for carbon reduction activities across programmes and projects were not available: none of the three RDAs in the study had published details of ‘environmental’ or low carbon investments and indeed this may be an agenda for future research in itself.

Funding for projects was available through various streams, although few of these were dedicated to carbon reduction initiatives. Some funding was available under the banner of the Defra BREW (Business Resource Efficiency and Waste) initiative through the RDAs – amongst a host of other organizations, including the Carbon Trust and Environment Agency – which came to an end in 2008. The RDAs received just below nine per cent of the £122 million funding in the last funding round (2007/8), and received no ring-fenced funding in addition to the £53 million that Defra contributed to the Single Pot in 2008/9. A number of predominantly renewable energy and microgeneration-related projects in the North East, South West and Yorkshire and the Humber received support through ERDF and Single Pot funding in between 2005 and 2007. Each of the three regions had one ‘flagship’ low-carbon energy scheme. In the South West, the RDA designated approximately £10.75 million ERDF funding towards developing ‘Wave Hub’, the world’s first large-scale wave energy farm (SWRDA, 2007). This project aimed to develop an offshore laboratory for testing and developing new wave-power electricity generators. This scheme threw up some issues relating to allocation of funding; and provided a first point for analysis of the ‘carbon politics of scale’. In interviews with local authority officers and councillors in the South West, there were suggestions from a number of respondents that RegenSW, the dedicated renewable energy funding arm of the South West RDA, had inconsistently applied funding rationales, meaning that relationships between Local Authorities and RDAs became frayed in places:

It's not good at the moment to be perfectly honest. I'll give you an example: we've recently been approached by the South West UK Brussels office about our work on biofuels; they asked if we'd be interested in developing any other projects. We said yes – we're looking at further work with xxxxxx [university] on gasification technology from renewables, which we regard as a key issue – and Brussels were keen. We got a load of other partners on board and Brussels advised us to go to the RDA who deal with Structural Funds ... But we drew a complete blank with the RDA, they weren't interested. Said they'd only consider funding something if it was cross-regional. Yet it is funding the Wave Hub project, which is only beneficial to Cornwall.

County Council Officer, South West

The respondent was unable to provide a reason as to the reasoning applied to the decision not to fund their project, other than that the RDA wanted to go with “their own baby” (*ibid.*). In other words, as controller of funding streams, the RDA was able to ensure that its own project received backing ahead of those led by other organisations or networks. In this sense, the fluidities between different forms of power are highlighted: what for one interest group was an enabling technology, the lack of funding for another group made it an issue of constraint, with the RDA using their resources to close down options and exert domination. Similar concerns were raised in the North East, where the flagship project was the £30 million NaREC project (New and Renewable Energy Centre). In this instance, a local authority officer complained that NaREC was a “vanity project” for the RDA, when money could have been spent more effectively on large scale implementation of micro-generation facilities, retrofitting buildings and energy efficiency drives. One reason that these decisions were made may lie in the political risk involved. That is, while technological fixes in terms of developing new forms of large scale production facilities do not have immediate or guaranteed successful outcomes, nor do they threaten the dominant mode of centralised power production or the interest groups that benefit from this arrangement; indeed they help to strengthen this dominance on the back of public funds. This issue does also highlight some of the constraints faced by RDAs in allocating funding – something which the local authority officer in the North East did go on to concede – and which was raised by a Yorkshire Forward executive:

At the end of the day, we're about economic growth, and we're about a business-led agenda. It's not a question of wishing it were different; that's our statutory role. So, when we think about funding particular low-carbon projects... we have to be careful that it still meets our... our overall *raison d'être*.

In sum then, direct provision was limited at the regional level: regional institutions were not charged with delivering particular services, and where funding was provided it was apparently reserved for high-profile projects that offered a chance for ‘regional branding’.

A less direct form of provision was that of providing carbon management knowledge and evidence to stakeholders and policy-makers. Here, the work of RDAs became less prominent, with greater involvement from regional assemblies and regional intelligence observatories and networks, which were funded by RDAs in each of the case study regions. In each of the regions, the regional assemblies commissioned studies to provide information to local authorities relating to carbon management. Between 2006 and spring 2009 – when it ceased to exist – the North East Assembly (NEA) produced four reports, including a ‘microrenewables toolkit’ to assist local authorities to meet the ten per cent ‘Merton rule’ (NaREC and CPEnergy, 2006) within the North East’s RSS and wind farm development and landscape studies (Arup, 2008; 2009) for four areas of the region.⁵³ The Yorkshire and Humber Assembly (YHA) produced fewer studies, but did commission a study of low-carbon transport actions for the region (SEI and JMP Consultants, 2008). The South West Regional Assembly (SWRA), on the other hand, was not responsible for commissioning any research reports: this fits in with a wider sense that “the [South West] Assembly are kind of involved tokenistically, but they’re not a proactive assembly” (Sustainable Development Commission Regional Advisor). The regional intelligence observatories and networks also played a role in the provision of knowledge and evidence. Their role, as outlined by a policy manager in Yorkshire and the Humber was as follows:

It’s very much about collating work that other people have done, making sense of it, and maybe communicating it better ... I think what we can do is integrate issues more than anyone else really, because we’re very well placed to work across economic, environmental and social issues, er... On the climate change one, then probably our role is spotting gaps in information, helping to inform thinking and communicating issues and raising them.

And, while the South West and North East observatories hosted a range of data on climate change mitigation issues, Yorkshire Futures were more proactive in that they

⁵³ This rule commits commercial buildings with a size of more than 1,000 square metres to source at least 10 per cent of their energy from onsite renewable sources. This was introduced in the London Borough of Merton in 2003, and was included as a national policy in Planning Policy Statement 1 (PPS1, Planning and Climate Change). PPS Planning and Climate Change is discussed in Chapter 12.

commissioned their own research reports: a study of the region's low carbon energy capacity (Arup, 2007a), and a carbon assessment of the ERDF 2007–2013 programme (Arup, 2007b). As with monetary provision, though, direct provision of knowledge and evidence tended to be piecemeal and sporadic.

More commonly, the three statutory regional organisations acted as 'facilitators' of activity. This worked in two similar ways. One method was to provide links to other people and organisations that could assist with emissions reductions. For example, Yorkshire Forward had an online "funding for going greener" tool, a matrix that allowed businesses to see what funding may be available from other organisations. Key – all non-statutory – partnerships in the regions included those concerned with sustainable development, climate change, energy and transport plus a range of more specific partnerships developed around sub-themes of the above. Knowledge was disseminated either through reports commissioned and published by regional bodies – most commonly Regional Assemblies – or through regional bodies hosting workshops on climate change issues facing the region; again, this was usually undertaken by Regional Assemblies. The latter sometimes included briefing sessions on research developments from outside the region and also on central government policy. Despite disseminating information regarding governmental development ostensibly being the natural ground for regional Government Offices, their move to a more 'strategic' role within the regions following the 2006 *Review of Government Offices* (HM Treasury and ODPM, 2006), meant they were generally involved in a supporting role to the Regional Assembly or RDA as opposed to facilitating enabling action themselves.

Co-option

As with direct means of authority and provision, co-option through direct forms of induction was also limited. For instance, funding with strings attached might be used to induct actors into a particular course of action, but was not used to great effect in early governing of carbon management. Regional actors did, however, work to build regional 'coalitions' on carbon management action, which were characterised by more subtle co-optive approaches: the main focus of the analysis of First Wave carbon management practices in Chapters 9 and 10 concerns attempts to co-opt local, regional and supra-

regional actors through seduction and forms of moral induction, alongside some facilitative practices. Of particular interest were attempts through the use of regional partnerships, knowledge dissemination, and the development of climate change action plans, to develop a 'climate change regionalism' amongst stakeholders. This was most clearly the case in Yorkshire and the Humber, but elements of this could be seen in the North East and South West. This involved enlisting stakeholders to the collective cause of tackling climate change, but also developing a sense of climate change as specifically a *regional* problem. The Yorkshire and Humber CCAP (2005) encapsulated this in threading a narrative throughout the Plan that develops an argument whereby Yorkshire and the Humber is portrayed as a unique *place* in itself – including its climate – with the regional governing institutions depicted as autonomous and competent bodies capable of driving action in the region. Reference to aspirational GHG targets for the region plays a role in developing this 'programme' (Latour, 1999), as will be discussed in Chapter 10.

Conclusion

Up to 2007, emissions across the regions followed a very clear trend of 'no significant change'; if anything, those that were performing better in terms of emissions were diverging further from 'lagging' regions such as Yorkshire and the Humber and the North East. This reflected a lack of policy emphasis across scales of governing, including at the regional level; but also shows that efforts by individual regions to reverse these trends were not taking effect. Yet, this reflects a lack of resources at the regional level to effect large-scale change, but also a lack of willingness to use those resources where available. Attempts to mainstream carbon management as a 'cross-cutting' theme through, for example, conditions on funding arrangements appeared to be limited, and generally ineffective in terms of reducing emissions. Similarly, governing carbon management as a distinct policy goal suffered from a lack of direction from the EU and central government. More generally, it may be argued that this led to regional actors failing to take account of inevitable governing failure, by not exercising a range of different forms of power to achieve their goals, perhaps through pragmatism with regard to which areas they were able to act upon and also have an effect.

This initial analysis also begins to hint at some of the recurring themes that will come through more strongly in the following chapters. Firstly, in theoretical terms it is clear that a typology of power does not prevent a great deal of fluidity between governing modes; in fact it serves to highlight these, especially in Chapter 12, where a move towards more multi-scalar governing processes served to highlight shifts in modes as they are translated across space. Second, in the absence of co-ordinated EU, national or internal programmes, regional agencies shied away from using direct provision, financial induction or authoritative actions to effect change. Thus we instead see in the first wave of regional action a preponderance of non-monetary techniques of facilitation and seduction to engage regional stakeholders. Some of these co-optive practices have attempted an ideologically – if not actively – ambitious programme to re-imagine the region as a ‘carbon space’ through developing a form of ‘carbon regionalism’: this will be the subject of the following chapter, where some of the wider legitimacy concerns with regional governing organisations are explored.

The previous section noted an absence of resources (broadly defined) to allow the exertion of more instrumental practices, and inconsistent use of those that were available. In the case of authoritative power, for example, regional actors were wont to claim that they had access to a paucity of resources; but where they were available, say through statutory planning responsibilities, there was an absence of internal will to use them. Nor were RDAs seen to be diverting large sums of money towards developing low carbon economies, with the exception of provision for a small number of flagship energy projects, which it may be argued did not challenge the status quo in terms of the energy supply. Instead, regions tended towards employing a range of associative practices using softer co-optive and facilitative governing techniques. Nevertheless, to each of these techniques there was a 'harder' side. Where seduction was used, it was in conjunction with moral inductive discourses and where facilitation was used, this came with an exclusionary side, too.

For the majority of respondents, regional action was largely concerned with "setting the agenda" (regional policy executive, Y&H), or more simply "providing a leadership message" (regional policy manager, SW). Most prominently, this included the development of regional climate change partnerships and associated climate change action plans. This chapter looks at the development of the Yorkshire and Humber Climate Change Action Plan – *Your Climate* (2005) – as an example of 'first wave' initiative on governing regional carbon management. Of the case study regions, Yorkshire and Humber had the longest standing partnership, and published the second iteration of its action plan in 2009, while both the South West and North East published the first iteration of their own action plans in 2008 (SWRA, 2008 and Sustaine, 2008). These partnerships, along with related activities and documents, represented the stirrings of 'carbon regionalisms' in the different regions: by which is meant a discursive and practice-based programme to foster a sense of regional initiative and identity relating to carbon management. These have played out in quite different ways

across the three regions. Throughout the research process there was a strong sense of a continuing regionalist agenda within the Yorkshire and Humber Climate Change Partnership. The North East and South West, on the other hand, were later in developing their partnership and action plan. A combination of changes to the national regional agenda post-Sub-National Review (SNR; 2007) and internal historical context led to a more muted and pragmatic outlook to regionalist agendas in these two regions.

The idea of a carbon regionalism can be viewed as relatively straightforward attempts to engage different actors in activity on carbon management through associative means. It may also, however, be seen as an attempt to re-imagine the region as a *legitimate* space for governing carbon; and the perceived legitimacy of the region may be integral to the success of any regional carbon management programmes that do not rely on direct intervention through authority or provision. As discussed in Chapters 2 and 3, regionalism might be conceptualised through two sets of interlinked legitimisation discourses: spatial and governing legitimacy. Spatial legitimacy relates to acceptance of the region as a territory, a networked space, a cohesive place, and a functional scale of action. Governing legitimacy refers to acceptance of regional agencies as autonomous, competent, progressive and representative organisations.

Before delving into the development of action plans, however, this chapter will take a look at the development of a regional emissions target in Yorkshire and the Humber. Prior to the development of a regional partnership and action plan, Yorkshire and the Humber introduced an aspirational regional emissions target in the 2003 RES. This represented an initial attempt at ‘re-calculating’ the region as a carbon space, and presents a number of interesting avenues of discussion in itself, as well as providing evidence of wider spatial and governing issues evident elsewhere.

As stated, these initial regionalist developments are denoted here as first wave practices, as they appear to represent the first coordinated attempts by regions to develop semi-cohesive strategies for climate change. The development of second wave practices – discussed in Chapter 12 – took place as first wave practices were still emerging in some regions, but these developments represent a move in a different direction for the role of the regions in governing climate change and bring forth a host of different issues. Focusing on the way that these technologies ‘translate’ through and across governing

networks draws attention to the processes of mediation that take place in the governing process; the extent to which carbon regionalisms have been successful as ‘meta-technologies’; and, where they have not been successful, hints at some of the possible reasons why.

Re-calculating the region: co-option through a regional target

In the 2003 Yorkshire and the Humber RES, ‘the region’ committed to “Cut greenhouse gases by over a fifth” by 2010 (Tier 1 Target, Objective 6). The North East and South West did not set specific targets during the research period, although they did both include commitments to meeting, or helping to meet, national emissions targets in their respective RSSs (2008, and – draft – 2006). Table 14 shows the regional target in Yorkshire and the Humber as a governing technology within the modes of governing framework.

Table 14: Regional target as governmental technology

<i>Technology</i>	<i>Rationality</i>	<i>Mode(s)</i>	<i>Governing Agencies</i>	<i>Institutional Relations</i>
Regional Target	Encourage action on GHG emissions reduction	Co-option (moral induction and manipulation)	RDA, RA, GOR	Heterarchy / Network

Rationality: the region as a legitimate carbon space

To begin with the programme rationality, the core rationale of the target was to effect action on carbon emissions by governed entities. This was largely to be achieved through co-option to a shared regional agenda amongst stakeholders. As such, the aim was for the regional target to act as a meta-technology and encourage behavioural change by drawing regional actors and organisations together to achieve a shared goal: to build a regional ‘heterarchy’ (Jessop, 1998) acting on carbon management and encouraging others to act in doing so.

This co-optive agenda worked in two directions. Most prominently, it aimed to make carbon management a legitimate and important policy goal for actors within the region. But this move towards calculating and monitoring regional emissions also makes a number of implicit statements, especially through the setting of a specific emissions reduction target. First, it connotes the region as a calculable space. This suggests that the region can be understood as a coherent assemblage of actors, the activities of which can be comprehensively monitored and measured. Second, as discussed in Chapter 4, targets and spatial emissions monitoring also work as a way of rendering a space more readily understandable within the prevailing mode of political logic; being both amenable to easy judgement of success or failure and as a clear signal of an actor's ambition. Such was the case in Yorkshire and Humber: the emissions target was seen as a key method of signalling the statutory regional agencies' intent and ability to act on carbon emissions. This was spelled out by one respondent:

I guess what targets can do is give the tone and intent of whether they want to go further, faster than national government or not. And certainly when I was at the RDA, that was what we were about: we were about saying, look the Government is on the verge of committing to, and while I was there did commit to 60% reductions by 2050, but even before that we had a go, well for this region ... we're going to go for this target.

Former Regional Policy Director, Y&H

In this way, the target was also used to signal an autonomous and progressive regional governing coalition.

Spatial legitimacies were also assumed: the idea of a calculable region drew on a notion of Yorkshire and the Humber as a cohesive 'place' with shared priorities; as the same respondent explained, it was seen as part of a wider project of bringing together the region's stakeholders to work on key issues as "Team Yorkshire" (Former Regional Policy Director, Y & H). This was to be achieved not only through 'horizontal' acceptance of the target as a rationale for action in regional-level agencies, but through 'vertical' translation across scales to local actors within the region. As noted in Chapter 8, respondents – including those involved in the original target-setting process – were keen to downplay the role that regional actors can play in reducing emissions. If this was the case, it therefore became crucially important that the target had vertical

influence in affecting the actions of local authorities. This was outlined by a regional policy executive:

With the target, the idea was to not just be Team Yorkshire at the top, at the regional level, but to filter through stakeholders, and especially local authorities, who after all have most of the on-the-ground powers. It was about setting a message for them to act as well.

Regional Policy Executive, Y & H

A final part of the logic behind the target was to successfully brand the region externally; that is, to develop an external image of Yorkshire and the Humber as a changing region at the forefront of addressing new political challenges and a good investment opportunity for those entering new markets based on low-carbon technology. A former regional policy director – a key protagonist in setting the initial target – noted this:

And, of course there was a thing about Yorkshire and Humber, industrial wasteland, coal, steel, mills and ports and a big thing that we want to promote is that yes that's part of the heritage and it's still there – but as value added industries – but that we are moving on as a region, we are ahead of the game on the environment, and we're actually aspiring to something different.

Former Regional Policy Director, Y&H

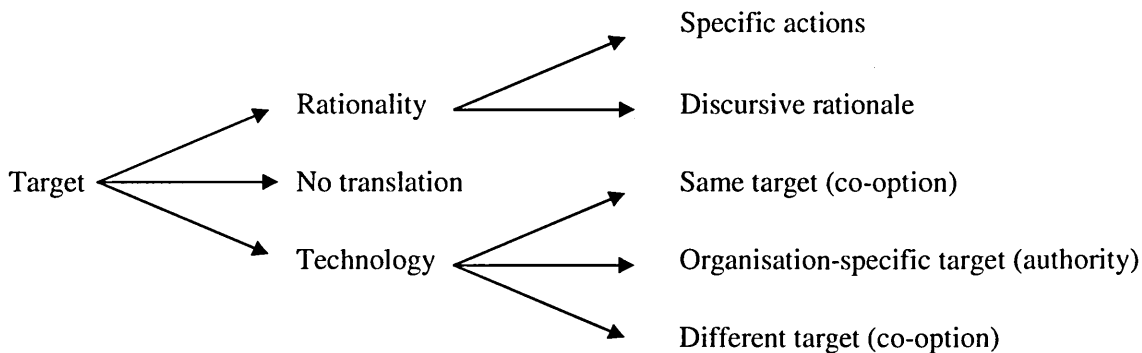
This builds on the same kinds of issues of spatial and governing legitimacy, but is aimed at developing an outwards-facing regionalism. The statement also stands in contrast to the comment made by a respondent in the previous chapter regarding the 'pragmatic' role of regional actors.

Connecting the carbon region: technological translations

In terms of measuring the success of the target, of greatest importance was translation from an abstract calculation to an impact on the governed entity at the 'end' of the governing chain: a reduction in carbon emissions, and in turn, stabilisation of the Earth's climate. This required that the calculation of the region as a carbon space by a small number of actors then had the effect of connecting a range of other actors to act on the same rationality. In the case of the Yorkshire and Humber regional target the

governing technology underwent various mutations *en route* as it was mediated by various actors at different points in space and time, as shown in Figure 3.

Figure 3: Translation routes



These different translations may hint at the ‘strength’ of the target – and of its implementation – as a governing technology. While significant mutations could, in theory, also lead to positive consequences, such as hardening of the target into more tangible and specific technologies, the greater and more profound the divergence from the original target the less impact it may be said to have had, and at the same time, the less impact it is *likely* to have. In Yorkshire and the Humber, the regional target underwent four key forms of translation. In some situations, the technology remained the same in essence, but underwent a degree of change to some of its attributes: a change in the measurement methodology, for example. A second set of mutations across organisations and space was characterised by translation to a more targeted form that was specific to the organisation or space being governed. A third form of translation took place whereby the target did not translate into another target, but instead acted as a rationality for other forms of action. Finally, in some cases the target failed to translate at all as actors simply failed to recognise the target as a technology or rationale for action. These are discussed below in three sections: material translations, that is the effect on carbon emissions and in turn the climate; ‘horizontal’ translations, translations through the regional governing network; and ‘vertical’ translations, those that take place in moving from regional networks to governing networks operating within different scalar formations.

Measuring the success of a governing technology is not simply a case of measuring a simple outcome indicator but, since the primary aim of a quantitative target is ostensibly to achieve a quantitative outcome, some exploration of quantitative progress on the target is worthwhile. Within a year of the first iteration of the target it became clear that meeting it was becoming unlikely. Successive versions of the region's annual progress report, *Progress in the Region* (PiR), included warnings regarding the likelihood of failing to meet the target every year from 2004 onwards, with increasing urgency over the years, from being seen as "very difficult to achieve" given planned regional and national interventions (PiR, 2004 p98) to there being a "strong likelihood that the region will fail to meet its targets" (PiR, 2007 p125). According to DECC (previously Defra) statistics, CO₂e emissions in Yorkshire and the Humber fell by three per cent between 2005 and 2007 (National Statistics, 2010). A 2007 report by Arup, commissioned by the Regional Assembly, used different production and consumption based methodologies to measure emissions. This showed a rise in carbon emissions since 2003 when measured either way, which they expected to continue for the foreseeable future.

This quantitative failure does not provide conclusive proof that the target entirely failed to impact on action within the region. It could, for example, merely show that the target was designed to fail, in that it was too ambitious to be realistically achieved. As demonstrated in the previous chapter, however, Yorkshire and the Humber had a fairly similar record in terms of progress on emissions compared to other regions, as measured by DECC. This leads to a basic understanding that the existence of a regional target did not directly result in emissions in Yorkshire and Humber changing at any greater speed than other regions. More fundamentally, it may bring about questions regarding the intrinsic feasibility of a regional emissions target.

All the same, this basic analysis does not take into account the specific role of the regional target in bringing about behavioural change within the region beyond any other measures put in place: its 'added value' as a governing technology. It is worth, then, exploring the issue in some greater depth to determine the extent to which the target has become successfully embedded as a rationale for action within the region. In doing so, it is useful to look at two other forms of translation across space: 'network' – across actors

operating ‘regionally’ – and ‘scalar’ translations; between regional and local or national governing actors.

Network Translations

In most instances the target did not translate at all across the core statutory governing network as measured through incorporation into corporate documents or regional strategies, and in other instances it was mentioned only in passing, rather than acting as a guiding rationale for action.⁵⁴ Three instances where the target did succeed to some extent in translating to core organisations are worth noting, however.

First, the 2003 RES was initially led by Yorkshire Forward, giving an implicit understanding that they signed up to the regional target, while the Regional Assembly and Government Office Yorkshire and Humber (GOYH) were also signatories to the strategy. Following on from this, the target also translated across to different high-level regional strategies, although with varying degrees of mutation. For example, the 2003 RES target was to reduce GHG emissions by *at least* 20 per cent by 2010, which was then firmed up in the 2004 RSS; this refers to the “the region’s target” (p76) specifically as a 20 per cent emission reduction by 2010 and 25 per cent by 2015. The 2006-15 RES (2005) also includes the target, but with another change from its original expression, moving from a production-based approach to a consumption-based methodology. More recently, the 2008 PiR uses both production and consumption related data to gauge regional progress on emissions, as do Arup, Stockholm Environment Institute and Cambridge Econometrics (2007) in reviewing the impact of the region’s core regional strategies on climate change.

Second, the regional target translated to an internal target for Yorkshire Forward. This aimed for a reduction in CO₂e emissions by between 1.5 and 2.5 million tonnes per year for the years 2003 to 2006 (Yorkshire Forward Corporate Plan, 2003b).⁵⁵ This target

⁵⁴ This was the case, for instance, in the 2003-2005 Regional Sustainable Development Framework, the 2008 Integrated Regional Framework and the secondary level strategies for housing and waste.

⁵⁵ This was based on a calculation of the emissions resulting from Yorkshire Forward projects if no carbon saving elements were implemented. As such it is arguably a false indicator of actual carbon savings, as it allows for a net increase in emissions per project, but a direct result of the regional target nonetheless.

was not met in any of the three years of monitoring and as a result the target from 2006 onwards was reduced to 0.5 million tonnes per year. In the 2006 Corporate Plan refresh, failure to ‘mainstream’ this and the regional target into RDA activities was noted as a particular issue: “this requires some serious work” (Yorkshire Forward Corporate Plan 2006-2010, 2006). One outcome of this recognised failure was the introduction of a ‘carbon calculator’ tool for use on Yorkshire Forward projects. This introduced another level of translation, as the target became a technology in the more commonly understood sense of the word; a piece of software that brought the target ‘to ground’.

By 2007, respondents did feel that the targets were beginning to have an impact. The role of the regional target as a co-optive technology was acknowledged by interviewees, for instance as “something we can all see” across the organisation; a “reminder of the need to act” (Regional Policy Manager, 2007) on emissions. In other words, the regional target acted as a meta-technology in building awareness of climate change as a ‘regional issue’, and set the strategic tone for action. Similarly, the adoption of emissions targets helped in the gradual removal of a ‘silo’ mentality surrounding climate change, and environmental issues more widely:

Probably, if you’d asked me two, three years ago, I’d’ve had to have said, that some departments would see the environment and climate change as just the job of the environment directorate, and wouldn’t really impact on what they are doing, and they’d be a bit sniffy if it did. But – and I think this is where the targets have played a big part – it’s now being recognised as part of what we all do, and it’s less of a problem getting people to understand that, you know, we are about economic growth, but we are about understanding environmental limits too.

Regional Policy Manager, Y & H

Maintaining a quantitative carbon target for actions in regional organisations was limited to those examples outlined above.

A third ‘immediate’ effect can be seen in the adoption of the target as a rationale for a series of specific actions. In this vein, the Yorkshire and Humber Regional Energy Infrastructure Strategy (REIS; YHA, 2007) takes the regional target as a core rationale for action, with a number of specific actions outlined to achieve this, including quantified potential contributions to the target. It is not surprising that the energy strategy should be more directly concerned with carbon emissions than other strategies,

but the fact that other strategies do not have a dedicated section focusing on specific actions related to the target shows a failure to embed it as an active – as opposed to rhetorical – rationality.⁵⁶ On this issue, *Your Climate* (2005) would appear the obvious vehicle for translating the target into action, but while the Action Plan includes reference to the target, it is not detailed as a key rationale for action and further analysis reveals that it only played a small part of the developing the Plan (see Chapter 10 for a more detailed discussion). The lack of reference to the regional target in regional strategies suggests it remained in the margins as a basis for regional action.

Nor did the target have the effect of drawing in other regional organisations or non-statutory agencies into climate action as part of ‘Team Yorkshire’. One respondent from the charity sector saw regional targets as crucially important to action, but felt that the existing target was not being properly embedded into regional action and that, at the same time, it was not the role of other regional stakeholders to deliver on this target:

Our job is to make sure that they are meeting their responsibilities, not the other way round. Team Yorkshire and all that, yeah that’s fine, but not if it’s about passing the buck to others.

Regional Environmental Campaigner, Yorkshire and the Humber

Similar views came from other non-statutory regional actors. In particular, the feeling was that, although setting a regional target was a positive step, which placed regional agencies – especially Yorkshire Forward – ‘ahead of the game’ in comparison to action in other regions, this also led to a degree of arrogance in their attitude towards other stakeholders, whilst materially little had changed.

Really they haven’t been brilliant at saying to us, you know, ‘help us out here’. I think Yorkshire Forward is keen to maintain an image that it’s established for itself as doing more about climate change mitigation than lots of other organisations, including some of the environmental ones. Which means that it starts to develop this attitude of ‘leave it to us guys, we know what we’re doing’, that sort of thing.

Regional Environment Stakeholder, Yorkshire and the Humber

As a result, an overall impression is formed of the target not being integrated into a strong regional approach on carbon management. The failure to develop a regional-level

⁵⁶ Although this in itself signals the extent to which carbon management as an issue more widely has moved from a peripheral issue of energy demand to one which is understood as also fundamentally concerning energy supply.

network of action on the target has been partially acknowledged by regional agencies: for instance the Yorkshire Forward Corporate Plan (2006, p34) notes the need to “secure significant interventions with the major regional generators and many other regional partners”.

This also highlights the fact that, although the REIS attempted to implement quantifiable projects, these interventions had been difficult to achieve. The role of energy companies in terms of this target was to some extent negated by changes to the target methodology⁵⁷ (see below), but other key actors remained – on the whole – distanced from the regional target. Perhaps equally importantly – in terms of the legitimacy of the target – carbon reduction actions that were being carried out were not being discursively linked to the target in planning or execution.

Scalar Translations

The development of the regional target was not only concerned with setting a rationale for action within the wider regional governing cabal. In order for it to be legitimately considered a success it was necessary that the target became part of a scalar practice between local and regional governing actors. There was little evidence of this happening. The regional target had not been replicated at the local level up to 2007 and where targets were later implemented these stemmed from other governing programmes and technologies (see Chapter 12). A review of local authority core planning, community, sustainable development, environment and climate change strategy documents in Yorkshire and Humber found only one citation of the regional target.⁵⁸ This is strengthened through responses from local authority officers and executives: no respondents at local authority level mentioned the target as a catalyst for action when asked about external – or specifically regional – influences on their approach to carbon management and, when asked about the impact of a regional emissions target on local decision-making, were often not even aware of its existence: “I can’t say that I was

⁵⁷ Although the introduction of renewable energy targets meant that reconfiguring the energy supply remained important for the regional energy partnership.

⁵⁸ Calderdale Borough Council’s draft core development plan (2008) sets the context for their climate change plan by referring to the regional target as set out in the RSS. It does not go as far as suggesting that Calderdale has a responsibility to help meet that target, however.

really aware of it ... They've not involved us in it in any way at all" (Local Authority Sustainability Officer, Y&H).

Importantly, when regional actors did interact with local authority and LSP actors on climate issues, the regional target was not mentioned:

On our big projects, on the ones that have the supposed 'regional impact' we have to deal with the regional planners. And to be fair, they can and have occasionally pulled us up on the need for more renewables or the BREEAM stuff. But the target, no, that's never been mentioned. They've certainly never said, you know, we need to meet this target, what's this contributing?

Local Authority Planner, Y&H

Others – generally those who were also involved in intra-regional networks – were aware of the target, and believed it to be important in signalling a willingness to act on climate change regionally, but admitted that it had little impact on decision-making locally:

Yes, I think some people here are aware of it. There's a difference between knowing about it and actually incorporating it into our systems, though. It's not used as a barometer of our success by any means. Nobody, either in our team, other officers, or – I very much doubt – [smiles] members [of the Council] discusses our contribution to the target, or where [the local authority area] fits in with the target. That might be a bit to do with the fact that we aren't set up to do that but really it's because what the region says on climate change isn't really on the Council's agenda.

Local Authority Climate Change Officer. Y&H

This quite clearly suggests a failure on the part of regional institutions to embed the target as rationality in local governing systems, but also suggests that this is not only a result of a lack of effort by regional actors: local authorities do not necessarily see regional actors as relevant and, where they do, some felt that they would be unable to constructively engage in a regional target without additional resources to calculate and monitor their own emissions. In other words, the region failed as a 'scalar' practice: by failing to link in other 'local' or 'regional' actors, the regional organisations remained distinctly localised actors themselves in this context. Similarly, as shown in the discussion of the RCCAP, below, and later in Chapter 12 on Local Area Agreements, local authorities referred to a different set of institutions and processes in their policy-making on climate change.

Another measurement of the regional target's success is through its influence outside its borders: for example, across other regions – that is, as a part of a network of similar territories across the UK and internationally – as well as its influence on national or supra-national governing bodies, and influence in spatially branding the region. As of 2007, a regional emissions target had not been taken up by any of the other seven administrative regions in the UK, suggesting the target has not had a direct impact on other regions' approaches to climate change policy.⁵⁹ Policy professionals in the North East and South West were ambivalent towards adopting a regional target themselves, but did note that Yorkshire and the Humber had shown ambition in taking up theirs. This was tinged with cynicism for some, however:

They've got this target, and certain individuals are keen to play that up and it gives them a good rep as leading on climate change and in some sense you could say they did get in there before some regions in setting out their stall on climate change but are they actually leading the field? They can give the impression they are, for sure, but... What we're doing in the South West; you could say we've got a much longer history on sustainability and the environment and it's more embedded into our way of working if you like.

Regional Policy Manager, South West

What these responses do suggest, however, is that the target has had the effect of 'seducing' actors outside the region into viewing Yorkshire and the Humber as a lead actor on climate change, regardless of material evidence. This may be said to have spread to the national scale; for example the National Audit Office's *Independent Performance Assessment of Yorkshire Forward* – commissioned by what was then BERR – referred to the target as an example of evidence of commitment to environmental action (National Audit Office, 2007). This compares to the reports prepared for ONE North East (2006a) and SWRDA (2006b), in which both agencies were charged with a lack of metrics to measure sustainability. Similarly, a respondent representing a central government department quickly identified Yorkshire and the Humber as a "not lagging" region; pointing to the target as evidence of their "ambition". The same respondent also noted Yorkshire and the Humber – alongside the North West

⁵⁹ London has a proposal to meet a 20 per cent carbon reduction target in the GLA's 2004 Energy Strategy, but had a different administrative remit, and more resources available to it. It is also a more obviously cohesive space as a functional city(-region) and so cannot be compared in the same geographical or governing sense to other English regions.

– as being responsible for “more interesting” approaches to the environment and climate change. And yet, as noted in the previous chapter, actual evidence of climate change action did not greatly differ across the three regions up to 2007.

At the same time, none of Yorkshire and the Humber’s statutory agencies were officially recognised as the leading regional exponent of governing carbon; the North West RDA was the lead agency for the Department of Energy and Climate Change’s (DECC) regional network, while Government Office South West was the lead organisation in the Government Office Network for Climate Change, suggesting that the region was not entirely successful in branding itself as a leading exponent of carbon management.

Barriers to regionalism, or anti-programmes

All things considered, Yorkshire and the Humber’s regional target did not successfully embed itself as a rationale for action at a regional level outwith Yorkshire Forward, and not comprehensively within it. Nor did it effectively work as a governing strategy across different scales and territories of governing. At the same time, it is important to bear in mind that this was a first attempt at calculating the region as a carbon space, in the UK at least. While its impact was not as great as may have been hoped – and one can easily become cynical about the intentions behind the target – the very fact that it was put in place at all represents a degree of foresight on the part of the actors involved.

Missing actions

Most importantly, the translations outlined above show that the target was never tied in to a specific delivery framework, or indeed any form of strategy aimed at delivering emissions reductions. Yorkshire Forward’s internal target and calculation tool was the closest that any of the signatories to the 2003 RES came to developing a delivery strategy. On the whole this meant that it stayed ‘free-floating’ from policy and had no clear route towards making a difference ‘on the ground’. As shown in quotations below relating to ‘missing actors’, the target was developed without regional actors having a

firm grasp on what would need to be done in order to meet the target, what the region could realistically achieve, or what they would be prepared to do. The regional action plan provided an ideal opportunity to create a delivery plan for the target, but this was not taken on board. This is explored in further detail in Chapter 10.

The target was essentially a co-optive technology, aimed at seducing and potentially manipulating actors to reduce their emissions as part of a shared regional movement on climate change. It relied on the perceived legitimacy of the signatory organisations as representative governing entities and internal will from the signatory organisations to implement emissions reduction strategies within their own operations. A number of further factors militated against the target translating across actors and becoming legitimised rationale for action.

Missing actors, or no overall control

First, there was a case of ‘missing actors’ involved with the target: no person appeared to have specific responsibility for monitoring and aiding delivery on the target(s). There was no co-ordinator for target-related action across the region, and nobody to whom specific enquiries could be addressed. More widely, there was no clear ‘ownership’ of the target by regional organisations. For instance, although production of the RES was led by Yorkshire Forward and many of its proposed actions were carried out by the RDA, it claimed not to ‘own’ the regional target: “It is the region’s target, and as a stakeholder in the region we sign up to it, but it is not ‘our’ [gesticulates parentheses] target” (Regional Policy Manager, Y&H). This was contrary to the belief of most other ‘stakeholders’, as amply demonstrated in the interview excerpts used in the above section on the target’s success. This includes apparent confusion by the Regional Assembly’s Scrutiny Panel (YHA, 2008b), who attempted to clear up the issue. They began by noting that:

Yorkshire Forward was the first RDA to commit to a greenhouse gas emissions reduction target in their RES ... Yorkshire Forward is applauded for being the leading RDA on voluntarily setting an output target of this nature.

But they then continue to make the following explanation:

The Scrutiny Board has however, identified some confusion over which organisation 'owns' the RES target, and *individuals and organisations have mistakenly believed that it is owned by Yorkshire Forward*. The Scrutiny Board is clear that the RES target is a regional target which any organisation can contribute to.

p23, emphasis added

Clearly, it was the aim of Yorkshire Forward to include other organisations in helping to achieve the target, but without any clear leadership the likelihood of it becoming embedded as a rationale for action was diminished.

The issue of leadership also links in with another concern, that of a sense that statutory regional actors engaged in a degree of distancing from the target. Policy makers felt that they must pay lip-service to the target, but did not necessarily believe it to be a useful indicator: the main rationale given for the target was that it was already there and that removing it would be difficult.

Researcher: Is it important that the region has a spatial emissions target?

Regional Policy Executive, Y&H: Well, we have one, so I suppose... And it would give a bad message to back down on it now... It does give off a message to the public that it's important to us.

Asked more directly on whether there was an internal wish that the target had not been initially set, another respondent replied with the following:

Well... I suppose there may be an element of that. It's, like I say it was agreed at a time when I don't think we really knew what we needed to do ... we're still learning as we go along really. I don't think we knew what action was required really, when we initially set the target.

Regional Policy Executive, Y&H

This lends weight to the notion of an arbitrarily determined target that regional actors were only just beginning to understand the implications of: thus an air of being bound to something that they felt may not be achievable, or perhaps appropriate.

The way in which the target itself was constructed shows a second set of weaknesses of the target as a technology. It should at the outset be reiterated that it was apparent that the initial setting of the target had not been very thoroughly thought through – “it was a stab in the dark” (Regional Stakeholder, Y&H) – and it looks unlikely that the target will be met. Reaching such a conclusion is not such an entirely straightforward task, however, owing to a number of factors. One respondent offered their view of the principles behind setting a target:

The balance has got to be, you’ve got to produce something simple and tangible and targets are ideal: Yorkshire and Humber produces x million tonnes of CO₂ per year, and by 2020 we want to reduce to y million, then that’s easy and you can very quickly grasp that. But on the other hand, whatever’s behind that has to be robust. So however you’ve got to that figure needs to be auditable so that if you can’t meet that, or you exceed it there is a rationale behind it.

Regional Policy Manager, Y&H

This statement quite conveniently points to a number of the key faults underpinning Yorkshire and the Humber’s target. A degree of ambiguity and inconsistency over the level of the target and data available to measure it – as well as the methodology used – has the effect of creating a confusing picture, while the measurement of carbon emissions also brings about questions regarding understandings of the region as a governed space. As one regional policy manager noted: “we do have different targets in different documents, which effectively sends out the wrong message”. As a result, Arup, Stockholm Environment Institute and Cambridge Econometrics (2007) went as far as to claim that “[i]n the Yorkshire and Humber region there is no definitive regional greenhouse gas emissions reduction target” (p3).

The difference between the production and consumption based methodologies used in the different forms of the target had potentially important policy implications, in that they focus more heavily on different sectors. For example, energy production is not included in the consumption approach, so achieving emissions cuts may have required promoting actions more towards individual consumers and businesses than by the energy sector. In reality, though, this had little effect on policy making. It allowed regional policy-makers to take a sector over which they felt they had little control out of

the reckoning, but because of other commitments – such as regional renewable energy targets – the energy sector continues to play a large part in regional climate change policy.⁶⁰

Notwithstanding the above, the shift in methodology should emphasise further the need for engagement with other stakeholders within the region, in particular local authorities, who had greater ‘on the ground’ resources and contact with individuals consumers and organisations. The target methodology also raises wider questions about regional understanding of the region as a space. The move to a more consumption-related approach removed some ‘supra-regional’ activities from the methodology, but did not make a distinction between ‘regional’ and ‘local’ activities. Nor was the target disaggregated to the sub- or city-regional level, where much of region-level activity was delivered. No spatial pattern of emissions was reported through regional monitoring at all. In this way the region was simply reduced to a series of regional ‘sectors’, with roles for local authorities remaining unclear.

The change in measurement methodology also added confusion over responsibility for the target, as shown here:

What I do know is, when you read the small print, it is basically only about Yorkshire Forward’s impact ... So there’s that side of it, and there’s confusion between consumption side targets and production side targets. So I don’t think that there’s a particularly clear message coming out, as to what this all means.

Regional Stakeholder, Yorkshire and the Humber

Although it appears that the respondent had become confused between the regional target and Yorkshire Forward’s internal target, this respondent was not the only person to make similar claims, which points to the lack of clarity over the principles of the target and its communication to others.

A large part of the appeal of a quantitative target is that it simplifies an issue so that progress can easily be monitored. The degree of confusion over the target to some extent negated this advantage; even those regional stakeholders and local authority

⁶⁰ Although it is impossible to completely avoid, energy policy is taken as something separate – although linked – to carbon management policy. I will discuss energy policy in the next chapter as having progressed differently from carbon management policy.

officers that were aware of the regional target were often not sure who it applied to, how it was measured, or even the level of emissions reductions aimed for. On the final issue in that list, nobody within regional agencies, never mind those outside, was able to point to a specific rationale behind the exact target chosen, nor to documents that explained them.⁶¹ In particular, there was a feeling that it was an arbitrary aspiration, linked vaguely to national targets, whilst not quite actually matching them.

Unless we can actually see how that's planned out then the conclusion that we come to – and you asked about the rationale of how it's set – is that it's completely arbitrary. Which is generally how most targets are set [laughs]. And they wonder why... They set an arbitrary target and they're not really implementing any policies to try and achieve it. Hmmm... [Laughs]

Regional Environment Stakeholder

Other actors cited the problems of measurement and monitoring discussed above as potentially creating problems with transparency and accountability as well as being an unproductive use of time:

There's a danger it might confuse people and there'll be a perception that people are being fooled and that people are using different targets at different times to say we've achieved or exceeded them when they haven't. And to some extent people will always accuse, whether it's the local council or the government, of doing that. Because they're cynical, and perhaps rightly so.

Regional Climate Change Officer, Y&H

The point for some was not the size, or measurement of the target, however. It was not necessarily important what the target was, more that it conveyed a message of a need for action on carbon emissions. Spending time worrying about data may only serve to delay action, and use scarce resources that could more profitably be used elsewhere.

Whether the target for emissions reductions in Yorkshire in Humber is 40, 60, or 80%, it's still a massive shift across the whole of the region ... Actually, the thing that regions need to respond to is, 'oh my god it's a large number, what can we do?' ... let's just accept it's a *big* number [laughs] and start now working towards achieving a big number.

Former Regional Policy Director, Y&H

⁶¹ Various people within regional organisations thought that such documents did exist, but nobody was able to find these documents, including those identified by others as being responsible for them.

These initial concerns around data and the potential for a ‘politics of knowledge’ in target setting were not greatly significant in the case of the Yorkshire and Humber regional target: the lack of ownership and leadership, including the ‘missing actors’ outlined above are likely to have been a stronger determinant of the target’s success. However, the discussion of issues relating to the mechanics of setting a target begin to highlight how calculative programmes, if not well articulated or combined with a programme of practice, can easily result in the ‘black box’ remaining open indefinitely, which can lead to questioning of the very basis of the programme.

Governing from Above

The implementation of the target was not helped by a level of ambivalence from the UK government, including some attempt at authoritative intervention on the inclusion of targets in regional strategies, apparently on an *ad hoc* basis. In the Yorkshire and Humber draft RSS (YHA, 2006) reference was made to the regional and national GHG targets. These were subsequently removed from the text by the Secretary of State, with the following justification:

Draft PPS on Planning and Climate Change (Dec 2006) says that “aspirational targets relying on actions beyond the RSS’s ability to influence should normally be avoided as they are not helpful in measuring the operational performance of RSS”.

Secretary of State Suggested Changes, 2007 p7

In 2008, the finalised RSS included an aim to “help to meet the target set out in the RES to reduce greenhouse gas emissions in the region in 2016 by 20-25% (compared to 1990 levels)”: despite an initial attempt by central government to remove reference to targets eventually they were able to negotiate a phrasing that was deemed suitable. This does, however, show a reluctance of the Government to allow regions to push beyond their specific statutory powers, thereby constraining the ability of regional institutions in developing their own policy levers. As one respondent remarked:

It was a bit weird all that... on the one hand they wanted us to show a commitment to tackling climate change in the RSS, but they didn’t want us to be so committed that we actually include our own regional target, which we already have anyway.

Furthermore, in contrast to Yorkshire and Humber's experience, the submitted South West (2007) and North East (2008) RSSs both included reference to the region contributing to *national* targets set out in the draft Climate Change Bill, without the Secretary of State suggesting removal.

Discussion: does a regional target make sense?

This chapter outlined an example of early calculative practices within Yorkshire and the Humber to co-opt regional actors to a shared 'regionalism' based around carbon reductions. On the whole the regional emissions reduction target failed to draw in actors from outside of the core statutory organisations, although had some success in changing practices within the RDA, where it was linked to a more specific internal target and calculative tool. A number of issues worked against the technology as a programme to re-calculate the region, in the construction of the target itself, and the lack of leadership on delivering the target. A set of wider issues begin to come forth about the relationship between national, regional and local actors, which will be explored further in the following chapter and after that, an ensuing discussion 'interlude' (Chapter 11). It also raises a number of questions about the validity of a target for the region in itself, however.

The statement by a Regional Policy Executive in Yorkshire and the Humber that, "I don't think we really knew what we needed to do" makes clear that the regional target was developed without regional actors being aware of exactly what actions would be required in order to meet the target. This issue also brings up the question of whether a target is a useful governing technology at all. Throughout the data collection process, respondents in Yorkshire and the Humber, as well as those in the North East and South West, expressed doubts about the value of a regional emissions target, *ceteris paribus*. These concerns largely emanated from the perceived lack of resources available to regional agencies to engender change – "we just don't have the leverage to make them do what we want" (regional policy maker, NE) – but also relate to the region as an appropriate scale for action. The energy sector provides a useful illustration of this,

particularly in Yorkshire and Humber. Energy production in the region accounted for a large proportion of production related emissions: 70 megatonnes of carbon per year, compared to total transport, domestic and industry emissions of 60 megatonnes (PiR, 2008). The regional target in its original guise required significant reductions from regionally based energy producers, a sector over which it was also felt there was limited regional influence:

The question is what can regional governance do to influence national infrastructure and national power generation and fundamentally the answer comes back as very little actually. And that's partly to do with the structure of the energy market, which is national rather than regional. It's partly, I believe, to do with the infrastructure itself: a *National* Grid, as opposed to a series of regional grids.

Former Regional Policy Director, Y & H

This was acknowledged in an observed Regional Energy Forum meeting, where a representative from the energy sector questioned the rationale behind attempted regional energy interventions, and as a result, how energy suppliers were supposed to engage with a regional emissions target. Although the more recent iteration of the target avoids this by taking a consumption based approach, this gives an example of the problems faced by a tier of governing that did not become sufficiently 'fixed' so as to have become a point at which (economic, energy or other) assemblages are organised around them. One respondent made the following comment, which illustrates an underlying consensus on the utility of a regional target given current governing, and wider societal, arrangements: "You might argue, being cynical, that the others haven't followed suit because they know that it's a meaningless target" (Regional Environment Stakeholder, Y & H).

This issue was put to respondents in the North East and South West, who discussed their reasons for not adopting a target. Respondents in the North East were not against the idea of emissions targets in general, but there was resistance to an overarching spatial target:

There's no point setting a regional target that is an overall reductions target ... What does that mean? What are more important are targets in terms of transport, different sectors of industry, domestic, agriculture ... If it's too generic, it's not made use of. If it's too detailed, but covers everything, it's too much.

Regional Policy Manager, North East

There are number of points to make here. First, it suggests that essentially the region as a governed space is about inserting connective strands between national and local programmes, specific to different sectors, not as a 'space' in itself; a point of scalar relations, not a place. Again, a spatial emissions target for the region was seen as meaningless, the implicit reasoning being that a regional target did not bring – the regional policy-maker's favourite term – 'added value'. In other words, regional protagonists were suspicious of subtle co-optive technologies that were not linked to direct programmes of action. There is a sense that regional governing should not be based on 'blue sky' aspirations, which could only be met by engaging actors internal and – crucially – external to the regional tier in the process of societal restructuring (something that they felt unable to do). The South West RSS puts this quite bluntly:

While the region wishes to make its contribution to achieving the national targets for reducing emissions, it is clear that relatively high rates of growth of population and transport will make this very difficult. We have taken on board the Government's targets to reduce CO₂ emissions over the 20 years of this plan, but recognise that our efforts may well fall short as many of the factors which have an influence are beyond our control.

SW Draft RSS, 2007

Similarly, a policy manager in Yorkshire and the Humber made the following, more fundamental point:

So we've got a regional target. Great. But ... you have to ask, why have we got one, because if it's there as a.. as a figurehead, is it really the role of the regional bodies to be making political statements about what others should be doing?

Regional Policy Manager, Y&H

In other words, regional governing actors were seen as being there to provide pragmatic interventions, within a political framework set elsewhere: the region was not a sufficiently 'legitimate' actor to go beyond that position. In terms of where 'elsewhere' is, on the whole people working at the regional level tended to refer upwards to central government – but not as far as the EU – rather than to local interests. In discussing the merits of targets, one respondent did emphasise the difficulty of situating the region within supra-national, national, other regional and local policy frameworks. Again, this reflects a concern with the appropriateness of a regional target when set within a wider multi-level governing system:

It's a difficult time, because there is obviously targets in the proposed draft climate change bill, and there's targets in the RSS and RES and I think they pretty much tie in together. But there's also targets around renewables. And there'll be targets in the Local Area Agreement, which will be bespoke per area. So I'm not sure whether or not targets are appropriate: I mean, the positive side is that it's something tangible ... I suppose the danger is that you, not that you can't meet the targets, but you get into a kind of confused area, where you think how do they all kind of all link together? ... It's all gone a bit target crazy.

Regional Climate Change Manager, Y&H

As such, the logic behind a regional target is brought into question. This is not, however, necessarily owing to the region being any more fundamentally ill-suited to quantitatively monitoring and governing than any other governed space. It is more a question of the resources that were available to regional organisations; the willingness of key actors within these organisations to use their resources towards meeting climate goals; and potentially a wider lack of understanding of the 'place' of the region within different forms of political networks and imaginations.

A second group of first wave practices based around discourses of carbon regionalism were those relating to the development of regional climate change partnerships and action plans. By 2007, all of the English regions had some form of regional climate change partnership in operation. These arose largely from an initial Defra and the UK Climate Impacts Programme (UKCIP) drive to promote climate change agendas, in particular climate change adaptation. This included some funding towards employing a climate change co-ordinator for the region. The regional partnerships in the three study regions had the role of providing a facilitative framework to bringing actors together within the region to act on climate change; and – in the North East and Yorkshire and the Humber – to produce a Regional Climate Change Action Plan (RCCAP). The South West provides a slightly different picture in that the partnership was adaptation focused, and the regional action plan was produced separately by an Assembly-based ‘Task and Finish’ group. Both the South West (2008) and North East (2008) were much later in producing their Action Plans than Yorkshire and the Humber (2005), and so the documents to some extent represent different political conditions, which will be discussed in greater depth in the next chapter. The fact that the comparator regions were later in producing Action Plans highlights some underlying factors internal to the regions that played a part in their later, more muted regionalist approaches, so are worth some mention here.

The key differences between Yorkshire and the Humber and the other two study regions centre on engagement between actors within regional organisations, and between those actors and other organisations within the region. Comparatively strong links between the core regional organisations were borne out in a relatively cohesive group of regional actors working as the Regional Climate Change Executive Group (later Partnership) in Yorkshire and the Humber. This was also reflected in stronger regionalist sentiment in the region’s Climate Change Action Plan, *Your Climate* (2005). Regional actors in the

North East and South West, by comparison, had less of a culture of engagement with one another. This, it would appear, was a key factor in determining a difference of approach between Yorkshire and the Humber and the other two regions.

Regional Climate Change Partnerships

As noted, each of the regions had a regional climate change partnership by 2007, although the role and make-up of these differed slightly from region to region. The Yorkshire and Humber Regional Climate Change Partnership (initially called the Regional Climate Change Executive Group) was formed in 2004 with the initial aim of producing a regional action plan. This group was formed by the Sustainable Development Board, which the Partnership 'sat under'. Both of these groups were notionally independent from the three statutory regional organisations, although the Regional Assembly and GOR both provided some 'secretariat' resources and hosted a climate change co-ordinator to lead the Partnership's work between 2004 and 2006.

In the North East the Partnership was more clearly linked to the Regional Assembly, with the climate change co-ordinator taking a lead role. This involved the development of an action plan, but also other activities, such as a schools education programme. The South West Climate Impacts Partnership was solely focused on climate adaptation activity. The regional action plan was instead developed by a Task and Finish group set up by the Regional Assembly and led by an officer from GOSW.

None of these groups can be said to have been placed at the core of regional policy. They were not 'high level' groups and, initially at least, were devised as relatively mechanistic technical bodies. The development of Action Plans in the North East (2008) and Yorkshire and the Humber (2005 and 2009) gave some purpose to the Partnerships, however, and revealed ambitions to develop as focal points of regional activity on climate change.

Regional Climate Change Action Plans in Yorkshire and the Humber and the North East worked as a material - and textual - manifestation of regional partnerships. They attempted to strengthen the logic behind a dedicated regional forum for action; and promote a programme of practice to embed the region as a source of action. In other words they worked as both co-optive and enabling technologies through seduction, induction and facilitation (shown in Table 15, below).

Table 15: Regional action plans as governing technologies

<i>Technology</i>	<i>Rationality</i>	<i>Mode(s)</i>	<i>Governing Agencies</i>	<i>Institutional Relations</i>
Regional Action Plan	Encourage action on GHG emissions reduction	Seduction, (moral) induction and facilitation	RDA, RA, GO	Heterarchy or network

In 2007, Yorkshire and the Humber was the only one of the three regions with a fully-fledged Climate Change Action Plan. Plans for the North East and South West were produced in April and September 2008 respectively. Yorkshire and the Humber published the second iteration of its climate change action plan in March 2009. The first Action Plan is of particular interest, however, as it demonstrates a central aim of pressing climate change as a specifically regional issue and is more clearly demonstrative of first wave climate change action.

Table 16: Regional Climate Change Action Plans

	<i>Action Plan 1</i>	<i>Action Plan 2</i>	<i>Linked to Partnership?</i>
East Midlands	2009	N/A	Yes
East of England	2009 (draft)	N/A	Yes
London	2007	N/A	No
North East	2008	N/A	Yes
North West	2007	N/A	Yes
South East	N/A	N/A	N/A
South West	2008	N/A	No
West Midlands	2007	N/A	No
Yorkshire and the Humber	2005	2009	Yes

Table 16 shows the pattern across the English regions. As can be seen, Yorkshire and the Humber were two years ahead of other regions in producing their RCCAP.

Rationality

At the time of the first tranche of interviews each of the regions either had a plan in place – as in the case of Yorkshire and the Humber – or were in the process of developing a plan, as in the case of the comparator regions. However, respondents were not especially clear as to where the impetus for these developments originated. Actors were clear that resources from Defra had provided a stimulus for the Partnerships and Action Plans, but they had difficulty in outlining a rationale for developing these regional forums and plans. Almost every regional actor found themselves verbally stumbling around a little before providing three sets of virtually identical phrases: “plugging gaps”; “added value”, “joining up” and being “ahead of the game” competitively.

I think it’s just a recognition that there is a regional perspective that can add some value and so that’s why it’s happening. I think it’s that whole recognition of the regional tier really. And I suppose there’s some sort of competition in there somewhere; I mean every region wants to be the best!

Regional Climate Change Manager, Y&H

In the case of Yorkshire and the Humber, the development of an Action Plan was identified in the 2003 Regional Sustainable Development Framework (RSDF) as a set action towards filling a regional lacuna in climate change action. Interestingly, neither the RSDF nor the final Action Plan make reference to the role of national government in pressing for this to happen, an issue which brings us neatly on to the first way in which the Action Plan has been used as a governing technology: as a text that attempts to engage actors within the region through a ‘programme’ of discursive seduction and induction based around the legitimacy discourses discussed in Chapter 2, and touched on in the previous chapter.

Technology (1): Discursive Seduction and Moral Induction

It is useful to begin first with the ‘outcome’ of the plan process – the Plan itself – and in particular the claims made about the region within the text. This helps to frame the discussion, as it very clearly draws attention to the regionalist sentiment behind the Plan. In Yorkshire and the Humber, *Your Climate* provided a focal point for the development of a carbon regionalism, through discursive approaches to legitimise regional climate change action through a textual ‘programme’ of seduction and moral induction. Part of this programme in fact works to blur the line between seductive approaches and moral, inductive arguments. Where a ‘morality of space’ is presented, this is then taken on to become a seductive point whereby regional organisations are the natural actors to foment action.

The *Your Climate* introduction points to a number of regional characteristics that seemingly mark Yorkshire and the Humber out as unique:

- 1.2 The Yorkshire and Humber region is characterised by its strong regional identity and great diversity of landscapes, businesses and communities. Despite massive economic change over the last 20 to 30 years, the major urban centres still form part of the industrial heartland of the UK. Outside these areas the region is predominantly rural and of high environmental quality ... Lowland valleys, such as the Vale of York, support highly productive agricultural activities.

Further analysis of *Your Climate* draws this out further. This begins with a seeming truism: “Our way of life in Yorkshire and Humber is based on the existence of a stable, temperate climate” (p2). This infers that Yorkshire and the Humber is distinct from other English regions; indeed it seemingly even has its own climate. In a similar way to the notion of the ‘region as a place’ the Plan also denotes a sense of collective responsibility and of a cohesive unit, or regional community. The text then develops from the claim that Yorkshire and Humber has a strong regional identity to use the term “our region”. We thus go from statements about “The Yorkshire and Humber region” (1.1 p6), to “our regional way of life” (1.2 p6). However, “our region” is taken a step further in being used to also mean the regional governing organisations and/or regional ‘stakeholders’, resulting in a confusing conflation of the two: in the statement “Our region is determined to help avoid further damaging shifts in climate” (foreword, p1), it is not clear whether the document is trying to make claims about the attitudes of people who live in Yorkshire and Humber, or about the regional governing organisations.

The intended result is that Yorkshire Forward, Government Office and the Assembly become synonymous with the region as a space, as truly representative of ‘the people’. But it also aims to show that the Action Plan is not representative of any one individual or group of people or organisations within the region, rather that it is an objective overview of the region as a whole: further on there is reference to the fact that “organisations in the region commissioned two important studies” (1.7 p7), meaning Yorkshire Forward, the Regional Assembly and Government Office. Finally, “our region” also works as a euphemism, by removing the role of individual agency in negative statements: “Our region is also a contributor to climate change” (1.3 p6), as opposed to (for example) “in Yorkshire and the Humber, individuals, businesses and public sector organisations are contributors to climate change”.

A third theme that entwines with, and builds on ‘our unique region’ is that of an autonomous and progressive tier of regional governance in Yorkshire and the Humber. The regional target discussed in the previous chapter is used here as both evidence of autonomous, progressive regional governing, and also the logical outcome of autonomous, progressive governing, creating a tautologous argument: ‘we promote strong governing because we promote strong governing’, or ‘we should have an emissions target because we have an emissions target’. Regional agencies are portrayed

as strong leaders on climate change, both in scalar terms and territorially when compared to other regions' activities. Statements like, "The time for debating is over; we now need to take positive action" (p7) work to lay the grounds for this argument, while the foreword emphasises the fact that "we have the only Region Economic Strategy in England that publicly commits to reducing greenhouse gas emissions" (p2), and similarly that "We have a forward looking Regional Spatial Strategy with a comprehensive climate change policy" (*ibid.*). The regional targets are again used as evidence for this, which calls back to the role of the target as a method of seduction in itself, as discussed in Chapter 10. Furthermore, a repeated claim is that "Our region has already made great steps towards addressing climate change" (p2, p8).

Regionalist sentiment is also present in the South West Action Plan, *The South West Climate Change Action Plan for the South West [sic] 2008-2010* (SWRA, 2008), as evidenced in the following statement, where 'we' is used to bind actors together as a cohesive gestalt:

Here in the South West we cannot insulate ourselves from the direct and indirect impacts of a changing climate, so we must prepare for them. We must make the transition to a low carbon society as quickly as possible, and where we can, take real advantage of the economic opportunities that will also arise.

The South West Action Plan for the South West, 2008 p2

In the overall document, however, there is more obvious delineation between 'we' as 'regional partners' and 'we' as inhabitants of the region, than in *Your Climate*; with very little regionalist rhetoric beyond the foreword. The North East Action Plan is an online document, devoid of regionalist rhetoric other than one mention of "our region" and a suggestion that the regional tier of governing can "add value" (Sustaine, 2008) to local and sub-regional action.

The extent of regionalist doctrine within *Your Climate* was also picked up by actors in other regions.⁶² One respondent in particular noted that:

It's quite, you know, out there with the region stuff, isn't it? There's a fair bit of drum-beating going on. I can sympathise with that, but I think we'd be quite a bit more er... [laughs] shall I say, conservative small c in our claims

⁶² Respondents were asked to read, and then comment on, the foreword and introduction to *Your Climate*.

This was acknowledged by a number of actors involved in the Action Plan process: “it is very much an issue for this region” (Regional Policy Manager, Y&H), and:

We wanted to show that we were working at this agenda and we wanted it to be understood that climate change has a regional dimension to it, and yes, there was some of the wanting to get people on board with the fact that the working together as-a-region is well a positive thing!”

Former Regional Policy Manager, Y&H

This approach therefore seeks to establish a rationale for regional action on climate change. In question here, then, is the extent to which this text was (a) reflective of perceptions within the region and (b) successful in strengthening perceptions of the region as a legitimate spatial fix for governing carbon.

Technology (2): Facilitative co-option

A second way in which Action Plans aimed to galvanise regional action on climate change was to facilitate partnership between different individuals and organisations. By doing so, they also aimed to co-opt actors into a regional discourse on climate change:

It was about trying to get some sense of regional purpose, togetherness on climate change. It's perhaps not quite achieved what we wanted, but the aim was really ... let's have a point at which people, stakeholders can see some regional leadership, can be part of a collective movement, if you like.

Regional Policy Manager, Y&H

To achieve these aims, we see a combination of co-optive and enabling governing modes within the sphere of reference determined by the regional partnership. Under the terms of reference for the Plan, seven of the 13 key objectives identified engaging stakeholders, or developing partnerships, including the following aims to:

- Work closely with other fora, commissions or other regional bodies with a stake in climate change issues.
- Improve engagement by key decision makers in climate change issues at regional and local levels.
- Engage local authority decision makers and strategic planners to develop tools to facilitate the development of local action plans.

Terms of Reference, *Your Climate*, p51

Furthermore, a range of regional organisations, sub-regional organisations, and local organisations – including local authorities and LSPs – were outlined as having key institutional roles and responsibilities with regard to climate change. Each of the specific actions also involved a lead statutory agency working in partnership with other organisations: for instance, work on fuel poverty (Action 3.7) was set to involve Yorkshire Forward as the lead organisation, with Transco, Yorkshire and Humber Assembly and local authorities supporting implementation. Several actions were reliant on non-statutory regional organisations to lead the work, including on climate change and ecosystems – English Nature – and on evidence-building, which was to be led by Yorkshire Universities.

The other two regions' RCCAPs have similar objectives. In the North East, a whole raft of 'leadership' aims were set out, including five specifically related to engaging different actors within the region, with a further three in the mitigation section that were aimed at engaging different public and private sector organisations within the region on carbon management activity. The South West Action Plan identifies nine out of 41 actions to be carried out by non-statutory regional organisations, although this included two to be led by Defra.

Technological Translations

As in the case of the regional emissions target for Yorkshire and the Humber, the impact of the Action Plan as a meta-technology can be seen through the various translations that took place as it was mediated by other actors.

The most obvious way to measure the success of the RCCAP – and by proxy, the Partnership – is to monitor delivery on its primary aims: the Actions within the Plan. A primary Action within the Plan was to ensure that it was continually monitored, including the production of a biannual progress report. Friends of the Earth (2009) contend that “there has been no analysis of the success or failure of the 2005 Action Plan”. This is not strictly true. In 2007, AEA Environment (2007b) carried out an independent review of one third of the Actions, but this was the first and only review that took place. This review focused on those Actions that aimed to address climate concerns in just three sectors: transport, housing and land management. As a result, only 11 of the total 33 actions in the Plan were reviewed. Three of these related to adaptation (of which one was deemed to have been fully achieved), and the remaining eight to carbon management. Of the eight, AEA deemed that only one had been unambiguously achieved, which related to delivery of insulation measures to fuel poor communities. This was delivered through Community Energy Solutions, a DECC funded non-profit organisation, who carried out work in the North East and Yorkshire and the Humber. They were not highlighted as a lead or support organisation in the original Plan, which brings a suspicion that the Plan was not necessarily a driver in the action being achieved. More broadly, Friends of the Earth (2009) strengthen this suspicion in contending first that commitments to monitoring had not been kept and that:

The achievement since 2005 of what measures have actually been undertaken to secure climate change reduction ... have not taken place as a result of the Action Plan, but independently of it.

ibid. p5

This is followed by a damning assessment of the overall delivery of the plan: it “did not work to any extent at all in terms of measurable emissions reduction, and in comparison to the scale of the challenge it confronted” (*ibid.*). The second regional plan, published in 2009, contained very little reference to *Your Climate* and no reflection on its success, or lack of.

As with the regional target, however, although the achievement of the specific actions is important the Plan may also be judged through other means, such as the achievement of some of the 'softer', associative actions: in other words, its success as a meta-technology in drawing actors together, raising awareness on carbon management, and encouraging other actors to develop their own action plans.

Network Translations

The Yorkshire and Humber Climate Change Partnership was relatively successful at engaging with statutory actors at the regional level: it was chaired by a member of the Assembly, while employees of the three statutory bodies attended meetings and became involved in the Partnership's tasks. LGYH did not regularly attend meetings up to 2007. The Environment Agency seconded a member of staff to the Assembly, who attended Partnership meetings, as did another Environment Agency representative. LGYH and the Environment Agency, however, were seen by respondents as being much less engaged in the Partnership; and climate change agendas more generally. In the case of the Environment Agency, its statutory role on climate change related to adaptation, which partly explains why they did not have such tight engagement on carbon management issues. LGYH, on the other hand, was not engaged as a 'regional' player in the same way that they did after the dissolution of Regional Assemblies: its lack of engagement up to 2007 was not seen as an issue by respondents. Nonetheless, attendance at Partnership meetings made it clear that the three statutory agencies were very much the lead entities in the Partnership, with other actors in place on a more consultative basis.

Even within the three core agencies, acceptance of the Climate Change Partnership and Plan was not universal. A number of those respondents not directly involved in the Partnership were dismissive, or ambivalent about its role:

Well, I think they are doing something useful. But they are a bit.. peripheral, perhaps, to the core business on climate change. That's not to say that what they are doing isn't good or important work, but they're not really, the Action Plan's not really seen as the driver of change on low carbon policy.

Furthermore, the absence of any authoritative measures from the action plan represented a lack of buy-in from the key partners in terms of the level of ‘clout’ they were willing to extend to the Partnership. Where authoritative measures were taken through funding or planning constraints, these were omitted from the Plan.

More formally, Action 1.1 in *Your Climate* aims to “ensure climate change is reflected in strategic decision-making progress to progressively advance climate risk management in key regional strategies” (p35): that is to ensure translation of the Plan’s core objectives across to other actors. All but one of the regional strategies published after 2005 do make reference to climate change. But this does not necessarily connote success for the Partnership: any number of other influences may have brought this on to strategic agendas. Specific reference to *Your Climate* in strategies would give a better indicator of its success. Also, while the Action within the Plan only refers to strategies, it is also useful to look at regional actors’ corporate plans. To begin with the latter, corporate strategies for core agencies made some, but limited, reference to the Action Plan as a means for delivering corporate goals. These instances reflected a case of a technology translating to become a weak rationale for ‘general’ action, rather than any firm programme of actions. Only the 2008-11 Regional Assembly Business Plan (YHA, 2008d) included a set of specific aims relating to the delivery of the Action Plan.

Cross-regional core strategies – RES (Yorkshire Forward, 2006), Integrated Regional Framework (IRF; Yorkshire Forward, 2007), and RSS (YHA, 2008c) – all refer to the Action Plan to some extent, although the level of engagement varies: the IRF describes *Your Climate* as highlighting “where the important work lies” on climate change; while the RSS is less fulsome, in saying that it highlights just “some” (p43) of the actions required on climate change. Again, the Plan is recognised as a ‘legitimate’ document, but there is no real level of commitment to it as a strong rationale for action.

In terms of ‘second tier’ regional strategies, of five that were published after *Your Climate*, three made some reference to the Plan. In two of these cases, there is some direct translation of actions within the Plan to objectives within the strategies: the Environment Enhancement Strategy and the Rural Framework both outline sets of actions that could contribute to the Action Plan. The Regional Energy Infrastructure

Strategy (REIS; YHA, 2007) refers to comments made in *Your Climate* relating to the “development of new technology and an increased role for biomass as the prime movers for reducing emissions” (2007, p15), but does not link its objectives to specific actions, or objectives in the Plan.

The other two strategies did not refer to the Action Plan. The Science and Innovation Strategy made no reference to climate change or carbon management at all. This strategy would relate to a number of Actions within the Plan, but is perhaps more distanced from the Plan than other regional strategies. More surprisingly, the Regional Biodiversity Strategy did not refer to the Plan either, despite having core objectives relating to climate change and the fact that the Plan has two Actions specifically relating to biodiversity, whilst – more generally – climate change has clear implications for biodiversity. In all, translation of the Plan amongst statutory regional actors was mixed. While most statutory regional organisations and strategies paid increasing heed to carbon management, *Your Climate* and – by extension – the Partnership do not appear to have played a large part in this.

There is less to go on in terms of judging the level of engagement with other regional ‘stakeholders’. Friends of the Earth engaged with *Your Climate* in producing their own review of the Plan, and provided “an important critical voice” (Regional Policy Manager, Y&H) to the Partnership. Other regional branches of national and international organisations were represented to varying degrees. The Yorkshire and Humber branch of the World Wildlife Fund was regularly represented at Partnership meetings and the NHS was nominally involved in the Partnership “at a distance” (Regional Policy Manager, Y&H) since its inception. Yorkshire Universities – an association representing the region’s 14 universities – were not regularly represented at Partnership meetings, but did commit to lead on one action relating to identifying new evidence, the ambiguity of which makes it difficult to measure. It is telling, however, that one respondent admitted that Yorkshire Universities had not been consulted in the development of the second iteration of the Action Plan, from which they – and the HE sector as a whole – were conspicuously absent.⁶³

⁶³ This is slightly different from involvement of people working within HE institutions. A small number of academics attended workshops and events held by the Partnership, but as interested outsiders or in a personal capacity rather than to lead action within the Partnership on behalf of their employer.

In relation to the private sector, Yorkshire Water was regularly represented at Partnership meetings and also signed up to support delivery on one action on land management. Several members of the Partnership did reveal frustration at a lack of engagement from regional business partnerships such as the Yorkshire and Humber Chamber of Commerce, and the Federation for Small Business. The latter had been approached on a number of occasions, according to one respondent, but would not engage with the Partnership “in any way”.

Outwith the region

It is hard to say precisely how successful the Action Plan was in influencing the decisions made by regional actors in other regions. There was no evidence that *Your Climate* had been directly influential in the development of climate policy in other regions: none of the other regions’ Action Plans make reference to *Your Climate*, and none of the respondents in the comparator regions felt that it had been influential in their decision-making.

On the other hand, by virtue of being the first published Plan it was understood as being “a good thing” (Regional Policy Manager, NE); but by dint of simply ‘being there’ rather than for its content. Plans across the regions detail relatively similar approaches on the whole in terms of actions; but seemingly through a lack of willingness to break from the regional policy ‘template’ as used in other policy domains, rather than specifically learning from the Yorkshire and Humber experience. Regional climate change co-ordinators met together periodically as a group, so there may have been some indirect influence through this mechanism, but interviewees in the North East and South West said that they were either unaware (SW) or not overly interested (NE) in the approach taken by Yorkshire and Humber: “our approach has to be specific to our region”.

A number of actions in *Your Climate* also related to ‘vertical’ influence, both in terms of translating to local governing networks and to national governing networks. As with the regional target, influence on local networks was limited, while there was little evidence of impact on national governing networks.

Local Governing Networks

In addition to the overall aim of engaging local authorities and LSPs in the work of the partnership, *Your Climate* identifies six specific actions to encourage local action on climate change, two of which focus on incorporating the aims of the Plan into local decision-making. These are detailed in Table 17.

Table 17: Actions directed at local governing networks

<i>Action</i>	<i>Deliverables</i>	<i>Timescale</i>
4.1 ... Develop a common tool for local authority emission benchmarking and monitoring ... aiming to facilitate the development of local action plans to improve corporate and borough wide carbon management	Emissions benchmarking tool developed and in use by regional local authorities	Tool developed End 05 Adopted by 50% LAs End 06
4.2 ... Assist LSPs to develop local climate change action plans or fully integrate climate adaptation and mitigation considerations with corporate business planning.	LSPs either develop specific plans to reduce ... emissions or fully integrate within corporate business planning	Start Sept 06

Source: *Your Climate* (2005)

The region did not produce a tool for emissions monitoring (Action 4.1). This is partly because the Action was superseded by developments on Local Area Agreements and Defra emissions monitoring (see next chapter), although this would not have been the case if the tool had been implemented within the projected timescales. An ecological

footprinting tool for local authorities was developed by URSUS Consultants (2008) on behalf of the region's Sustainable Development Board, but this development was not something that the Climate Change Partnership was involved with. These actions also link back to the regional target, and the calculation of regional emissions more generally, and the failure of these to become embedded within local decision-making. A clear opportunity was missed here to link together the target with specific actions within the Action Plan, and then link these further into a regional network of local benchmarking and shared calculation agendas.

Nor was Action 4.2 successfully implemented. By the end of 2007 not one of the region's local authorities or LSPs had published a climate change action plan. This compares to five local authorities with action plans by 2007 in both the North East (out of 12 councils) and South West (out of 15), without the 'catalyst' of a regional plan. In 2009, only Leeds and Sheffield City Councils had fully functioning carbon reduction or climate change action plans, although a number of others were in the process of being developed.⁶⁴ As with the regional target, Calderdale was the only local authority or LSP to refer to the regional climate change partnership in any core, sustainability, or climate change document. Interviews with local authority officers confirmed that there was a lack of engagement with the Regional Partnership. When asked the level of impact the RCCAP had on local decision-making, the stock response was, "None at all, to be quite honest with you" (local authority executive, Y&H).

National Governing Networks

Briefly, in addition to the above, *Your Climate* had no obvious effect on national governing networks. For instance, despite being the first region to publish a climate change action plan or strategy, this was not picked up by national reports on regional

⁶⁴ Furthermore, Sheffield's 'low carbon plan' (Sheffield First, 2009) was developed as a direct response to adoption of a carbon reduction target through the 2008-11 Local Area Agreements and not related to the regional action plan, while Leeds' climate change strategy (Leeds Initiative, 2009) states that it was developed as part of their agreement as a signatory to the Nottingham Agreement, which most local authorities in England had signed up to. Kirklees – widely regarded by respondents as the region's most forward thinking authority on climate change – had a comprehensive climate change website, with details of a range of initiatives and future plans, but no formal action plan or strategy

action on climate change.⁶⁵ Interviews with national government policy makers elicited very little interest in Yorkshire and the Humber's Plan, with respondents emphatic in their opinion that it has had no influence on the Government's regional policy on climate change: "No influence; not really. We know it's there, and it's good that it's there – although by now it is an expectation – but that's all" (Central Government Policy Executive).

Barriers to Regionalism

As with the regional target, a range of issues worked against the delivery of the Action Plan or its success as a discursive programme. In particular, a 'lack of teeth' or metrics to measure the carbon reduction potential of actions, insufficient prioritisation of enrolling other actors into the programme, and a lack of clarity of purpose were identified as key factors.

Missing Modes (Absent Authority)

A number of actions were highlighted as 'missing' from the Plan by respondents. It was particularly felt that the partnership could have worked more at the provision, and transfer, of knowledge: many local authority respondents and 'stakeholders' could see a useful role for regional partnerships as points through which access to knowledge, evidence and best practice relating to carbon management. Although Yorkshire Futures – the Regional Observatory – did make regional studies available through their website, it was felt that the Partnership should have taken a more proactive approach to ensuring that actors within the region were informed about work taking place in the region. This included updates on the work of the Partnership relating to actions within the RCCAP. This issue was also alluded to by a central government respondent – responsible for DECC's liaison with RDAs and Regional Assemblies – who noted a lack of knowledge transfer activity between partnerships and other actors within the regions.

⁶⁵ Examples over this period include Sustainable Development Commission's (2005) *Independent review of sustainable development in the English regions* (2005), the government response, *Securing the Regions' Future* (2006), the National Audit Office sustainability appraisals of RDAs (2006-8), or the Environmental Audit Committee regarding sub-national action on climate change (2008).

Regional respondents were less sure about this issue, however. They agreed that knowledge transfer was important, or even “crucial” (regional policy manager, Y&H), in governing carbon reduction, but were unsure where the Partnership fitted in with this. Respondents pointed to the role of the Energy Savings Trust and the Carbon Trust in this area, as well as workshops held by the Regional Assembly and the Yorkshire Futures website as ways in which ‘the region’ as a whole, if not the Partnership itself, was working to share knowledge and evidence. A lack of finance to fund such activities was also highlighted. However, the fact that action was being carried out separate to the Partnership and that the Partnership could not afford to carry out the actions itself both emphasise the fact that it was not sufficiently recognised as the point of co-ordination for regional activity on climate change, and was not being backed by ‘high-level’ regional actors to carry out the kinds of actions that stakeholders felt they needed.

As noted, the Action Plan does not include any authoritative action to be taken by Yorkshire Forward, Government Office, or the Regional Assembly through regional planning or funding conditions, nor does it identify ways for Yorkshire Forward to use its funding streams to provide funds for carbon management schemes. Friends of the Earth (2009) were scathing on this issue, claiming that instead the Action Plan focused on “oblique and secondary” measures that did not directly deliver emissions reduction: “In other words the original design of the measures was quite unlikely to deliver the intended outcome”.

Similarly, a local authority executive made the point that a “lack of teeth” within the Plan made it less likely that local authorities would to engage with it: “the potential benefits seem to be minimal, there’s no programme or even lobbying action to get more funding for climate action, and the ‘sticks’ to make local authorities engage are nonexistent”. Regional actors were also engaged in debates about the role of the action plan. This included questioning which actors it should target, who should be involved in delivering actions and also the types of power they should aim to exercise. Only two respondents at the regional level outlined the use of authoritative power as a useful tool to bring about action, and these were qualified in their proposals:

This was the first Action Plan, and was about trying to bring together the key regional players... it was important to concentrate on that, on what we can do working together, and not concentrate on what our individual statutory roles are. It was about getting a message out there too, that we're about facilitating, about enabling. And this has been discussed recently, should the next Action Plan be about facilitating again? But the question comes back to, how much power do we have as a climate change partnership? I mean, is there a stick to beat them with? In terms of regional delivery, it's difficult to be authoritative.

Regional Policy Manager, Y&H

Clearly, the experience of delivering the RCCAP made regional actors reassess their role as governing entities; but it also served to emphasise the lack of input from elsewhere. It may be that the Action Plan and Partnership should be specifically about 'acting in partnership' through joint facilitation and 'soft' enabling measures. Such an approach, however, relies on strong associational ties and belief in the Partnership and region more widely as a legitimate point of shared action, which was seemingly limited in Yorkshire and the Humber in this case. So, whilst such an approach may have been laudable in principle, and perhaps unavoidable, the lack of 'harder' actions that either constrained or provided for action did have the effect of limiting the legitimacy, and therefore impact, of the Action Plan and Partnership.

Missing Actors

As with the regional target, there was a clear sense that the absence of various actors from the Partnership had been a contributing factor to the relative lack of success. This was exacerbated with a lack of effort to engage with other actors. Firstly, there was a feeling that the Partnership had not gone very far in attempting to include external viewpoints, and create a participative approach to regional action on climate change. As a member of the Partnership noted, membership consisted of "what I call the usual suspects" (regional policy officer, Y&H). Another respondent referred to this group as "a cosy coterie" (regional environmental stakeholder, Y&H). Rather than encouraging a more inclusive network of actors, an aspiring regional oligarchy was being developed; albeit one that was unable to exercise the power to act as such. This was viewed – somewhat wearily – as being nothing out of the ordinary, however:

The way decisions are made, I suspect, is pretty much the same the world over ... It basically works the same way, which is that a few people do most of the decision-making and it goes through whatever process it has to go through to be authorised.

Former Regional Policy Director, Y&H

Observation of Partnership board meetings also highlighted a (vague) power hierarchy between actors. Assembly and Government Office representatives carried out most of the work on Action Planning and Partnership administration, but at the same time deference was paid to Yorkshire Forward representatives: they appeared to be the ones with the clearest sense of what their organisational aims, ambitions and priorities were. At the other end of the scale, non-statutory stakeholders seemed to be fulfilling a role as critical observers, with contributions on specific issues, but not as fully fledged actors within the partnership.

The Partnership included two local authority representatives, the Chair – a councillor and member of the Assembly – and a local authority officer. There was no formal recruitment process, however. The Chair was responsible for inaugurating the Group through involvement in the regional Sustainable Development Board, and had a history of involvement with regional-level partnerships; similarly the local authority officer approached the Partnership owing to personal interest in climate change and regional governance. Interviews with local authority officers confirmed a sense that local authorities were not included in the decision-making of the regional partnership: “they’ve really been very weak on trying to involve [the local authority] in what’s going on regionally. We’ve had nothing from them” (local authority executive, Y&H), and: “The climate change partnership is not much more than a partnership of the regional agencies. There’s definitely, I think, a lack of local engagement there” (Regional Local Government Representative, Y&H). Actors involved with the Partnership largely agreed that they had not made great strides towards including local authorities.

There was in fact a degree of ambivalence towards the importance of involving local authorities, despite their importance in achieving actions within the plan.⁶⁶ At the same time however, respondents involved in the Partnership and Action Plan were keen to note their role in “providing a framework for local action” (Regional Stakeholder, Y&H) and for local authorities to “use our model to develop their own Plans” (Regional Policy Manager, Y&H). Respondents also acknowledged a gap in representation from the private sector, especially small businesses. To further emphasise these issues, AEA

⁶⁶ Similarly, ‘regional’ businesses were seen as important, yet 90% of businesses have fewer than 10 employees and operate very much ‘locally’ (National Statistics and BERR, 2008)

Environment (2008) gave an overview of some of the successes and challenges faced in the Plan's implementation. In particular, they noted a lack of clarity over responsibility for actions and the need to strengthen co-ordination between organisations in the future.

A second case of 'missing actors' took place between 2006 and 2008, when there was a two year hiatus without a regional climate change co-ordinator. Without a full time 'champion' of the regional partnership, it was felt by some respondents that activity had stalled and lost the focus of developing links with other actors: "there is a bit of a feeling that it's just lost its way a bit, and that it's maybe losing its relevancy as a result" (Regional Policy Executive, Y&H). This was even noted from outside the region:

If you look at the other regions which developed quite well and then fell away because they lost their co-ordinator, because they were the only person that it was their role to do stuff, action stalls. Development stalls. And it's really important that that doesn't happen, because I could be run over by a bus, I could be offered a better job, I could fall out with people so badly I leave. You know, you just don't know do you?

Regional Policy Manager, NE

The issue of 'buy-in' recurs again here. Although regional actors from the different statutory organisations worked comparatively well with one another in Yorkshire and the Humber, there remained an issue relating to the amount of influence these actors had within their own organisations, and consequently a lack of high-level engagement from the statutory organisations. Individuals attending Partnership meetings tended to be policy managers with a specific remit on climate change or sustainable development and meetings were not attended by senior level executives from any of the statutory regional actors. The need to get more visible high-level commitment for the Partnership was acknowledged in interviews and in one of the Partnership meetings attended as part of the research process. This was also reflected in the difficulties found in securing finance to maintain the Partnership and employ a co-ordinator, which was seen as the "biggest challenge" (Local Councillor, Y&H) that they had faced since being incorporated in 2004.

Various respondents also suggested that cultural problems – both organisationally and between individuals – were creating barriers to action. One respondent felt that the lack

of engagement with the Partnership was in part owing to the ‘apolitical’, technocratic approach taken by the actors involved in leading the Partnership:

You see, with [policy officer A] and [policy officer B] in the regional partnership, they’re not involved properly with the bigger picture. They’re no good at engaging with people, like the important players at the local level. They’re not really interested in influencing people to the extent that they’re rethinking their way of doing things.

Local Authority Officer, Y&H

This was not a widely held view, although members of the Partnership often referred to themselves as being ‘action focused’ as compared to being concerned with political attempts to engage others: “I’m more [concerned] about action than sitting about chatting about the problem” (Partnership member, Y&H). Another respondent highlighted differences in working cultures between actors as a reason why the Environment Agency was less involved with the carbon management action, arguing that “people in senior positions in the Environment Agency, in the regions are generally not political operators”, as a result of their “technocratic” background (Former Regional Policy Director, Y&H). In relation to these cultural or personality differences, one respondent also reinforced the idea of the closed-shop, in emphasising the similarity of people involved with the Partnership: “...the sense I get from the exec is that we’re all similar kinds of people really, we tend to work in a very consensual way” (Regional Policy Manager, Y&H).

On the other hand, reference to the two comparator regions highlights that, although ‘Team Yorkshire’ caused some problems in terms of promoting a ‘we know best’ attitude, in the other two regions there was less partnership working between the statutory agencies, which presented its own problems. In the South West, the RDA had been seen as the leading actor on carbon management, with “tokenistic” (Stakeholder, SW) involvement from the Assembly, while Government Office “isn’t in the loop terribly well ... they just get on with doling out Neighbourhood Renewal money” (National Policy Stakeholder). This was mirrored in a more fractured overall picture on climate change action, with the South West Climate Change Impacts Partnership solely focused on adaptation policy, while the regional Action Plan was developed through a separate ‘task and finish’ group, led by the regional Assembly and Government Office. This led to the involvement of even fewer external actors in the process of developing

the Action Plan. In the North East, “things are much more politicised” (National Policy Stakeholder, UK):

...of course being the place where the referendum and no vote was has really weakened the Regional Assembly, and the RDA, where there are a bunch of very strong, very conventional economic development people in charge see no reason to engage with the Assembly ... And the Government Office director actually spent some time in the RDA and again is a conventional, a good, *solid* Whitehall manager. But, they are really three parallel streams, where the RDA are *absolutely dominant*. Rather than any attempt to integrate those.

ibid. Emphasis in speech inflections

As a result, the North East’s Regional Climate Change Partnership took a more outward-facing approach to its operations: “the aim is to develop something self-propagating, that engages *the region*, not just regional policy bods” (Regional Policy Manager, NE). In other words, there was a belief that the partnership needed to reach a ‘critical mass’ through various practices of engagement with a range of regional stakeholders.

The lack of engagement with other actors is also reflected in a lack of links to external – local, regional, national and supra-national – policy within the Plan. The Partnership and Action Plan in Yorkshire and the Humber were very much ‘stand alone’ entities. Although the Plan was set within the context of different policies in its introduction, Actions themselves contained few links to these policies, with little emphasis of how they could work to achieve the agendas of actors outside the Partnership.

The regional target is of particular relevance here, given the aim of the Plan to reduce emissions in the region. Linkage to the target could have worked to strengthen both the Plan and the target. For instance, Action 1.1 above – on developing a local emissions accounting tool – could have been tied to a regional monitoring approach to promote the notion of a regional climate agenda or the region as a carbon space, as well as foment action on emissions monitoring and reduction. Attempts to ‘roll-out’ Yorkshire Forward’s calculative tool for measuring emissions ‘savings’ across other organisations would also have been a useful way of encouraging emissions reductions whilst also strengthening engagement with the regional emissions target.

Critically, actions within the Plan gave no indication of the extent to they would contribute to regional – or other – emissions targets. As such, there was little understanding of the intended outcome of actions; what each action might contribute to emissions reductions; or what level of reductions the actions combined would potentially achieve. Friends of the Earth paid special attention to this issue:

The quantified regional emissions reduction target established in adopted RSS 2004 ... was not identified as the driver for its individual measures. This would have required the setting of allocated targets – e.g. to policy or sector areas of emissions – required to be achieved.

Friends of the Earth, 2009 p5

This provides a reverse side of the coin to the lack of success of the regional target as governing technology: in the case of the RCCAP a more robust linkage to the target, including specific contributions would have given the Plan greater clarity and legitimacy as a programme itself, with the result of also strengthening the role of the target in the region.

The statements made by Friends of the Earth, above, point to the fact that was clear uncertainty regarding problem identification. As noted, regional actors seemed unsure of the rationale behind a regional partnership. There was a sense of ‘if there’s a regional tier of governing, then that needs to include climate change’. This argument is not without merit, but it shows an underlying lack of thought as to why carbon management specifically required a regional dimension, beyond integrating it into the activities of regional organisations. This lack of clarity was apparent in observed meetings and interviews when discussing Yorkshire and the Humber’s second RCCAP (RCCAP-2; YHA, 2009) as the need to carry out mapping exercises, regional inventories and data gathering continually arose – having not been comprehensively carried out prior to development of the first Action Plan – while at the same time actions were being drawn up quickly in order to “urgently press on” with developing a new Action Plan. This perhaps reflects climate change as a ‘wicked issue’ for policy makers, in the sense that data and information has not always been available within the same timescales as the perceived need to act require (see Chapter 12 for further discussion of this). Nonetheless, there were elements of this that were specific to the regional partnership, which fed through into understanding the purpose of the regional partnership and the related RCCAP. This was encapsulated in the following discussion of the process behind the second iteration of the Plan:

I get the impression that at the moment we’re trying to start with a blank sheet of paper and kind of think, what are we really about, what are we really trying to achieve and is there a point to us?

Regional Climate Change Manager, Y&H

There had been a degree of *post hoc* reflection regarding the Action Plan, but at the same time, this only served to highlight the uncertainty about the specific role of the region in governing carbon management. This issue was prevalent across both sets of first wave practices analysed here, and is explored further in the following discussion chapter; in particular this relates to the problem of attempting to build a new policy domain within a relatively ‘unfixed’ spatial settlement.

The initial drive towards regional partnerships and action planning came in part from central government. Defra and UKCIP's initial funding of climate change co-ordinators for the regions provided some impetus towards developing cross-organisational action on climate change. Although these monies were particularly aimed at driving action on climate adaptation they were also used to develop work on carbon management across the regions. This funding was not, however, sufficient to allow a continuous co-ordinator post in Yorkshire and the Humber without match-funding from elsewhere and the two year gap between co-ordinators was clearly deleterious to the Partnership's progress. This gap also meant that the Partnership was less tied in to regional networks across England. UKCIP facilitated a climate change co-ordinator network, which was primarily focused on adaptation, but which nonetheless played an important role in allowing co-ordinators to share knowledge on mitigation agendas:

... of course we end up talking about the whole gamut of things we're involved in and what the region's up to, and the majority of that still is on the mitigation side, so that inevitably becomes part of the discussions.

Climate Change Co-ordinator, North East

The barriers faced by the Partnership should also be set within the context of a wider governing malaise. It was clear that there was a distinct lack of formal support from central governmental actors, despite their initial priming of the co-ordinator role. While UKCIP continued to provide support on adaptation issues, there was little involvement from central government on carbon management activity through the Partnership, although the provision of some funds was relatively important in keeping the Partnership and the Plan going:

At the regional level to date, minimal... We have had some bits of funding but it's you know, little bits here and there. But, in terms of advising policy, minimal. And this time round, we've not specifically consulted them ... I mean obviously we're aware of the national picture as a reason for the Action Plan: because so much has happened nationally since the last one was published. But no specific advice as such.

Regional Policy Manager, Y&H

This was not limited to Yorkshire and the Humber: respondents in the North East noted a similar lack of engagement with Defra and CLG.⁶⁷ Similarly, as with the regional target, EU actors were absent from the Plan process. That is not to say that the EU is not a powerful actor on climate change, and that its work did not impact on the regions – in fact, it has been crucial to their very existence as governed spaces – but that EU actors were not involved in specific regional activities, such as Plan-development. Their role here would perhaps be described by Bob Jessop as metagovernance ‘in the shadow of hierarchy’. More specifically – and as noted in the previous chapter – the types of practices that the EU engage in to govern action on climate change at the regional level tend to be very much ‘at a distance’ through specific authoritative interventions, directives or funding regimes; many of which filter through the mediating force of the UK government before arriving in the offices of regional policy makers. On the other hand, the EU does work to develop transnational regional networks on certain policy agendas such as ESPON or networks relating to the EU cohesion agenda or Structural Funds: regional actors tended not to be aware of or involved in similar activities with regard to carbon management.

Conclusion: does the region operate as a scaled network?

This chapter explored the development of a regional climate change partnership and associated action plan for Yorkshire and the Humber, with some reference to the North East and South West by way of context. These developments worked as two sets of governing technologies: one of which was based around a seductive regionalist programme in an attempt to re-imagine the region as a carbon space and a ‘natural’ point of governing carbon management. Despite the strong sentiment behind this, the allied technologies based on facilitation and enabling largely failed, with a number of factors for this discussed above. More widely, these factors touch on questions about the extent to which the region failed to become a ‘scaled network’ for activity on carbon management, in much the same way that it failed to develop a scalar relationship in developing an emissions target for the region. In other words, the relative failure of the action plan and partnership highlighted the fact that the region did not act as a point of interaction on climate change: networks within the region were not, and did not become,

⁶⁷ DECC was not created until October 2008

scaled in this way. This may also reflect on the intrinsic nature of climate change as a policy agenda and highlights the limitations of contiguous spaces that can be ‘made the same’ as objects of government for certain types of ‘fluid’ phenomenon. A brief look at the different ‘types’ of local authorities within Yorkshire and the Humber would help to further unpack these issues.

In terms of local authorities, there seemed to be two broad categories: larger authorities that were not ‘bound’ by the region; and smaller authorities that were not ‘plugged in’ to the region. The ‘unbound’ authorities tended instead to be members of wider networks; in particular, the UK Core Cities Climate Change Group, through which each of the UK’s core cities has signed up to the Core Cities Climate Declaration, but also international networks, such as that framed around the Aalborg Agreement or the Cities for Climate Protection network (see Bulkeley and Betsill, 2003). They had not only ‘jumped scales’, but also had been actively involved in the creation of new ‘networked scales’:

Firstly, I think, here in [the local authority area], as I’ve said, we’ve not had much engagement from anyone regionally really, but also I think as a city, we look to the other core cities rather than to the region. Another thing is around timescales: it’s not as though it’s co-ordinated in any way to match up with when we were coming out with our Action Plan at all; not that it necessarily needs to be, but the timing just didn’t match up... And... well, I just don’t think we as a unit were massively aware of the regional agenda... We didn’t, or don’t, necessarily see its relevance to us.

Local Authority Executive, Y&H

This also highlights a second issue: not only were these larger authorities not interacting as part of or with a regional network, they also saw regional governing actors as being somewhat ‘behind’ in terms of their efforts on climate change. This was emphasised by another respondent – this time not at a ‘core city’ authority – who claimed that “it’s local authorities like us that are leading the way on climate change, not the region” (local authority officer, Y&H).

‘Unplugged’ authorities, on the other hand, were those that were not being reached by the regional Partnership, and/or were not attempting to engage themselves. For these authorities, climate change was either not fully on the local agenda, or the Partnership was not offering them the benefits that would be of most use to them:

You could say that it's taking a while for certain [council] Members to come round to the seriousness of climate change. And that stops things moving. But, I have to say, I don't think really the regional group have really tried to engage with us greatly. It's something I personally would see the benefit in, linking up with others to learn from each other, get some economies of scale from pooling resources and getting extra resources from elsewhere maybe, but I haven't really had the sense that they're [the regional partnership] pushing that agenda to be honest.

Local Authority Officer, Y&H

Instead, those authorities that did want support on climate change issues reported that they tended to look to national advice bodies, such as the Carbon and Energy Savings Trusts, for specific help on carbon management.

The issue of 'unbound' and 'unplugged' authorities is developed further in Chapter 12, while the following chapter turns to drawing out some of the wider issues relating to the development and implementation of first wave practices.

Taking the analysis of the technologies in Chapters 9 and 10 together, a number of broader themes clearly emerge. Despite some small successes in developing a carbon regionalism through broad-based approaches based on associative power, first wave efforts largely failed to impact on action in the region. Regional actors did not develop a basis for regional action that was either sufficiently cohesive or compelling to engage non-statutory actors in the process. This can be reduced to the fact that regional actors lacked governing or spatial legitimacy in the eyes of others both internal and external to the regions. Regional actors failed to embed a regionalist discourse to foreground action on carbon management: to return to an earlier quotation, “what the region says on climate change isn’t really on the ... agenda” (local authority officer, Y&H).

These are played out through a number of factors that came through both the wider analysis of modes of governing and the specific studies of the two meta-technologies in Yorkshire and the Humber and can loosely be filed under governing and spatial legitimacies. In terms of governing, the previous two chapters described the limited success of attempts to draw in actors from different policy domains, types of organisations or scales of activity. This leads to a sense of isolated networks within regional organisations; vertical disconnection between actors operating at different scales; and a linked ‘politics of non-engagement’. Spatially, there was a clear notion of carbon regionalism as a ‘regional agenda’, rather than an ‘agenda of the region’ (as noted in Chapter 10): that is, led by a small number of ‘regional’ actors, rather than something that a wide range of actors within the region engaged with. Crossing the two sets of issues was a sense of institutional muddle, as highlighted by other studies of sustainability policy (see Batchelor and Patterson, 2007; Gore and Wells, 2009), but that – crucially – this was mired in a deeper existential muddle. Reflecting back on the previous two chapters, this meant a lack of clarity of purpose, difficulty in identifying

problems and solutions, including identification of which actors to engage through what means.

Governing Legitimacy

It was clear that regional actors lacked governing legitimacy in terms of carbon management. There was some limited expression of regional actors as being seen as progressive in Yorkshire and the Humber, with a belief from some that regional actors were doing more on carbon management than in other regions. This still amounted to little, however: “it’s at the local level where innovation is taking place; where some of us are pushing climate change as an issue and really taking it seriously” (local authority executive, Y&H). This is a contentious claim and certainly not all, or even many local authorities could be said to have been demonstrating such a commitment. But, by dint of the operations they perform, local authorities are intrinsically more closely linked to the space that they govern and they also have some *de facto* representative legitimacy through the elected chamber of councillors. As a result of this, in some ways local authorities had greater autonomy than regional actors to develop their own agendas, even if centralisation and regionalisation over the period 1979-2007 did limit the ability to act upon them.

Sentiment regarding the region as a progressive force was also noticeably absent in the South West and North East: “They’re attempting F all, excuse the language, nothing beyond a few words here and there, the odd flagship development...” (Local authority officer, NE). Regional actors were also seen as reactive to development elsewhere:

They, well, let’s take each of the three. The RDA, Yorkshire Forward, they’re... well, they did start off with some good rhetoric, the targets, what have you, but... They’re not really pushing on climate change are they? They’re kind of... You get the sense of them putting their heads above the parapet now and again and thinking, ‘something’s going to happen on this soon’ ... Government Office, well, they’re whatever the Government says ... and the Assembly, I get the sense that the intentions are there, but they can’t do a lot unless other people agree to it, agree to fund it.

Regional Stakeholder, Y&H

Understanding these issues may be helped in part through reference to Jessop's (2003) notion of inevitable 'governing failure' and the lack of a cohesive programme of practices or specific technologies, including little variation in the form of these practices. For instance, the regional target was left largely hanging alone in documents, expected to work as seductive technology in itself. There was no comprehensive programme to engage other regional actors in the target. The RCCAP could be seen as in part reacting to this issue, although influence from Defra and UKCIP provided greater impetus towards developing the Plan. Similarly, the Plan did contain a wide number of deliverable actions, but these were not linked to any delivery framework. Some of the actions may have had frameworks set in place 'behind the scenes', but many clearly did not. In particular, actions that were aimed at encouraging action amongst – for example – LSPs and local authorities had no particular governing strategy behind them, other than a broad notion of 'engagement'. A typical example of this was the aim for all local authorities to develop their own climate change action plans: it appeared that the existence of the RCCAP was expected to act as a seductive or inductive technology in itself, as if local authorities were supposed to see the Plan and say 'the region's got one, so we'd better follow suit'. This relies on local authorities already being tied into the notion of the region as a legitimate governing and spatial entity, however. This highlights a form of Catch-22 situation, propagated by a lack of attempts by regional actors to change the way in which they approach practices of governing.

Drawing from these thoughts, two particular problems of governing legitimacy present themselves as indicative of wider patterns of carbon management policy at the regional level. These relate to linked notions of autonomy and representation and were noted within the studies of the two technologies in Chapters 9 and 10, but also more broadly across each of the three regions.

Vertical disconnection (not autonomy)

The regionalist programmes studied here did not succeed in travelling across scales of governing. Their targeted governed entities did not engage with the rhetoric of governing and spatial legitimacy for a carbon regionalism, in part because of a lack of a comprehensive programme of practice to engage them; and also – perhaps crucially –

because central government did not engage in a co-ordinated manner with regional approaches to climate change. This may have been in part because climate change still lacked real ‘thematic legitimacy’ at the national level and it was not yet at the point where national climate policy was taken sufficiently seriously to disaggregate responsibilities to sub-national governing actors. From interviews with central government civil servants at Defra it seemed that there was a degree of general ambivalence about the role of regional actors in acting on carbon management, partly because they were not yet clear what they felt the role of regions should be within national policy.

This highlights a wider issue of ‘vertical disconnection’ between national, regional and local governing actors on climate change. Actors did not act autonomously – their actions were heavily shaped by other, principally central government actors – but at the same time, they did not engage with actors at different scales in their decision-making: “we just don’t have the leverage to make them do what we want” (regional policy maker, NE).

The issue of governmental constraint is not a simple case of statutory responsibilities and governmental intervention: more subtle forms of power, through various governing technologies, were more in evidence in constraining action at the regional tier. This is particularly an issue for climate change policy, as an emerging and potentially complex policy domain. This has resulted in uncertainty at the regional level, a lack of engagement at the local level and a seeming sense of “bemusement” at the national level as to the actions of regional organisations (Central Government Policy Manager). Regional respondents were relatively open in saying that they were not clear of what is expected of them by central government. They received little guidance over the development of carbon reduction policy and often received contradictory messages from different government departments:

I have to be honest, and say, I don’t think we, I don’t think any of us, really know what’s expected of us from central government. There really hasn’t been a great deal of ‘steering’ if you like, so we’re just trying to work it all out, not all on our own, but there is an element of that.

Regional Assembly Policy Manager, Y&H

In 2007 there were no set guidelines of expectation from central government to the regions, and many respondents at the regional level mentioned a lack of formal or informal governmental steering and ‘enabling’ on carbon management in general. This was not confined to Yorkshire and the Humber; respondents in the South West and North East were agreed on this and the UK Government tacitly acknowledged this issue in response to criticism from the Environmental Audit Committee: “Regional co-ordination is important and the Government must ensure that the different players are all clear about their respective roles” (Government Response to Environment Audit Committee, 2008, Paragraph 66).

The EU has been cited by others (for instance, Fairbrass and Jordan, 2004) as key to the development of progressive national and sub-national policies on environmental sustainability. At the regional level this was largely an invisible process in terms of climate change action; either through policy that filtered first through national government, or through conditions attached to associated funding regimes. There was also a distinct lack of direct engagement with the EU. For example:

We’ve had some contact with [the EU] on specific issues – especially on CCS [Carbon Capture and Storage] – but not a great deal in general; and nothing on the Action Plans. Of course there are specific points in funding programmes, although they can be interpreted in different ways.

Regional Policy Manager, Y&H

None of the respondents could point to much involvement with the European Commission or Directorates General, although this was beginning to improve. It is important to bear in mind the limit to European Commission resources – particularly in terms of personnel – here: they have to prioritise how and where they focus attention, but clearly – outwith specific regional programmes – regional carbon management policy had not been afforded major focus at this point.

Representation: politics of non-engagement

Linked to evidence of vertical disconnection was a politics of non-engagement between different actors across governing levels, and outside core governing networks at the

regional level. In the South West, for example, there was a complaint that GOSW had played a role in this lack of engagement in not functioning as a conduit between government and other statutory regional organisations:

It's been very, very poor. We have engaged extensively with regional representatives of national agencies, such as the Highways Agency, but if you're saying "have you had good links with government departments or ministers" ... then no. We've approached Government Office – we saw it partly as their job to link us up with Whitehall – and they have said that Whitehall are too busy with the Climate Change Bill, Energy Bill and so on. Which I thought was a bit weak; and a bit crap to be honest with you ... And Government Office didn't really help, by acting as both gatekeeper and lock keeper.

Regional Assembly Policy Manager, South West

This also had further consequences on relations between other governing organisations. For example, in one particular case a lack of engagement between EU advisors and the regional development agency led to an exacerbation of tensions between local and regional actors. In this instance, a local authority was approached by the regional European Office to build on an existing programme relating to renewable energy production. They did not, however, engage with the RDA – who held the necessary funds – in this process, and as a result the application for funding failed: the RDA had already committed its money elsewhere. This in turn created some ill-feeling between the local authority and the RDA.

A more general perspective from respondents working within the regions was the lack of accountability of regional actors, linked to them also appearing unrepresentative of 'the region' more broadly conceived:

The region looks, from the outside, like a completely self-serving, self-appointed sort of coterie of a few people making all the decisions. Which isn't entirely fair, but you can see why it might look that way. And I can quite clearly remember sitting in a bar, at a conference [laughs], after far too many drinks one night, and I can remember talking to somebody about – this is five years ago – and him saying that there's going to be a backlash against regionalism because of exactly this; because people just.. the case for it hasn't been made properly. And there's no clear line of accountability for it. And it's kind of set up to fail.

Former Regional Policy Director, NE EA

Another respondent noted similar issues, pointing to an inherent weakness within the regional governing system, essentially arguing that the region's main strength has also acted as its 'Achilles heel':

One of the slightly appealing things about a regional tier of government [is that] the region is small enough to be responsive to local circumstances, but big enough to be able to make and arguably impose some of the more awkward areas of decision-making ... where no local government wants to be responsible for that decision and responsible to their local electorate for. I think where that falls down is that ordinary people have got wise to that approach and they're very suspicious of unaccountability at all levels.

Former Regional Policy Director, Y&H

This view of regional actors as unrepresentative thus made others less likely to engage with them; which in turn works to fulfil this premise.

Governing muddle

A 'Jessopian' understanding of these issues may lead to a discussion of processes of strategic selectivity as performed by national and regional policy actors. This is followed here to a degree. Clearly national government, and EU bodies, shaped regional action through on the one hand 'letting them get on with it' while also communicating an expectation of a degree of action to take place, but at the same time not setting a strategic tone through their own actions or providing regions with the necessary resources to push the agenda comprehensively themselves. On the other hand, the extent to which *all* of these processes are intentional is questionable; central government itself was still only beginning to grapple with the issue of climate change and the level of change required to achieve large-scale emissions reductions. In this case it would not be fair to call all of these events 'strategic'. In the same vein, Gerry Stoker's (2002) notion of 'purposeful muddle' is partially discounted. Early carbon regionalisms partly failed because of a lack of commitment – and national government was perhaps happy to see what experiments emerged from regional thinking – but largely because “nobody knew what they were doing” (regional stakeholder, NE) nationally, as well as regionally.

In a wider sense, the UK government's ambivalence towards effective action on carbon emissions did shape a number of the actions taken by regional actors, and also the response of local authorities – and other actors – to the actions taken by them. The forms of power exerted tended to be shaped by a lack of concern for climate change as compared to other issues; that is, they were generally limited to exercising 'soft'

associative power. Similarly, actions were often shaped by ‘indirect’ power: an assumption of national governmental interference if certain actions were, or were not, taken. This was built on ‘messages’ received from central government, or on the basis of previous interventions.

These problems were not limited to actors external to the core regional network. There was also a lack of strategic commitment within regional governing organisations, as demonstrated in the discussions of carbon regionalisms above:

...there is a leadership vacuum on climate change which needs to be rectified, so that climate change action can be more effectively delivered and monitored.

Regional Scrutiny Panel, Y&H, 2008 p20

As a result of this external and internal ‘muddle’, regional policy makers and officers struggled to outline what the role of their agencies on climate change should be. This uncertainty and disconnection between central and regional departments made regional agencies also less likely to go beyond quite pragmatic, timid proposals towards governing carbon management; including a lack of willingness to contribute significant levels of resources towards a policy area that was not being pushed as a regional issue by central government.

As a result there was a genuine feeling amongst regional policy professionals and stakeholders that the lack of engagement between tiers of governing, and a general sense of governing muddle was constraining action:

You feel that you’ve.. you’ve put a lot of effort in to kind of build a regional consensus around these areas and we just don’t have the instruments, we don’t have the power to do much about it, you know. I think that genuinely effective initiatives in climate change mitigation are going to come from the ground up, from the local scale... And government is still too scared to take that sort of leap ... It feels as though it is waiting until voters are in favour of climate change mitigation before it will do anything. So, all of the people who have specific jobs, remits within their jobs about climate change mitigation don’t really have any... teeth, any instruments with which to do their job.

Former Regional Executive, NE

Similarly, from a local authority perspective:

The lack of input legitimacy, of democratic mandate, and the disconnect between the region and local authorities, means that it's not getting into the local authority system; it's not.. trickling through.

Regional Local Government Representative, Y&H

In addition, the 2007 'Sub-national Review' may be said to have set the wider role of statutory regional bodies in governing the environment into greater question. I will return to this in the next chapter.

Spatial legitimacy

Disconnection between governing networks – and the problems that this can cause – was an important theme of regional action on climate change. This can be discussed through the lens of governing legitimacy; but there is also a range of linked spatial issues that mediated the governing process. These relate to scalar practices, place-based discourses and a wider sense of 'existential muddle' as to how the regions should be understood by policy actors.

A regional agenda, not an agenda of the region.

First and foremost, linked to – and perhaps partially explaining – the notion of vertical disconnection, carbon regionalisms were specifically regional agendas, in the sense that they were developed by actors within core regional governing networks, rather than being an agenda *of* the region, an 'organic' manifestation of a shared carbon management agenda amongst people across the region.⁶⁸

This was owing in part to the weakness of the 'region as place' discourse: local authorities, for instance, saw themselves as residing within a region, but did not really identify with the region as a core point of concern. For respondents that represented

⁶⁸ I mean core here in the sense of being people within the statutory agencies, rather than the 'core' decision-making actors on mainstream policy domains such as economic policy

local authorities, the region was not a ‘place’ of shared beliefs and agendas. It was instead seen as a network of people operating at a different spatial scale of activity, with whom they may interact, but who were not a natural first point of call beyond those areas where there was a statutory relationship in place: for instance through planning guidance.

Similarly, the region did not – on the whole – act as a ‘scaled network’ for many larger authorities, who instead looked to other cities across the UK, Europe and the rest of the world to share ideas and best practice on climate change. For example, respondents in larger authorities often talked of being part of networks such as the Core Cities network, or the international Cities for Climate Protection network. Smaller authorities with less capacity could benefit most from regional enabling activities, but they were not being comprehensively reached. There were, for example, local authority actors who were keen to be involved but felt disengaged from regional activity: some respondents from these authorities complained that the region was less interested in the ‘smaller’ problems that they faced; others felt that they just were not being offered the “right sort” (local authority officer, Y&H) of engagement by the region. Some smaller authorities felt more of an affinity towards sub-regional activities (see the example of the Tees Valley in Chapter 12), and yet others had a more parochial ‘keep ourselves to ourselves’ attitude and were not involved in any climate networks. In all three regions, one or two local authorities were recognised as leading on climate change agendas, but the feeling was that they were not being effectively utilised to push the agenda at a regional level.

Existential muddle

Within regional networks there was also a very strong sense that regional actors were unsure as to how ‘the region’ should be understood, especially when this came to understanding the ‘carbon region’. This moves beyond confusion over the role of different actors, or ‘governing muddle’, to a deeper sense of ‘existential muddle’. This stretches back to the construction of the regions as spaces of governing, as discussed in Chapter 3, but attempting to re-imagine an already chaotically understood concept has highlighted these issues further. One respondent was particularly open in revealing the uncertainty about what constitutes ‘the region’:

You start to get into questions like why the region? What is the region? And if you're like me, you think 'bloody hell! This isn't quite what I was signing up for when I came here!' And in truth I don't think we could really, not properly, answer those questions.

Regional Policy Manager, Y&H

This issue is portrayed in both case studies above. For instance, the construction of the regional target may be seen as a search for order and an attempt to give a clear signal of the region as a legitimate space. Instead, however, it succeeded in showing a degree of uncertainty about what counted as 'regional' emissions, with prevarication around 'regional influence' over particular sectors, but also a lack of spatial delineation between – for example – regional and local. In fact, no spatial pattern of emissions was being reported through regional monitoring at all. Also, as a result of not being clear in their understanding of the region, regional actors did not seem to know exactly who their target audience was, especially in the Action Plan and Partnership. Although the Action Plan focused on particular sectors, different respondents said different things: some were keen to get more 'regional players' on board; some felt that local authorities were a target audience, while others did not; some wanted to be involved with engaging individuals with climate change, while yet others felt strongly that this was not the region's role. One respondent felt that regional actors involved with the Yorkshire and Humber Climate Change Partnership had not been reflexive or reflective enough in approaching climate change as a regional issue:

So climate change is interesting because it's... I don't know how it would work with something else.. but it seems to be that we're, you know, we're dealing with the issue in the way that we deal with every other issue, and perhaps climate change is a bit.. bit different, and perhaps we should be dealing with it a bit differently. I think there's an automatic assumption that we're doing something useful when perhaps it's all already happening out there and we don't need someone to drive it or add value to it. I think we do, but... I think we need to not just assume that.

Regional Policy Manager, Y&H

When well understood lines of authority are in place, these issues can be put to one side somewhat: an organisation's role is simply to act on orders. Where this is not the case – as for first wave climate action – it seems to be of fundamental importance that spatial governing actors are clear about what their potential role could be, but also about what and who they are trying to influence.

The next chapter turns to second wave practices, which brought a number of continuities from previous challenges, although these issues were re-cast within a move towards the development of instrumental governing programmes and greater central government co-ordination. This has the effect of making some differences appear more stark – for instance problems relating to ‘unbound’ and ‘unplugged’ local authorities, while issues relating to regional legitimacy became somewhat circumvented by shifts in scalar and sectoral organisation of carbon management policy.

The publication of the 'Sub-National Review' (SNR), the Climate Change Act and the national roll out of Local Area Agreements (LAAs) in 2007 and 2008 had significant impacts on the English regions as political spaces and for climate change as a political issue. These governmental programmes brought changes to the involvement of different actors within the governing process: for instance, LAAs brought about a greater emphasis on the direct involvement of Government Offices, while the SNR resulted in the abolition of Regional Assemblies and an enhanced role for regional local government associations.

There was also a shift in the form and extent of governing meta-technologies for carbon management. First wave meta-technologies featured regional actors as instigators of spatial governing programmes, which were bound to sets of regionalist discourses. The introduction of local carbon emissions monitoring and targets marked a second wave of action, with a move towards regional actors becoming more bound as mediators of authority. This took place alongside an array of enabling and co-optive arrangements to work with actors within the regions: indeed many of these arrangements were developed as a response to growing statutory pressures on public and private sector bodies to reduce their emissions. For instance, the growth of local authority climate 'regionalisms' through Regional Improvement and Efficiency Partnerships may be seen as a direct response to the inclusion of area-wide carbon reduction targets in LAAs.

Specifically, these changes might be said to have signalled a move from governing through 'muddled co-option' at the regional level towards the development of specific instrumental rationalities, whilst – at the same time – more fractured regionalisms based on specific sectoral or instrumental goals began to emerge. If first wave technologies were defined by vertical disconnection and a politics of non-engagement, second wave

approaches moved towards more formalised vertical hierarchies and a politics of variegated connection manifested through access to and manipulation of knowledge or evidence. This fits in with a wider ‘politics of mediation’ that began to emerge through the development of centralised carbon reduction programmes.

Having focused more specifically on two sets of practices in Yorkshire and the Humber in Chapter 9 and 10, I will widen the focus once more in this chapter to take in developments across the three regions. LAAs, as a national programme rolled out at the same time across the country, allow for a more comparative angle to be taken, which also helps to gain a broader understanding of the direction of travel in the regions at the end of the research period.

Governing from above: four key developments

Before delving into the specifics of the issues outlined above, it is worth a brief reminder of the key national policy developments that took place in 2007, and some discussion of the implications – broadly speaking – that they had for regional carbon management actors.

The Sub-National Review

As noted above (and in Chapter 3), *The Review of Sub-national Economic Development and Regeneration* (HM Treasury, 2007) – or ‘Sub-National Review’ (SNR) – had far-reaching implications for the regions, most notably through the abolition of Regional Assemblies. At the same time, the SNR proposed the strengthening of sub- or city-regional governing arrangements in terms of greater delivery of regional programmes through sub-regional partnerships and – where there was demand – the introduction of Multi-Area Agreements for groups of local authorities. As a result, regional actors were to be left with a more ‘strategic’ governing role. These changes had a number of repercussions, with statutory planning and transport responsibilities being transferred to RDAs, and the ‘democratic’ mandate being taken up by newly empowered regional Local Government Associations: Local Government Yorkshire and Humber (LGYH),

South West Councils, and Association of North East Councils (ANEC) in the three regions of concern here. For some respondents, especially representatives of local authorities, this represented a positive step and was seen to lead the way towards a more streamlined and directly representative system of governing. This, they felt, could potentially work towards removing the issues of non-engagement and vertical disconnection outlined in the previous chapter:

That's actually, to me got some positive aspects to it. Part of it is about trying to rebuild the relationships between different levels of government and trying to get a proper accountability structure there. And in terms of the regions, it's about looking at it all and thinking 'what can be done at the regional level that adds value by us all working together, by collaborating' ... and I'm particularly interested in what might come through more collaboration at the sub-regional level.

Regional Local Government Representative, Y&H

Similarly, in the North East it was seen as an opportunity to clear up tensions between different policy actors, and bring about greater engagement between RDAs and local government:

I don't think it will change regional policy as such, but it will change the way it's developed, because one organisation won't be around ... ANEC and the Assembly used to be one body, and they split and there's political tensions around 'who's the boss'. But they will have to be stepping up to the mark. And they have to sign up to the IRS and each of the Local Authorities, too ... Previously, I don't think the RDA have had much to do with local authorities. That has to change, they have to be on board with them.

Regional Policy Manager, NE

This also had immediate ramifications for the day-to-day workings of regional governing networks, as Assemblies wound down and new settlements were agreed. RDAs were able to exercise greater power over the decisions made in partnerships - as outlined by more than one respondent in each of the regions - while Regional Local Government Associations began to push for more resources and be more vocal in their views. At the same time, this did not necessarily always result in 'power struggles' and in Yorkshire and the Humber the key issues appeared to be more about pragmatic discussions around 'moving forward':

I guess there probably is a difference. It's very difficult to get away from a sense that we know the Assembly's not going to be there in two years time, so there's a kind of sense that as we get closer to that their importance will diminish. And particularly for the Action Plan ... it's probably going to be a two or three year action plan, so its lifetime is going to be longer than that of the Assembly when it's launched, so we have to have a think about how that works.

Regional Policy Manager, Y&H

In terms of climate change, the SNR – particularly in the consultation draft – was decidedly quiet. Climate change was mentioned rarely, and with no reference to the regions' role in tackling carbon emissions in the whole of the original document. Furthermore, the consultation draft proposed the removal of all statutory targets from RDAs – including those related to sustainable development – and replacing them with a single indicator based on regional GVA. This provoked a degree of concern from policy professionals and stakeholders around the country, including the vast majority of those interviewed for this research: “it's a very clear concern, if you listen to the response from people in this region, and others” (Regional Policy Manager, North East). In reality, however, other political developments ensured that carbon has remained on the agenda for all governing actors, although in part as a means to increase GVA.

The Climate Change Act

On 13th March 2007, the draft Climate Change Bill was published, setting out a framework for reducing carbon emissions in the UK. It received royal assent as an Act of Parliament in November 2008. Despite being a major piece of legislation, the immediate ramifications for the regions were not clear. Nonetheless, the Act did not include any specific requirements for regional emissions budgeting. It certainly framed policy debates at a regional level, however, and led to some reflection on the role of the regions in governing carbon management: “it [the Act] does beg some fundamental questions, particularly with the SNR happening and changing relationships” (Regional Climate Change Manager, Y&H). Effectively, this worked to bring climate change higher up the regional agenda, both through adding to the national discourse regarding climate change, and through the exercise of indirect power: although regional actors were not directly affected by the Act, they could foresee an increase in expectation for regional action on climate change. This also coincided with a House of Commons

Environmental Audit Committee enquiry investigating – amongst other things – the possibility of mandatory disaggregated targets for the regions (discussed in more detail below).

Planning Policy Statement: Planning and Climate Change

First published as a consultation document in December 2006, *Planning Policy Statement: Planning and Climate Change* aimed to set out “how planning should contribute to reducing emissions and stabilising climate change (mitigation) and take into account the unavoidable consequences (adaptation)” (p2). This included guidance for regional planning bodies, particularly on the development of Regional Spatial Strategies. Alongside broader delivery principles and a reiteration of the need for renewable energy targets, the document also “encouraged” (p5) regional planning authorities to include carbon trajectories for new developments, but - slightly contradictorily - not use these trajectories in making decisions on planning applications. Although not directly related to the following discussion, this is worth bearing in mind as part of a move towards more central coordination of local and regional climate change policy.

Local Area Agreements

The nationwide roll-out of Local Area Agreements in 2008 – whereby local authorities, with their Local Strategic Partnerships, agreed up to 35 targets based on the National Indicator set – was championed as a means of devolving decision-making away from central government. Here, Government Offices (GORs) took the role of the decentralised ‘administrative state’ (Dryzek, 1992) as a conduit for central government. They were responsible for negotiating Local Area Agreements (LAAs) with local authorities and Local Strategic Partnerships. No indicators were mandatory in Local Area Agreements, but GORs did have to agree to those that were chosen and could potentially veto decisions made by local authorities and LSPs, while the Secretary of State for Communities and Local Government was ultimately responsible for signing

off LAAs. All local authorities were monitored through Comprehensive Area Assessment (CAA) regardless of their inclusion in LAAs.

The third round of LAAs, published in June 2008, and the linked CAA included for the first time a range of climate change related indicators. The new National Indicator (NI) set included performance monitoring of local authority contributions to climate change mitigation and adaptation: NI 185 referred to local authority 'in-house' carbon emissions; NI 186 to local authority-wide emissions, NI 187 to fuel poverty, and NI 188 to climate change adaptation. NI 186 was the first example of mandatory spatial emissions reporting in the UK. This indicator was the top priority within Defra for inclusion in LAAs (Government Office Yorkshire and Humber, 2008), and as such GOR officers were expected to push for their adoption by all local authorities and LSPs.

Instrumental Ties: Calculation and Mediation of Emissions

The most significant developments in spatially governing regional carbon management came through the increased monitoring of emissions, as well as a new role as mediator for Government Offices in the monitoring of local authority emissions through the CAA and local authority emissions targets associated with LAAs. In terms of emissions monitoring, there was a centralisation of methodologies through the annual publishing of Defra/DECC local and regional emissions data, alongside continuing uncertainty regarding the extent of accountability (in both calculative and political senses of the term) of the regions. LAAs and CAAs also brought about a range of questions regarding the future role of regional actors in governing carbon management, potentially suggesting a move towards, or back, to the 'managerial' region – described as 'pragmatic' regionalism in Chapter 3 – for this policy area, which chimes with an emphasis on the 'strategic' role of regional actors in the SNR.

Governing from above: emissions monitoring

Carbon management policy at the regional level slowly began to shift towards being bound by more formal ties to central government. Two sets of issues arose during the

research period that related to ‘direct’ governing from above, one of which was a fairly subtle process of aligning emissions methodologies and one which may have logically followed on from this – the development of disaggregated targets for the regions – but which did not. These two sets of issues are of minor importance within the wider understanding of changing carbon management policy: they did not coerce actors into action; nor did they include stringent mechanisms of reward and punishment. But they do point towards a gradual development of more specific scalar roles – vaguely akin to a form of environmental fiscal federalism (Oates, 1972; 2002) – including a developing hierarchy of authority in climate policy.

Defra/DECC emissions monitoring

As evidence of a fairly ‘covert’ process of governing-by-authority, although statutory regional bodies were not formally monitored with regard to their action on climate management, Defra did publish annual regional emissions levels, based on AEA Environment (2005; 2006; 2007a) monitoring data. From 2008 onwards, this data was given National Statistics status (see National Statistics, 2010). As a result this tended to form the basis of emissions monitoring for regional agencies (see Table 18). Both the North East and South West used Defra/AEA monitoring data to assess their regional emissions, again because this was more “politically expedient” rather than being the most robust or ambitious route:

We’ve taken a quite pragmatic approach; it’s much easier to focus on the carbon emissions approach that Defra use. There are more subtle methods on the horizon, but it’s a political issue; to get it through we had to be pragmatic and look at what was politically expedient.

Regional Policy Officer, South West

Similarly, Yorkshire and the Humber’s *Progress in the Region 2007* reported on production-based GHGs measured through Cambridge Econometrics’ REEIO (Regional Economy Environment Input Output) model, but also shows Defra ‘point-source’ CO₂e statistics. But by 2008, all reporting referred to Defra statistics. The use of a set methodology for LAAs (see discussion below) also meant that if regions tried to be consistent, they were bound to the Defra/AEA model.

Table 18: Methodologies used in measuring GHG emissions

	<i>Data Source</i>	<i>Target</i>	<i>Methodology</i>
National - Kyoto	Defra UNFCCC reporting	12.5% (2008-12)	Production based
National - Labour	Unclear	20% (2010)	Unclear
National - CC Act	Defra Environmental Accounts	80% (2050)	Point source
Regional - National monitoring	Defra Environmental Accounts	N/A	Point source
NI 186	Defra Environmental Accounts	Varies	Point source
Yorks and Humber	Defra, SEI, Cambridge Econometrics	20-25% (2015)	Differs across documents

This also introduces a second, potentially more fundamental issue. While Yorkshire and the Humber's aspirational target made no distinction between local and regional emissions by monitoring all emissions as 'regional'; the Defra approach did the opposite. Here, the region was simply an aggregation of local authority emissions. This points to a notion of the region as purely an intermediary, at most a constrained mediator, between supra-national or national government and local authorities. It gave no sense of where the much-vaunted 'added value' was in having a regional dimension to carbon monitoring and management. It is also worth noting at this point that guidance on local emissions targets in LAAs (AEA/Defra, 2007) lists a range of 'local' and 'national' actions as important in reducing local emissions, but no 'regional' actions. Again, the regional tier of governing was considered incapable of change in its own right, something that the network of RDAs recognised, and contended with:

It is important that innovative action by regional bodies be accounted for ... Regional activity is generating additional carbon savings and without this recognition, there will not be clarity on how the UK's overall carbon reduction targets are being met.

Memorandum submitted by the RDAs to the Environmental Audit Committee, 2008

This is drawn out further below in discussing the process of calculating and negotiating NI 186 in LAAs. Before doing so, however, the discussion moves to a 'non-event': the proposal and rejection of mandatory targets for the regions. This deepens the sense of uncertainty about where the region should sit within emerging carbon management regimes.

Following the submission of the Climate Change Bill and the reorganisation of regional structures, there was some speculation about the possibility of mandatory disaggregated targets being introduced for the regions. In initial interviews with regional policy actors in the three regions there was a belief that mandatory spatial carbon reduction targets were likely to be part of the final post-SNR regional settlement, alongside targets for GVA and housing. Around the same time, the cross-party House of Commons Environmental Audit Committee (EAC) launched an inquiry entitled *Climate change and local, regional and devolved government*. A core element of this was to determine “to what extent should there be disaggregated targets for different levels of government?” This included discussion of mandatory regional spatial targets. The responses to this inquiry revealed a deep level of uncertainty amongst regional actors across England, despite a degree of support for mandatory disaggregated targets. The East of England Development Agency’s submission was typical in this respect:

There is still no clarity as to whether the Government intends to cascade national targets to regional and local level or whether it expects regions and local authorities to establish their own targets which will be amalgamated into the national target. There is also uncertainty as to whether regional/local targets as set by central government will be legally binding and how the Government will ensure fit with the targets which have already been set by regions or whether the expectation is that the existing regional/local targets will be abandoned in favour of the Government’s targets ... The Government needs to make a clear, urgent decision on how it intends to handle regional and local carbon reduction targets ... There needs to be a robust and consistent process for cascading targets from the national level through the regions to local authorities.

EEDA Submission to EAC, 2008

Respondents in the three regions had also engaged in “a fair amount of discussion” (policy co-ordinator, NE) with Defra with regard to the Climate Change Bill and the disaggregation of targets. In the final EAC report, however, the Government submitted their view that they were “not in favour of disaggregated targets” (*ibid.*, p7).

On the surface, then, this is a bit of a ‘non-issue’. But this does link to the problems caused by governmental ‘non-decision making’ discussed in the analysis of first wave action. Regional actors were clear only in their lack of clarity about government

intentions; and in the event the government introduced spatial accountability measures through targets at national and local levels, but left an ambiguous gap for the regional tier. So, if the regions were not to be held directly accountable for their own action, what was their role to be within the emerging calculus of carbon spaces? To this we now turn.

Regional actors as mediators of governmental programmes

The introduction of LAAs, and specifically NIs 185 and 186, brought about some changes to the role of regional organisations in governing carbon management. These changes included strengthening of the role of some policy actors as well as introducing a more formal *mediating* role for the regions, through the activities of GORs as a conduit for central-local relations. This took place both through enabling actions to help governed entities meet national/supra-national policy requirements and also by potentially strengthening processes of governing-by-authority from national government; that is, acting on behalf of government as a localised expression of power (see Allen, 2003). NI 186 is of particular interest here, as it marked the introduction of spatial carbon monitoring and targets at the local level, and opened up a range of issues regarding the spatial and scalar politics of carbon management. This included not only developments regarding the *governing* role of regions, but also understandings of the region as a *space*.

NI 186 – and the optional LAA indicators more generally – pose a slightly tricky problem in terms of attempting to define it as a governing mode. It may, for example, be seen as a form of authority, induction, or enabling mode. In terms of governing by authority, LAAs were compulsory and every higher-tier authority in England agreed one. National Indicator 186 was also automatically monitored through CAA, but there was no statutory compulsion to achieve any set level of emissions reductions unless LSPs, led by Local Authorities, took up NI 186 as a basis for a target in their LAA. However, Defra did have NI 186 as their top priority for environmental indicators. As such, GOR officers were expected to ‘push’ for its inclusion using more ambiguous exertions of power. Whilst LSPs and local authorities were committed to meeting the agreed targets, the consequences for failure were unclear (see ‘monitoring’, below). There was,

however, a small element of induction or provision – depending on the way the process is viewed – involved in the LAA process: LAAs come with a small pot of money tied to achievement of goals.

Table 19: NI 186 in LAAs as Governing Technology

<i>Technology</i>	<i>Rationality</i>	<i>Mode(s)</i>	<i>Governing Agencies</i>	<i>Institutional Relations</i>
NI 186 Target (national govt)	Encourage action on GHG emissions reduction	Authority, enabling (provision)	Defra (DECC after Nov 2008)	Hierarchy
NI 186 Target (GoRs)	Encourage local authorities to take up a NI 186 target	Indirect authority, co-option (seduction and manipulation), enabling (provision)	Government Offices for the Regions	Hierarchy

Mediation through Negotiation: Authority, Seduction, Manipulation

The role of GORs, as the regional body charged with negotiating LAAs, demonstrates an emerging ‘politics of mediation’ in governing climate change mitigation, firstly as an arm of the administrative state; a localised ‘enforcer’ of national policy. Local authorities with their LSPs (henceforth referred to jointly as local authorities⁶⁹) potentially engaged in several rounds of formal and informal negotiations with GORs and across each stage of agreeing their LAA. In this process, Government Offices were seen as the “eyes, ears and mouth” (National Policy Manager) of central government in developing the finalised LAAs. As noted above, Defra guidance on LAAs set out NI 186 as the priority environmental indicator for Government Offices to ‘push’ for in negotiations, a process described by a Government Office representative in Yorkshire and the Humber:

⁶⁹ Although LAAs are supposed to be LSP-led frameworks, in the case of NI 186 negotiation was led by local authorities.

We negotiated the LAAs on behalf of central government, with the local authorities, LSPs.. So, obviously working for Defra in promoting the hierarchical pyramid that they have, with 186 at the top, and their expectation that all local authorities have at least one mitigation indicator. And our role was about publicising climate change, what support is available, new developments on guidance for each indicator, one to one meetings in negotiating each indicator ... we were encouraging and challenging them to include 186 and... then agreeing the specific targets later on.

Regional Policy Manager, Y&H

This description was echoed in the South West and North East:

Initial proposals come from local authority, the LSP, and then we'll get to see those, we'll comment so we have the opportunity to push particular indicators with particular authorities. In this round of LAAs we were very clearly given the message that they wanted to see 186 in every LAA. Now I don't see the point of LAAs if the government's going to say, 'we want that in every LAA'. They're supposed to be agreements based on local priorities ... We did push 186 with all authorities but we didn't insist on it.

Regional Policy Manager, NE

The above descriptions of the LAA process were also alike in emphasising that GORs did not attempt to *enforce* NI 186, although they did “push” for it. In both instances the actual methods of co-optive ‘persuasion’ are unclear, and this is something that was difficult to uncover in discussions with respondents. It appears, however, that these negotiations focused – on the whole – on softer forms of seduction, both through emphasising the benefits of including NI 186 – “we tried to remind them how good it would look politically to include it” (Policy Manager, Y&H) – and through pointing to support for the indicator, as described in the above quote from the Regional Climate Change Officer. They represented, in other words “the friendly face of authority” (Policy Manager, SW). Nonetheless, there was an underlying suggestion that local authorities were ‘challenged’ by GORs to take up NI 186 by implying the use of threatened authority. In the end, the Secretary of State could veto LAAs, and this underlay negotiations:

They didn't say, 'you must include this indicator', but they did stress that they wanted it seen there, and when that's backed up by the power of the State – even if they're not saying they'll use that power – you have to at least pay some regard to that. Because you know that they could use that power if they wanted to.

Local Authority Executive, Y&H

As with first wave developments, ‘indirect’ authority came to the fore; albeit this time more overtly stressed.

Defra was satisfied with the role that GORs played in negotiations, particularly in ‘selling’ NI 186 to local authorities, as evidenced in interviews and official statements, including the following:

Government Offices in partnership with the Department for Environment, Food and Rural Affairs (Defra) have proved highly successful in achieving the Government’s aim of ensuring that addressing climate change features prominently in LAAs.

Environmental Audit Committee, Govt Response 2008 p4

GOR officers in the Yorkshire and the Humber, South West and North East were also pleased with their own role in negotiating LAAs, with respondents unanimously keen to emphasise their success in achieving take-up of NI 186 and climate change indicators more generally. But the role of GORs flowed in both directions; they also were important in communicating local authorities’ perspectives to central government. Again, respondents working in central government praised the role of GORs in this respect:

...this is important: they communicated well with us, and other government departments, really well to put across local authority needs.

Policy Executive, Defra

In this sense GORs governed from below as ‘enablers’ of central government operations through provision of information, as well as for local authorities through operating as a channel to facilitate dialogue with central government. While central government was satisfied with the role played by GORs, analysis of NI 186-related guidance and discussions with local governing actors tells a slightly more nuanced story. This narrative draws out several political issues relating to the process of mediation, in particular around access to and manipulation of data, knowledge, evidence and monitoring procedures.

Of 150 LAAs agreed in 2008, 87 per cent (130) included at least one carbon reduction target, a seemingly encouraging statistic. 100 included NI 186, and of those that did not, a further 30 included NI 185 (local authority ‘in-house’ emissions). Of the remaining 20 LAAs, 13 included NI 188 (climate change adaptation measures). This left just seven LAAs with no climate change measures. However, this also shows that a third of local authorities did not take up an emissions target that involved instigating action outwith their own operations; seemingly a very high non-adoption rate for Defra’s highest priority indicator (for further discussion, see Eadson, 2008). Table 20, below, shows the key descriptive statistics for the targets agreed.

Table 20: NI 186 Targets for CO₂e Reductions in ‘Take-Up’ LAAs

<i>Year</i>	<i>Carbon reduction target 2008-11</i>				<i>Standard Deviation</i>
	<i>Mean</i>	<i>Median</i>	<i>Max</i>	<i>Min</i>	
2008-11 (n = 95)	10.5%	11.0%	15.0%	1.0%	2.2%
2008-9 (n = 87)	3.7%	3.4%	11.8%	0.0%	2.0%
2009-10 (n = 86)	3.2%	3.3%	7.0%	0.0%	1.2%
2010-11 (n = 86)	3.7%	3.7%	11.0%	0.6%	1.5%

Nb. Targets based on baseline year of 2005

In all, local authorities pledged to cut emissions by 26.4 mega-tonnes, equal to a 5.7 per cent reduction of total UK carbon emissions as measured through the indicator, or a 4.7 per cent reduction in the UK’s total ‘Kyoto’ carbon emissions in 2005. This would have provided quite a boost to the UK’s carbon accounts and to achieve such a reduction through implementation of NI 186 would appear to be quite an achievement.

A look at the level of take-up of the indicator in each of the case study regions may say something about the levels of authority, or the success of their co-optive efforts, being exercised by GORs.

Table 21: LAA take-up of NI 186 in Case Study Regions

	<i>LAA's with NI 186</i>	<i>Per cent of LAA's</i>	<i>Mean reduction target 2008-2011</i>
North East (n = 12)	7	58%	11.73%
Yorkshire and Humber (n = 15)	10	66%	11.95%
South West (n = 16)	12	75%	8.50%

Table 21, above, shows take-up of NI 186 in the three case study regions. As can be seen, there is a mixed picture; only half of North East LAAs included the indicator, while 81% of LAAs in the South West did. The North East also had the highest incidence of LAAs that include no carbon reduction indicators. This would initially suggest that local authorities in the South West were either (a) more politically tuned in to climate change mitigation issues or (b) had greater capacity to effect CO₂ reductions.⁷⁰ But it may also suggest that GOR Officers in the North East were less effective, or less willing to fulfil their governmental role in pushing for inclusion of NI 186. However, by taking a glance at the agreed targets within those that included the indicator, it becomes clear that the South West's LAAs agreed to significantly lower emissions reductions over the three years of the Agreement than in either the North East or Yorkshire and Humber. Perhaps, therefore, GOR Officers in the South West were simply more willing to negotiate targets in order to encourage the inclusion of NI 186. There was some sense of this in interviews, but nothing conclusive. There may also have been some degree of uneven application of intra-regional emphasis on the levels of reductions required within NI 186: for example, Bristol in the South West was permitted to commit to just a one per cent emissions reduction over the three years of the LAA. The case of Bristol is discussed in further detail below.

⁷⁰ Within each region there is no obvious geographic or political pattern to take up of the indicator - with the exception of the Humber sub-region in Yorkshire and the Humber, whose LSPs universally opted out of NI 186: as respondents noted, there was more pressing concern for adaptation issues following the floods of 2007 - so this appears to rule out many of the more obvious context dependent issues.

In April 2008, AEA Environment produced a report for Defra offering guidance on a ‘community climate change indicator’, alongside tables suggesting potential emissions reductions by local authorities over the period 2004-10. This report and updated data was then used in determining suggested targets for local authorities that adopted NI 186. Local authorities were supplied with figures via GORs, but these were pre-determined by Defra via AEA. While GORs were charged with delivery, they have little power to alter the framework for action in any way. This point was made in interviews by local and regional respondents: “AEA have projected 11 to 13 per cent for most authorities, and we just had a small band that we had flexibility to negotiate in if the local authority could provide justification for that”. Their ability to engage in ‘enabling’ activities was thus limited and they seemed only able to act, at best, as the ‘kindly face’ of authority.

Not only were the figures prescribed by Defra, but so were specific actions that should be taken to achieve the agreed cuts, through recommendations in the supporting AEA report. This report lists a total of 49 actions to reduce local emissions, split into national programmes, national programmes with local influence, and locally-led programmes. Somewhat oddly for a ‘local’ indicator, only seven actions – marginal actions on local transport such as ensuring residents’ tyres are at the optimum pressure to decrease petrol consumption – out of the total are locally-led. As noted above, there is no mention of regional actions within this, and again, there is no leeway given for GORs to suggest alternative actions or to allow local authorities to suggest different approaches. In all, there was “a lack of scope really for Government Office to have much say in how targets are met and what target should be set” (Regional Local Government Executive, Yorkshire and Humber).

Mediating knowledge: limited provision, unequal capacities

One area in which GOR representatives did have the capacity to enable local authorities was through the provision of knowledge, data and evidence. This emerged as a key issue in interviews with respondents and in the LAA negotiation process it was clear that some local authorities – many of which came under the banner of those ‘unbound’

to the region – were more ‘carbon savvy’ than others. These authorities were able to manipulate figures and make a case for a target different to that prescribed by central government. As noted, Bristol in the South West was able to make a case for just a one per cent CO₂ reduction over the three years of the LAA: government figures (AEA, 2008) suggested they should be able to achieve a 13.1 per cent reduction (see Eadson, 2008 for further analysis of this issue). This shows one way in which GORs, Regional Assemblies and regional local government associations failed to achieve a level playing field in the negotiation of emissions targets. The rationale behind emissions reduction scenarios, produced by AEA Environment on behalf of Defra, is in itself something that in excess of one-third of local authority respondents were unaware of. As such, they were automatically disadvantaged in terms of agreeing to a target: they did not know what the target referred to. In many local authorities they “were just really thinking, well that sounds about right, that’s similar to the national target, okay” (local authority officer, Y&H). Similarly, many of the smaller (‘unplugged’) ‘carbon naïve’ authorities did not possess the resources to effectively negotiate on targets: again showing a failure by regional organisations to provide adequate support.

The position for authorities that did not adopt NI 186 was similar. Some opted out of the target because they had recognised some of the inherent faults with the methodology, and instead took up NI 185 or a ‘185 +’ indicator, which expanded the influence of local authorities to include schools, hospitals and emergency services. Others had opted out because carbon management was not yet on the agenda for the authority: most commonly this was described by respondents as being a result of unwillingness from elected members’ to take this on. It was not clear exactly how they had resisted pressure from GORs to take up NI 186. One possibility was that some authorities were simply more truculent, and perhaps more detached from regional and national policy actors than others. In other words, maybe the ‘pushing’ from GORs could only be effective from those who recognised their authority, and who already had some level of engagement with the policy actors involved.

One respondent particularly emphasised the fact that data has not been readily made available to local authorities, either through Defra or the GOR flagging up where data might be found, suggesting that GORs – as in the experience of some respondents

during first wave practices – again acted as ‘gate-keepers and lock-keepers’ of information:

I mean I had to do a lot of digging: Defra haven’t published a lot of this data. There’s an extra layer of data that they didn’t put on the website that I had to get from AEA. But an extremely important layer of data. There’s only one colleague in the North East who’s recognised that lack of data and has requested to know how I did it. Which leads me to believe, or guess, that there’s no other authorities in the North East that have really nailed down what this indicator means. Because you can’t from the level of data on the website.

Local Authority Officer, North East

The East of England Development Agency (EEDA), in a submission to the Environmental Audit Committee also argued that “central government needs to provide robust and back-calculated databases, disaggregated to the regional/local level, to support this process” (2008). This was something acknowledged as a problem by national respondents, including a suggestion that the RDAs needed to play a greater enabling role post-SNR, but also that Regional Innovation and Efficiency Partnerships (RIEPs) would have a key role in relation to LAAs and climate change (discussed in more detail in ‘fractured regionalisms’ below):

There is certainly scope for a lot more knowledge exchange between organisations at all levels and there is, I suppose, an issue around different departments and agencies making more effort to share their knowledge with each other.

Policy Executive, Defra (now DECC)

Carbon savvy authorities also engaged in a more subtle process of manipulation. Availability of local emissions data meant that there was a two to three year time lag in data being published: targets refer to a 2005 baseline, and 2008 data was not expected to be available until the final year of the current agreements. A number of local authorities took this opportunity to manipulate the process by ‘front-loading’ their target so that the 2008-9 year has the highest projected carbon reduction; including, as it does, any reductions made in the years 2005-8. The LAAs with higher reductions in their first year were then able to commit to much smaller commitments over the final two years of the programme; the mean target for these LAAs was only 0.5 per cent higher than for the other ‘non-savvy’ Agreements (see Table 22, below).

Table 22: ‘Carbon Savvy’ LAAs compared to whole population

	<i>Mean Target</i>	
	<i>Whole Population</i>	<i>‘Carbon Savvy’</i>
2008-11	10.5%	11.0%
2008-9	3.7%	6.2%
2009-10	3.2%	2.4%
2010-11	3.7%	2.5%

Silent intermediary: monitoring

A third issue relates to the role of GORs in monitoring the targets, which continues to highlight the highly top-down nature of NI 186. On this issue GOR representatives were no more than silent intermediaries for central government. All monitoring was to be carried out by AEA and Defra/DECC: “that’s a job for us; it’s centrally done, and really that’s the only way it’s possible to do it at the moment” (Central Government Policy Executive). This was partly pragmatic, but also shows the lack of control that regional and local actors had over the process. No easily utilisable tool was available to local authorities or regional actors to monitor changes to their own emissions, which made it difficult to challenge the monitoring data, particularly for low capacity ‘carbon naïve’ authorities.

Finally, respondents were not clear as to how they would be rewarded or censured for their progress on meeting targets. There was an overall financial reward offered for achievement of goals across the LAA as a whole, but not for individual targets. This meant there was a lack of incentive for local authorities to meet their specific goals, as long as most priorities were met. As such, respondents felt that this would mean that NI 186 could drop towards the bottom of priorities as local authorities focused on more politically achievable goals that met dominant economic and social policy lines. GOR officers recognised this, but argued that their role as ‘authoritative seducers’ came to the fore here in making sure that local authorities remained “on the ball” (GOR officer, SW) with NI 186.

The top-down developments in spatial carbon calculation started to map out a more clear route of disaggregated responsibility for certain regional actors – especially GORs – which points to a move towards ‘Type I’ multi-level governing of sub-national carbon management, with designated chains of hierarchy. These hierarchies also included differential governing modes, with national government adopting a more ‘traditional’ authoritarian mode once LAAs were agreed, and GORs taking on a more enabling role. It is in the negotiation process itself that power fluidities and ambiguities were more clearly asserted, however. Here, for example, (indirect) authority, seduction and manipulation overlapped as GORs attempted to persuade local authorities to take on NI 186, and then to agree to specific targets. At the same time, the absence of provision proved to act as a constraining mode of governing in itself by denying access to information to some local authorities, while other authorities were able to use their own resources to manipulate the process of target setting. For some local authorities, then, the role of GORs in constraining options gave the NI 186 process a more authoritative air, while ‘carbon savvy’ actors were able to turn the process into one of genuine negotiation based around various modes of co-option.

Associative Ties: Fractured Regionalisms

Alongside regulatory moves towards forms of instrumental ‘carbon control’, and attendant scalar politics, there were concurrent moves towards a second wave of associative regional partnership building. These were built in part on the back of the new regulatory arrangements, in part as a rejection – or lack of – co-ordinated efforts to develop inclusive regional partnerships on climate change, and in part as a result of continuing RDA attempts to engage with business communities to attract inward investment and modernise their ‘indigenous’ economies. The move towards the mainstream of political thinking, including economic development policy, brought some additional ‘legitimacy’ to carbon regionalisms as they became more closely tied to either central governmental instrumental programmes or used monetary induction and were more squarely focused on particular audiences. As a result, there was a fracturing of agendas along sectoral lines as regional climate change partnerships continued to

develop alongside the introduction and development of a range of other partnerships, as well as some scalar fracturing as sub- and city-regions began to develop their own regional climate change ‘identities’.

Sectoral Fracturing

By 2009 each of the three regions had their own first wave Climate Change Action Plans, as did the other five ‘non-case study’ regions. Yorkshire and the Humber produced a second iteration of their plan – *Your Climate, Our Future* – in 2009, which struck a slightly more discursively pragmatic tone than the previous document: it focused less on seduction and moral induction and more on sets of issues based around 10 ‘priority areas’. This perhaps reflected the lack of success in the previous strategy, but also that acting as an ‘umbrella’ for regional activity was increasingly difficult, as a number of other ‘regionalisms’ began to develop. While the plan was more focused – for instance attention on specific housing schemes in Kirklees and Rotherham – the actions themselves tended to be equally vague, being focused on ‘supporting’, ‘encouraging’ and ‘engaging’ in much the same manner as the first Plan. Stakeholder respondents expressed concern at the continuing lack of delivery framework or metric behind the plan, which prompted the inclusion of the following statement:

The plan does not list lots of detailed actions. It is not specifically linked to CO₂ targets and cannot provide a breakdown of how they will be achieved.

Your Climate, Our Future, 2009 p10

This statement reflects a level of pragmatism about the extent to which the Action Plan could be expected to achieve large carbon savings, but also perhaps questions the point of going to the trouble of creating one in the first place, particularly given that other Partnerships were being created to grapple with specific issues of carbon management.

The most notable new partnership was the introduction of Regional Improvement and Efficiency Partnerships (RIEPs), led by regional local government associations. These were introduced across the regions in 2008, and part of their ambit was to support local authorities in delivery on climate change agendas through the CLG and Defra funded

Climate Change Best Practice Programme. Central government actors had identified an issue relating to the piecemeal nature of support offered to local, and regional, governing bodies:

Coordination of support for local and regional government on climate change mitigation and adaptation is recognised by the Government as essential. This has been reflected in the approach taken to developing the Climate Change Best Practice Programme and the wider RIEP programme

EAC Report Government Response, 2008 p5

This funding – between £200,000 and £500,000 for each region per year – was designed especially to support Local Authorities to deliver improvements in their National Indicators related to climate change: NI's 185, 186, and 188. This included facilitating a network of local authority climate change practitioners to share best practice and knowledge in both the North East and Yorkshire and the Humber, while in the South West NI-specific networks were set up. For one respondent, these networks would be helpful in overcoming the knowledge gaps outlined in the discussion of the NI 186 target-setting process, above:

I would say that the RIEP climate change board could be more involved in the LAAs in future, and help to set targets that are really more likely to fit local capabilities.

Regional Local Government Representative, NE.

RIEPs role in delivering the Climate Change Programme also created a strange situation with regard to the work of regional climate change partnerships and related action plans, as the two streams of work overlapped somewhat. In Yorkshire and the Humber it was mooted that the Regional Climate Change Partnership take leadership of the climate change element of the RIEP, but the Climate Change Partnership decided against doing so; ostensibly because they felt it would distract from the work they were already doing:

I went to the climate change partnership and said 'do you want to act as leaders on this strand'. It seemed to make sense. But they said no! I came back to them 'but you could get £1 million a year to do it'. Their argument was though that it would distract them from their purpose. I thought, 'why on Earth would they not want to work on this'. And I think a big part of it is that they didn't want us taking over, us dictating to them ... But a big chunk of the action plan involves RIEP, so...

Regional Local Government Representative, Y&H

This issue fits with a wider criticism made by a number of local authority actors that the Regional Climate Change Partnership in Yorkshire and the Humber:

...continues on but seems to have been overtaken by events. There's so much other stuff going on and they just seem to be stagnating there. I'm not really sure where they sit amongst all the other stuff that's going on, even just at the regional tier.

Local Government Executive, Y&H

This is further compounded by the growth in associative regionalisms aimed at non-policy actors. As an example of this, a developing carbon 'new regionalism' began to take shape between 2007 and 2009, particularly in Yorkshire and the Humber, but also across the other regions. This developed further the notion of carbon management offering economic gains to those that acted fastest to develop new technologies and adapt their businesses to be more carbon-efficient and link with earlier ideas around the competitive region. Such ideas were clearly prevalent in the initiation of 'flagship' renewable energy projects in the three regions, but now they were beginning to develop specific project streams based around carbon reduction as a regional issue. The launch of *Carbon Action Yorkshire* (CAY) was particularly notable in terms of developing a business-focused carbon regionalism. CAY was incorporated in 2007, with the aim of signing-up the 100 'top companies' in the region – including the largest public bodies – to commit to reduce their carbon emissions. This apparently met with some success, and by March 2008 60 of the target companies had signed up to the partnership "with another 39 expressing an interest" (Y&H Sustainable Development Board, March 2008, p6). In November 2009 this was then subsumed under the banner of *CO₂Sense Yorkshire*, which drew together CAY with *Future Energy Yorkshire* and *Recycling Action Yorkshire*. The launch of these initiatives may also be seen as being implicit recognition that first wave action had made little or no difference to 'on the ground activity' and that more direct engagement with actors and organisations within the region was necessary.

There was also a degree of scalar fracturing of climate regionalisms, as a number of sub- or city-regional arrangements began to form. These took place partially as a result of the SNR's emphasis on multi-area partnerships at the city-regional level but also through a bottom-up push for supra-local action on climate change. Following the SNR the role of city-regions as an additional level of governing came to the fore, with the initial introduction of multi-area agreements (MAAs) in ten city-regions. Four of these lay within the case study regions: Tees Valley, Tyne and Wear, South Yorkshire and Leeds City-Region. Tyne and Wear took up NI 186 as a target, while Tees Valley had already developed a climate change action plan (Tees Valley Unlimited, 2007) as means of promoting action locally and regionally on carbon management.

The Tees Valley example represents an early rejection of the administrative region as a legitimate source of climate action. Led by Middlesbrough Council – now a Climate Change ‘Beacon’ Council – the five Tees Valley local authorities, alongside other ‘key partners’ including Scottish Power and the Environment Agency, developed a sub-regional climate change action plan, beginning in 2007 (*ibid.*).⁷¹ This included funding a full-time co-ordinator for three years and was developed from a recognition of (a) a lack of action and (b) a gap between local and national action on climate change. In making these points there was an implicit rejection of the North East region as having provided insufficient leadership on these issues: as noted in the previous chapter, first wave action in the North East was relatively slow in taking place, which left a gap for other actors to fill.

Unlike regional efforts, this plan and the related partnership contained no ‘regionalist’ sentiment, but was instead built around a coalition of local authorities, in particular aiming to build on good practice identified in Middlesbrough. Significantly, no regional agencies were involved, while local authorities and LSPs were the main delivery organisations for 17 of the 30 actions. ONE North East was identified for support on one action – “work towards the integration of renewable energy into the major new developments in the Tees Valley” – but was otherwise absent.

⁷¹ Tees Valley consists of the areas covered by Darlington, Hartlepool, Middlesbrough, Redcar and Cleveland and Stockton Borough Councils.

The Tees Valley Climate Change Action Plan also set a 8.75 per cent (minimum) and 14% (aspirational) target for reducing carbon emissions between 2000 and 2006-2012, as well as a 27 per cent minimum reduction 2012-2030, developed from 2000 baseline data for each LA in the partnership and introduced the Tees Valley Emissions Monitoring Protocol for measuring and reporting on emissions. A crude calculation taking LAA figures alongside the 2000 baseline minus major industry emissions suggests a 10.3 per cent reduction by 2006, suggesting that the sub-region had been relatively successful in meeting its goals. The Plan also sets out an objective to develop local authority action plans in each of the local authority partners, with the exception of Middlesbrough, which already had one. Unlike the regional partnership in Yorkshire and the Humber, this was successful in translating to local action: Darlington published its Plan in 2006; Stockton in 2007, with a refresh published in 2009; and Hartlepool's was published in 2007. Only Redcar and Cleveland did not have an Action Plan in place by 2009.

Fractured legitimacies

The profusion of associative regionalisms, sub-regionalisms and city-regionalisms developing between 2007 and 2009 led national policy respondents to report co-ordination of regional activities as “a nightmare”, with the attendant claim that “it’s a real case of too many cooks in the kitchen” (National policy co-ordinator). Seemingly, in the absence of strong institutional legitimacy – spatial or governing – for regional actors as a cohesive entity, they instead worked around specific areas where some shreds of legitimacy could be found. The rise of sub- or city-regional approaches post-SNR also raised questions about meso-level action on climate change. While the regions were seen as either too large, insufficiently active or not fully recognised by central government, local authorities still felt the need for some co-ordination between areas given both a lack of resources and the uncontrollable nature of carbon emissions as a ‘local’ issue.

RDA-led (new) regionalisms were developed around business efficiency, facilitating funding sources and developing new technology ‘clusters’; and GOR-led instrumental

regionalisms were developed around central governmental programmes. The Tees Valley also offered an example of bottom-up regionalism to fill a supra-local void in terms of climate change action, with legitimacy residing in the five partner local authorities 'buy-in'. In Yorkshire and the Humber the development of these partnerships and programmes prompted further questioning of the regional partnership's continuing role in governing climate action in the region. One local authority respondent, for example, offered the viewpoint that "they just seem to have outlived their purpose, but don't seem to know it themselves yet". Feelings were less strident in the North East and South West, but the carbon regionalist agenda had always seemed more muted in these two regions anyway, and the partnerships had operated alongside that general feeling with more restrained rhetoric.

Implications and conclusions

Was a shift taking place in the sub-national governing of climate change? Were we seeing a move in the direction of more instrumental 'carbon control' regimes? At the end of the research period this was not entirely apparent, not least because the institutional framework of the regions remained fluid. A strong emphasis on the facilitative and enabling roles of regional agencies remained, particularly in looking at different initiatives towards developing 'carbon regionalisms'. However, these regionalisms had in some ways shifted focus to reflect, for example, the development of new regulatory systems governing carbon emissions and renewable energy. At the same time, these new regulatory systems were difficult to place as necessarily reflecting a new era of 'carbon control', although it is clear that they differed from past regimes in the sense that they were emplacing direct top-down, quantitative, governing mechanisms that were largely absent previously. Yet, here, the role of regional agencies was somewhat muddled: for instance, GORs acted as a conduit for national government priorities, but it is difficult to tell exactly what their influence had been on the regulatory system and the continuing uncertainty about regions roles as 'accountable' carbon spaces – both in terms of calculation and democracy – which also made it difficult to analyse the emergent role of regional governing actors. These ambiguities appeared to have affected the development of policies in at least one of the study regions: the development of new regional partnerships and 'regionalisms' appeared to

reflect a continuing, and growing role for regions as supporting governmental programmes through strengthening government messages, providing communication of these messages, and facilitating partnership working to achieve governmental goals.

This was not an apolitical process, however. In particular an emerging multi-level politics of knowledge was starting to take shape across scales and networks. The LAA negotiation process highlighted this particularly, with GORs and other bodies apparently unsuccessful in ensuring that local authorities had equal access to knowledge and evidence. There is no evidence that this was a deliberate strategy, more a ‘missed trick’. More directly, through planning interventions and regional funding strategies, there was scope for further political conflict, which as yet has been relatively muted: this was, however, dependent on national government and the EU giving stronger and more co-ordinated messages – through different modes – on the need for regional agencies to intervene.

As regional action became more fractured across different agendas and spatial levels, developing a cohesive strategy at a regional level became more difficult. Against a background of more strategic focus for regional bodies, and carbon management entering the radars of actors working across a range of policy domains, this was perhaps inevitable. But, nor was this fracturing necessarily negative. Potentially, the development of smaller, policy-specific approaches could also have provided space for the construction of ‘proper’ experimental regionalisms: given clearer ‘shaping’ from national government, regions were able to build new coalitions around these and experiment with new approaches. By binding themselves to more specific rationales and technologies, these regionalisms were more able to legitimise their existence than the broadly-defined ‘holistic’ regionalisms represented by regional climate change partnerships and action plans. In doing so, these developments also led to questioning of the future of region-wide climate change partnerships. The future success of these partnerships appeared to lie in their ability to recognise opportunities to work with other developing regional approaches – as the Yorkshire and Humber CCAP failed to do in the case of the RIEP – but also in their own positioning within regional governing networks: the development of separate regionalisms that were not placed under the umbrella of the regional partnerships in part serves to show the lack of buy-in from high-level regional actors.

As I will briefly discuss in the following, concluding chapter, the election of the Coalition government in May 2010 marked a new era for the regions, which brought about plans to abolish RDAs and GORs, with some resources returning to the centre and Local Economic Partnerships – most of which are likely to be based around city-regional or sub-regional partnerships – taking on a narrower economic development role than the regional structures that preceded them. In July 2010, Communities and Local Government also announced that CAAs would be abolished in the spirit of ‘new localism’ (CLG, 2010), and it is likely that LAAs will go the same way. It is not yet clear what this means for sub-national carbon management arrangements, but a possible scenario would be that this narrower agenda sees a further centralisation of climate governance, with local authorities either ‘set free’ of specific targets, or – potentially – tied even more directly into governmental programmes such as the mooted local carbon budgets (FoE, 2010).

This research account has attempted to uncover the ways in which the governing of carbon management was unfolding in the English regions, with particular emphasis on spatial ‘meta-technologies’ aimed at re-imagining, calculating and connecting regions as ‘carbon spaces’. In doing so, the thesis has explored how these practices developed and changed over time, with two distinct waves of action identified. To draw this account to a close, reflection on the research aims, findings and implications helps to set the analysis within a wider political and theoretical context, whilst also looking to future avenues for research.

Research Aims

In the introduction to the thesis I set out four basic research questions as follows:

- How is carbon management being governed in the English regions?
- Specifically, how are practices of governing being used to re-imagine regions as ‘carbon spaces’?
- What are the specific spatial practices involved in doing so?
- How have these practices changed over time?

In essence this was an exploratory piece of research that aimed to bring empirical light to the role of sub-national governing organisations in carbon management amid suggestions that ‘carbon control’ was usurping sustainable development as the *leitmotif* of eco-state restructuring. I investigated the extent to which this shift might be viewed within a study of climate policy by first exploring early region-led attempts to engage with climate agendas – ‘pre-carbon control’ action – against practices formulated within

the context of rising governmental and popular interest in climate change as a policy agenda.

In particular, following the glut of policy and academic focus on the ‘new regionalism’ and region-led economic growth I was interested in the ways in which regional actors were attempting to develop spatial practices that tried to ‘re-draw’ the region as a carbon space through either discursive techniques to re-imagine the region, or recalculation of the region through monitoring carbon emissions. These were also cast within the notion of re-connecting the region through enrolling actors to a shared approach to carbon management: a ‘carbon regionalism’.

Yorkshire and the Humber offered a useful study in that regional actors were relatively early in adopting carbon management initiatives, especially in terms of outward-facing regionalisms. This was seen most clearly through the adoption of an aspirational emissions target for the region and then also developing the first regional climate change action plan in England. While not central to the study, views from the North East and South West were imperative in providing context to the decisions made within Yorkshire and the Humber as well as material that helped to build on understanding of some of the wider issues and trends in the regions.

Research Findings

The empirical studies drew out a gamut of matters for discussion, from the discursive framing of ‘regional’ issues through to the varying success of actors in connecting with those operating with different network or scalar relationships. At the forefront of this was an overarching understanding, particularly within first wave events, that while some level of activity on governing carbon management was taking place, there was very little direct action to reduce carbon emissions. Because of the temporal proximity of the research to second wave events, these too were only at the stage of being constructed, with the impact of these yet to become clear. The implementation of the two types of meta-technology in this thesis summed this up well, with the development of targets and action plans being treated almost as an end in themselves by policy-makers. Impact on actions that would reduce carbon emissions was minimal and the

further that investigation moved along potential routes of implementation of technologies, the more slender the connection between the technology and the actions of governed entities became. The target in Yorkshire and the Humber may be seen as an attempt to 'mainstream' carbon management, but this had limited success because of insufficient action to include it in decision-making processes. Where attempts were made within Yorkshire Forward to implement an internal target this also failed to have significant impact on governing practices. The Action Plan gave an opportunity to remedy this situation, but it failed to deliver any meaningful actions with 'on the ground' impact or link these to any sense of quantitative achievement of the regional target.

The reasons for these initial failures were manifold. They include the thematic legitimacy of climate change as a serious policy item, as well as the fact that policy makers at all levels were only just beginning to think about how to integrate the issue to existing policy structures. A range of different questions was also presented by the changing role of regional actors within multi-level governing processes, and also by the way in which policy actors understood and considered the geographic space that they were attempting to govern. Four core themes may be drawn out from these sets of issues. Two of these are quite specific and relate respectively to changing practices of governing and changing institutions. The second two consider more broadly 'the search for order' in constructing formations and some reflections on how policy actors approach the issues of imagining and re-imagining the region.

Changing practices

Changing practices may be described, in short, as follows. First wave sub-national action on carbon emissions was piecemeal, poorly resourced, and involved too few people. Sub-national carbon politics were largely characterised by disconnection and disengagement. Regional governing practices were essentially aimed to effect change indirectly through co-optive meta-technologies. This reflected an understanding by regional actors that their role was purely to 'set the strategic tone' or carry out some broad enabling and facilitative actions. This in part suggests that regional actors lacked the resources, or perceived autonomy, to be bolder in their actions, both because of

external – central government – and internal – regional policy networks – ambivalence towards carbon management as a legitimate policy agenda.

Around 2007, central government became more involved, including the introduction of a more coherent system of calculation. This resulted in a shift in roles, and a fracturing of agendas for regional actors. The emerging politics of governing carbon management stemming from these changes centred not around disconnection or disengagement, but on the variegated nature of connection and engagement: that is, the forms of resources made available (or not) and the forms – and focus – of power being exercised.

Second wave action saw a clear move towards the use of more instrumental technologies, tied to particular governing programmes, but these are not as simple to categorise as to say they were ‘authoritarian’, or ‘coercive’. They operated along the fuzzier boundaries between power modalities, and used more subtle means to manipulate and induce action. For example, while LAA targets and CAA monitoring were not examples of ‘classic’ governing by authority, they did begin a process of shaping the ways in which local authorities consider the space that they govern. Equally, the agreed targets were to be monitored on a ‘light touch’ basis and were agreed through negotiation rather than imposition. Nonetheless, the imbalance of resources between the parties involved meant that central government (Defra) and GORs were able to manipulate the process through the selective provision of knowledge and evidence to local authority officers.

Referring back to While, Jonas and Gibbs’ ideas regarding eco-state restructuring and carbon control (2010, see also below), sub-national sustainable development agendas in the 1990s and 2000s placed emphasis on the role of governing actors in developing partnerships and fostering associative practices to effect behavioural change. Early moves towards delivering specific climate policy goals relied on similar means. However, these did not disappear with the emergence of more instrumental practices of carbon control. Instead they became more focused around specific goals and rationales which often related to the instrumental programmes. Here the path-shaping activities of the state become clear. National government’s ambiguity towards climate change as an issue in the early stages of regional action propagated a sense of existential muddle with relation to both the region as a political entity and as a ‘carbon space’. As they became

more involved in sub-national activity, however, this led to a clear shaping of regional actions: they became more focused on specific areas of economic or central governmental concern.

Changing institutions

The research period also covered a number of institutional changes, which had a bearing on the way in which carbon management practices were developed. The 2007 Sub-National Review resulted in greater resources – in terms of statutory responsibilities – being given to RDAs, while the tone of the Review focused very much on ‘strategic’ economic development. As such, there were fears that environmental issues might become even more muted in regional policy. Instead there was a relative ‘explosion’ and fracturing of carbon management activity around a range of agendas, as noted above. In light of what was to follow in the 2010 general election this might be viewed as the beginning of the end of ‘standardised’ regionalism with the start of a new process of re-scaling and retrenchment of the state through the institution of more narrowly configured city-regions. Some of these city regions chose to focus on climate issues, but the majority did not; at least in their formal Multi-area Agreements.

The arrival of the Coalition government in May 2010 was marked by a number of announcements regarding the future of many of the institutions and programmes discussed in previous chapters. In the Coalition’s *programme for government* (2010) it was announced that RSSs would be “rapidly” abolished. In June 2010 it was announced that the RDAs would also be abolished (CLG, 2010), with GORs hearing that they would meet the same fate in the October *Comprehensive Spending Review* (HM Treasury, 2010). CAAs were also removed, with LAAs likely to follow suit. Some of the resources and responsibilities were to be returned to central government, some planning freedoms given to local authorities and some economic development responsibilities reserved for voluntary Local Enterprise Partnerships (LEPs). This may be seen as a continuation of narrowing of sub-national agendas and potentially signalling an even more squeezed space for ‘inclusive’ carbon regionalisms, although low-carbon agendas as a focus of economic growth priorities were relatively well represented in the 56 proposals submitted by prospective LEPs. Instead, both parties in

the Coalition have committed to implementing local carbon budgets (FoE, 2010), which may signal a further centralisation of resources and power, with a concomitant localisation of responsibility for carbon management.

Much of this thesis is dedicated to the relative failure of regions as institutional spaces, both as legitimate spaces of governing and more specifically in implementing climate policy. This requires some further unpacking, especially in light of the abolition of statutory regional bodies. First, the arguments do not propose that regions *per se* are intrinsically doomed to fail as political constructs. Nor do I propose that the English administrative regions could not have become ‘legitimate’ political constructs given the right conditions and resources. Rather, there were problems with the framing of what legitimacy they did possess and then a seeming over-extension of what could be achieved when compared to what actors were able – within the scope of national and international regimes – or willing – within the scope of individual organisations – to do. The problem with this ‘centralised regionalism’ was that (a) it was difficult for regions to frame policies around non-mainstream policy lines as they did not have sufficient freedom to determine how to utilise resources, (b) the institutional set-up of regions was such that it reflected central concerns and as such was not designed to deal with non-mainstream policy, and finally (c) when the centre became unsure as to how best to proceed, or did not give sufficient freedoms for regions to proceed themselves, there was insufficient bottom-up support for them to continue.

The search for order

Both first and second wave spatial practices may be framed as being part of a ‘search for order’, in terms of defining and delineating what climate change meant for governing actors and also in terms of what the region meant within that. In terms of region-led approaches, the calculation, monitoring and targeting of regional emissions in Yorkshire and the Humber was a particularly clear signal of attempts to reconfigure the region as a carbon space. This largely failed to carry weight with other actors within the region, however, and may be partially put down to the fact that this ‘search for order’ was highly disordered in both its construction and implementation. Clear bureaucratic lines were not implemented (*a la* Wiebe, 1967), but nor were these programmes linked

to a cohesive programme of associative seduction or facilitation. When regional actors developed broad-based regionalist approaches, these were not directly linked to targets and suffered from a lack of legitimacy in the sense that they did not give any real indication of the value of their actions. Partnerships and Action Plans – especially in Yorkshire and the Humber – also failed to filter through to other levels of governing and, again, seemed to suffer from a malaise of being unsure how to order activities on carbon management. The failure of these programmes to operate across scales may be said to have left these ‘regional’ actors as only regional in title: they were operating very much as localised actors with connections limited to a small number of other people in offices in Leeds (Yorkshire Forward and GOYH) and Wakefield (YHA and LGYH).

Second wave instrumental programmes carried a much clearer organising logic, however. Regions were more clearly tied into a national monitoring framework, with area-wide carbon targets for local authorities linked to specific roles for regional actors. These gave regions a source of legitimacy as part of a central governmental programme, which overrode some of the ongoing problems of spatial legitimacy that acted as an explanans and also consequence of the failure of first wave actions.

On the other hand, second wave associative programmes, built on a tighter instrumental logic, in some ways created an even more disordered sub-national space of carbon management. This disorder had some negative effects: for example, in creating difficulties for those attempting to co-ordinate – or order – carbon management, and in developing overlaps between programmes (see the discussion on the relationship between the REIP and the RCCAP in Chapter 12). At the same time, however, a clearer process of metagovernance from ‘above’ helped to create a space for the beginnings of genuine engagement with carbon management issues across different sectors based around specific goals. In a sense one might therefore argue that the beginnings of clearer spatial regulation of carbon management may have worked to start off a process of proper experimental carbon regionalism had the regional tier not been so abruptly curtailed in 2010. This perhaps also reflects the wider tensions between ‘creative destruction’ and ordered regulation in capitalist economies.

Building on the above, some wider conclusions can be drawn about the way in which policy actors imagined and then attempted to re-imagine sub-national space. The ability to re-imagine the region as a carbon space was hampered from the start by the fact that initial imaginings had not reached any settled understandings in the first place, and had undergone ongoing uncertainty. Creation of a new policy domain on top of existentially muddled infrastructure that already sat upon unsteady and shifting sands simply added a new level of uncertainty for policy-makers. What the 'carbon region' might look like, or whether such an object could in fact be constructed was not explicitly considered. Similarly, regional policy-makers did not spend a great deal of time considering their role in relation to the space they aimed to govern: for instance, what resources they had at their disposal and which different power modalities they could exercise. Instead, they chose to follow well-trodden policy routes used in other domains. This was problematic, in part because of a lack of 'thematic legitimacy' for climate change as a policy area, which also impacted on the level and types of resources available. As a result, the co-optive action plans and targets had few levers to encourage others to get 'on board'.

Spatial carbon policy was calculated in both first and second waves through an understanding that it could be tackled through the deployment of policy across existing spatial containers. This may reflect the way in which many 'new' policy areas are developed. Tony Gore (2005, p1) suggests that this may reflect "a neoliberal concern to obtain control over complex or 'wicked' issues by attempting to insert connective strands into an institutional structure that remains fundamentally unchanged". Literature on spatial calculation and the sociology of accounting (see Miller, 1994) also highlights the post-enlightenment tendency towards 'making things the same' through calculative practices so that they can be easily compared and combined. The use of existing geographical boundaries therefore makes carbon 'the same' as other spatially calculated properties such as GVA per capita.

Simplifying responsibilities and boundaries through use of existing scales and territories may be beneficial in terms of inserting 'connecting strands' with other policy infrastructures and then co-ordinating action across different policy areas. The prevailing approach therefore views different spatial formations essentially as

containers, and as contiguous. But this desire to homogenise quite different spatial properties is potentially problematic. In particular, the calculation of carbon to date throws up three sets of dilemmas. First, there are issues as to how sub-national carbon calculations have viewed these spatial containers. For instance, certain aspects of sub-national space were excluded as national, or international concerns, while whole other sectors were left unconsidered in terms of suggested actions to deliver carbon reductions. Similarly, there were different views of how these containers were 'put together'. First wave regional targets measured the region as a 'flat' unit of space, without reflection of difference across that space, while centralised DECC monitoring saw regions as no more than an agglomeration of local authorities. On top of this was a seeming misunderstanding of the notion of scale: regional actors understood the region as operating 'above' local authorities, and as such were ambivalent about engaging with them. They instead attempted to by-pass them to interact with other 'regional' actors: 'regional' businesses, or regional public sector institutions such as the NHS. This left targets, action plans and partnerships somewhat divorced from 'real' scalar relations with, for example, local authorities.

Second, the region as a carbon container immediately frames the way in which it is measured and calculated, which gives rise to a more fundamental limitation to this approach to policy spaces. One aspect of this is that it means that only action that took place directly within the region counted towards regional emissions. For example DECC's point-source approach to emissions monitoring takes simply those emissions generated in local authorities 'at source'. This meant that the linkages between actors within the region and elsewhere were downplayed. That is, the 'embedded' emissions in consuming goods and services produced elsewhere are given little attention. Later iterations of the Yorkshire and Humber regional target referred to consumption-based methodologies. This included embedded emissions from various activities, but because the sources of these were outside of the contained region, and the region lacked the capacity and/or willingness to productively engage with the points of production, this meant that potential policy was limited to reducing demand for products.

Finally, the rise of national and international 'scaled networks', such as the international Cities for Climate Protection network, suggest that some actors are beginning to imagine carbon spaces as 'like-spaces' made up of urban areas with similar political

concerns or other properties. This is quite different from the notion of the nation state consisting of a number of 'russian doll' discrete and spatially contiguous containers, which poses questions about how national policy might engage with such imaginings within more traditional 'top-down' policy domains. For instance, policy actors could approach carbon management as an issue for different types of space – for instance, specific sets of policies for core cities, small towns, rural areas and so on – which may not sit together within a region, or perhaps even nation. It may even allow for groups of local authorities to develop their own shared 'spaces' as policy units, which again may not sit neatly together in a traditional spatial sense. This has yet to come out in policy considerations. Such an approach might mean a different understanding of the region. For instance, 'unbound' cities may form one type of policy network, scaled nationally or internationally, while in this scenario 'unplugged' spaces could become the focus of regional enabling measures: in many ways quite different from the cities-as-growth-poles approach taken by RDAs.

Theoretical Implications

This account drew on three core sets of ideas: exploring the construction of governed spaces through the notion of spatial and governing legitimisation; understanding the plural nature of spatial and power relations (within limits); and the need to develop a framework that could capture both the how and where of these relations, including the mediations and translations that might take place 'in-between'. Contributions have been made to the literature on each of these issues. More specifically the aim was to contribute to debates on eco-state restructuring and carbon control, with hints towards the implications of an emergent multi-scalar politics of calculation. This involved exploration of a way of capturing the multi-level exercise and mediation of power through re-working Harriet Bulkeley and colleagues' Modes of Governing framework.

As first discussed in the introduction through Italo Calvino's *If on a winter's night a traveler*, this research account has particularly highlighted the importance of studying the role of mediators and intermediaries in governing programmes, and of the translations that can occur in power modalities and the technologies themselves as they are mediated through chains of actors. In relation to the practices analysed in the previous chapters, this politics of mediation draws attention to how – for example – knowledge and evidence were manipulated by different actors in processes of calculation and the effects this manipulation might have on eventual policy outcomes.

Multi-level Governance theories can help to model these processes to some extent, and place emphasis on the connective strands between different actors, but this approach also fails quite significantly to either encapsulate (a) power relations between actors or (b) the multi-directional nature of power. In relation to the latter it might be that re-framing MLG as 'multi-site governing' helps to overcome this issue, although this thesis has been more concerned with exploration of (a), which is a more fundamental problem.

The Modes of Governing framework opens up these issues somewhat, by helping to focus on the specific ways in which new policies and strategies are developed and implemented; and how governing institutions may attempt to draw others into their own set of logics and practices. Re-framing the approach through more explicit attention to John Allen's thesis on the 'lost geographies of power' helps to further open up the subtleties of power, to give a potentially richer understanding of governing processes; especially when combined with a more flexible approach that takes into account the multi-site and multi-directional exertion of power. Re-working this approach has allowed for understanding of the fluid nature of power, the full constellation of processes and relations that comprise a governing practice and – of particular importance – the ways in which these are mediated by different actors across space.

In particular, attending greater focus to the translation of discourses, interests and governing programmes makes it possible to clearly trace the way in which such matters are mediated by others. This helps to find clear points of success or failure within

governing processes but also brings added depth to the understanding of implementation. The process of deploying a governing technology is illuminated beyond the initial actors and the eventual governed entity and instead clear fault lines are exposed. This also brings a more nuanced dimension to understanding multi-level processes: different rationales and power modalities are highlighted as they are added and removed from programmes as they pass through different sets of actors.

Carbon calculation and control

In Chapter 4, carbon control was understood as a continuance of ‘narrowing’ trends of ecological modernisation in practice. Analysis of first and second wave action on carbon reduction in the regions would seem to bear this out. For example, rhetoric within policy documents focused on the idea of ‘decoupling economic growth from growth in emissions’, through technological fixes, rather than understanding the problem as intrinsically linked to capitalist economic systems. Calculating and economising nature – in the guise of carbon – also grew as a theme, for instance in Yorkshire Forward’s use of a carbon calculator tool, and then the integration of emissions targets into LAAs. More broadly this is encapsulated by the focus in the Stern report (and subsequent ‘mini-Sterns’ for Liverpool and Manchester) on the cost of carbon, shadow pricing in governmental departments and continued development of different emissions trading regimes across Europe and North America. Similarly, carbon was seen as something that could be ‘made the same’ as other policy domains and implemented as a ‘connecting strand’ within a fundamentally unchanged governing infrastructure. Changes that did take place to sub-national institutions were not made out of any consideration for climate policy. The focus of second wave associative practices also showed a narrowing as well as fracturing of agendas as different institutions sought to build coalitions of engagement around energy supply and associated technologies, organisational efficiency and waste reduction. These all centre on changes to organisational behaviour and technological fixes, rather than fundamental societal transformation. Social justice elements do not feature strongly within these themes, nor do processes of democratic deliberation.

Clearly there were some quite important changes to the way in which carbon was spatially governed over the study period, and these changes do in part follow those of the 'carbon control' thesis. The introduction of Local Area Agreements, with regional actors as mediators in both authoritarian and enabling practices showed a clear scaling of carbon reduction policy, with delineated responsibilities. This moved towards a view of regions not as carbon spaces in themselves but as merely collections of more 'legitimate' or manageable spaces in the form of local authority areas. In first wave practices the relative importance of local authorities to regional actions was not always clear to regional actors, whereas in second wave actions they became a clear focus. Although the exact form of these instrumental programmes will change over the coming period, there are hints that spatial calculation will continue and potentially harden through the introduction of mandatory local carbon budgets.

The identification of two waves of carbon management policy within the research period is also important to note in that it sets emerging trends of 'carbon control' within the evolution of climate policy, rather than moving from an analysis of sustainable development to climate change as the central concern of eco-state restructuring. This allows an understanding not just of how concern for climate change increased in recent years, but what this means for different actors as carbon management moves from an associative goal to one of increasingly constraining instrumentalism on the one hand and selective enabling on the other.

The changing role and space of 'in-between' governing organisations takes this somewhat further, in showing a trend of 'stripping out' meso-level policy concerns. This saw a move from broad-based regions to a simplified structure of economic governance, to city-regions and now LEPs. LEPs potentially mark a final reduction of (city-) regional policy to a small range of specific economic interventions. The role of wider environmental policy within these is almost entirely lost, while carbon reduction is relevant only where it contributes to economic rationales. Indeed, the Coalition government has been short on definitive action on carbon reduction so far, while international progress on a post-Kyoto framework has also stalled following the identified 'second wave' of climate policy, or first phase of carbon control. There does, however, appear to be an incremental move towards carbon as a more mainstream 'currency' of calculation within governing at all levels.

The calculation of space is highlighted as an important research agenda within emerging literature on carbon control (While, 2010). This thesis developed this in further conceptualising the role of calculation in governing practices, the ways in which different forms of calculating carbon can frame policy decisions and the politics of knowledge and evidence that surround these calculations. A linked area of thought here relates to the moral tensions relating to targets and related calculations in themselves. The literature outlined in Chapter 4 on emerging academic debates on emissions targets and related programmes – including the carbon control thesis – focuses mainly on the potentially regressive nature of such types of calculations. This represents only one side of the moral issues relating to targets. On the one hand the methods by which calculations are constructed and deployed may, by the very nature of homogenising complex issues into a single number, result in the loss of important nuances and in turn become environmentally and socially problematic in their consequences. On the other hand, emissions targets and monitoring allow others to see a clear and concise indication of where an organisation, city or country currently is, and where they are aiming to get. Being able to say – as many have – that targets are not ambitious enough or that progress towards meeting them is too slow, shows that such calculations can also open up organisations to a degree of accountability and in many ways invites interested parties to explore the black box of policy formation. This, one might argue, is fundamentally a good thing. Rather it is the power relations involved in their deployment – for instance imposition by national government on local authorities – that determine the regressive or otherwise nature of calculations. It is therefore important to untangle whether targets and related calculations are in fact morally neutral devices in themselves, something which may become lost in focusing on the politics of their construction and implementation.

Analysing the development of carbon control from within carbon management policy formations rather than in contrast to sustainable development logics highlights some additional facets of the ‘rise of carbon control’ to those initially outlined by While, Jonas and Gibbs (2010). In particular, it highlights the messy nature of environmental policy formation, which is not always easily cast simply as state ‘strategic selectivity’. Similarly, the role of different interest groups and policy actors in developing new associative technologies around state programmes at urban and regional scales has

perhaps been underplayed by While, Jonas and Gibbs: while instrumental policies were certainly seen to be on the rise, the responses to these policies continued to tend towards softer enabling measures – and some increasing financial provision in specific sectors – rather than passing authoritative measures further down the chain of governing actors. That is not to say that this may change over time, particularly as carbon reduction and oil dependence imperatives become more keenly felt.

Limitations and future research agendas

While it is felt that this research account has something to offer in terms of empirical, conceptual and theoretical debates, various avenues remained unexplored, and others that were not explored in as great detail as may have been the intention at the outset. This is due in part to the nature of the research. This was an exploratory piece of research and as such took a deliberately broad view of governing carbon management in the regions. This meant confinement to within carbon management policy and some discussion of the inclusion of carbon management agendas within spatial rationales broadly speaking. As a result some of the debates take a broader view of events, rather than specific attention paid to – for example – the impact of policies on economic decision-making. This was in part enforced by lack of access to people working within RDAs, which shaped the research agenda somewhat. I would have especially liked to have spent more time exploring the impact of the Yorkshire Forward carbon calculator on decision-making within the organisation, which would have potentially provided a fruitful avenue for discussion within the framework of ‘re-calculating’ the region.

As noted in the discussion of research methods in Chapter 7, it was initially hoped to carry out some embedded research within an RDA or Regional Assembly, but this turned out not to be possible. Such an opportunity would have perhaps allowed for deeper saturation within the day-to-day deliberations of policy actors. This would have acted as an ‘added bonus’ to the material that I was able to generate through other measures, but was certainly not critical to uncovering the issues under consideration in this account. More likely it would have led to a different type of account, answering different sets of questions.

I reflected in the introduction on the issues posed by the demise of the regions in terms of the continuing validity of this thesis. It is worth reiterating here the belief that the research has generated findings that are sufficiently applicable beyond a specific set of institutional arrangements in a specific place at a specific time. Beyond this, however, some difficulties were caused by the level of uncertainty with regard to the future of regional institutions throughout the research period. For instance, respondents often found it quite difficult to respond within any degree of certainty to even the simplest questions regarding future plans. Similarly, the changing role of regional organisations muddled the waters somewhat in terms of climate change policy, in trying to untangle which changes resulted from regional upheaval, and which were as a result of debates relating more specifically to carbon management. This is inevitably reflected in the research account, as it has meant that a wide range of different debates about the role of meso-level governing as well as of environmental policy have had to be marshalled, synthesised and then also untangled in order to describe and explain the events covered. This is generally seen as a positive aspect of the research in that it allows for some relatively wide-ranging discussion about some fundamental issues regarding the politics of spatial formations, but it did also preclude a more ‘compact’ analysis of a very specific set of issues or events.

The theoretical focus was chosen deliberately to avoid taking an overtly ‘regulation’, political-economy or -ecology approach to the study. The aim was to be slightly more inductive in terms of uncovering the politics of carbon management and approach the emerging policy domain as a serious political issue. This involved more discussion of basic principles regarding uncovering the exercise of power or construction of spatial formations rather than taking an approach that tied itself to particular sets of political *a priori* assumptions. That said, the aim of the study was not uncritical in the sense of exposing political disjunctures, inequalities and underlying state selectivities (or lack of). So, while the ‘multi-level power modalities’ approach did not in itself begin with specific transformational goals, its utilisation allowed for the researcher to begin uncovering where such goals might be developed.

This thesis fits in with a wider programme of analysing the political implications of the state 'taking climate change seriously'. The second wave fracturing of associative carbon agendas across different 'strategically selected' policy areas – in particular energy, economic 'new regionalism' and specific local 'efficiency' agendas – is interesting in itself; in particular to view how these different agendas are variously framed and shaped. But perhaps of more importance – or at least interest to me – is further examination of the role of emerging calculative practices in the framing of political decision-making.

This could first be expanded through further comparative research into the multi-level politics of calculation in other national contexts, as well as further development of how these practices enrol certain spaces and actors while excluding others: both areas of political contention, such as air travel or those that are deemed less important, such as particular groups of disenfranchised actors or places. While this thesis focused on the original construction and translation of spatial carbon accounting, which provided a necessary understanding of how these practices have unfolded *within* carbon reduction policy, it would now be illuminating to turn to how this 'carbon calculus' (While, 2010) is being played out in the wider politics of governing. This would include emphasis on the way in which carbon calculation, including technologies such as shadow pricing, are beginning to impact on economic policy rationales, as well as the way in which such calculations pass along different policy 'chains'. This might include some emphasis on the wider behavioural effects of such technologies on organisations and individuals. Such discussion would benefit from deeper consideration in relation to the evolution of other policy domains, and in particular the evolution of calculation and the wider 'search for order' within – for example – the welfare-state, economic policy or even other environmental agendas (see for example, Hopwood, 1983; Miller, 1994; Kalthoff, 2005; Vollmer, Mennicken and Preda, 2008 on). It would also be useful to pay greater attention to the developing science of climate change to develop more nuanced frameworks regarding the calculative agendas of political actors. As yet political accounts – this one included – have only skimmed the surface of the political implications of carbon accounts and much could be learned from greater interdisciplinary engagement between social and climate scientists.

Second, and related, this research account pointed to issues relating to ‘unplugged’ and ‘unbound’, or ‘carbon savvy’ and ‘carbon naïve’ local authorities. While emphasis on emerging – or experimental – practices within unbound or carbon savvy authorities is important – and is the subject of growing attention – there are equally important questions that relate to those that struggle to keep up with changing agendas. For instance, what becomes of the urban hinterlands in city-regions within calculative regimes? While (2008) explored ideas of future non-economic growth agendas based around low-carbon competition and trading, but there are a range of concerns that are already beginning to play out regarding the level to which non-core cities and towns are acting on a level-playing field in relation to existing carbon management agendas and the extent to which they are able to effectively engage with what may become a second era of post-industrial economic restructuring in the West.

Finally, the modes of governing approach has been fleshed out in this thesis towards an approach that is more conceptually consistent with ideas of multi-level (or multi-site) governance; mediations, translations and mutations through networks; and multiple power modalities. This has helped to develop a more fully fledged ‘theory of change’. In order to develop this further, the approach outlined in this thesis requires further work in terms of testing in different policy domains, to answer different types of questions and in different spatial contexts.

Final reflections: non-human space in policy

Much of the analysis in this thesis pointed to the failure of governing actors to implement technologies that either act as strategic ‘steering’ measures for organisations, or make a difference to ‘on the ground’ delivery of carbon reductions. Most disappointing in the creation of new policy domains on carbon management has been the failure by mainstream policy actors to take the chance to ‘do governing differently’. As noted, plans across the regions – but also nationally and locally – detailed relatively similar approaches in terms of actions, seemingly through a lack of willingness to break from the regional policy ‘template’ as used in other policy domains. The creation of a

new policy domain, particularly one with such far-reaching and complex consequences for human life as climate change, provides an opportunity to consider alternative methods of governing, or to engage with new groups of human and non-human entities. For instance, the calculative practices outlined in the empirical chapters could have been utilised to radically re-envision the region as a genuine ecological space of ‘carbon flows’, rather than focusing on areas that were less politically contentious. Even within standard policy restraints, carbon regionalisms could have been built on genuine participation with local authorities, LSPs and individuals, rather than – in a misguided search for ‘added value’ – being based on acting around the margins of policy and spaces.

Reflecting more broadly, progress on carbon emissions reduction remains slow and subject to periods of time where seemingly little happens, as well as spaces of inaction. This is shown in this thesis through the microcosm of regional policy. But it is also a reflection of wider trends, epitomised in the failure of the Copenhagen summit in 2009 to deliver progress on ‘Kyoto II’ and the continuing reluctance of economically developed nations to act on their moral duty in taking a lead on emissions reduction and providing sufficient aid to those unable to escape the consequences of climate change. The responses that have been taken are narrow, limited and over time potentially socially and environmentally regressive. The Coalition government in the UK promised that they would be “the greenest government ever” (Cameron, in *The Guardian*, 2010), but had failed to live up to this billing at the time of writing. Large cuts to the budgets of DECC and Defra announced in the 2010 *Spending Review*, and the abolition of the Sustainable Development Commission as part of the government’s ‘bonfire of the quangos’ are particularly worrying portents for the wider consideration of environmental agendas in government.

It could be argued that policy-making as a whole is an attempt to grapple with the contingency and impermanence of existence. Nonetheless current ecological crises make recognition of the relativity, impermanence and plurality of space all the more critical for policy actors. There is some evidence that policy actors are beginning to acknowledge at least a small proportion of the challenges relating to the specific crisis

of climate change, but there remains a fundamental reluctance to grapple with the notion of non-human space and recognise that it is 'real'.

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Annex 1

Regional profiles

Table 23: Profiles of English Regions (ranked)

Region	Population	GVA per capita	CO2 Emissions		Action Plan		Emissions Targets	Policy Strucure
			Total	Per Capita	First Iteration	Second Iteration		
North East	8	8	8	1	2008	N/A	None	Partnership
Yorkshire and the Humber	6	7	3	2	2005	2009	20-25%, 1990-2010 (RES)	Steering Group / Partnership
East Midlands	8	4	7	3	2009	N/A	None	Steering Group
North West	2	6	2	4	2006	N/A	Intent to match national target (CCAP)	Partnership
West Midlands	4	5	5	5	2007	N/A	Intent to match national target (CCAP)	Partnership
East of England	3	2	4	6	2009	N/A	None	Partnership
South West	7	5	6	7	2008	N/A	None	Steering Group
South East	1	1	1	8	No single document	N/A	None	Partnership

Table 24: Respondents by job category

	Yorkshire and the Humber	North East	South West	Total
National Policy Actor	N/A	N/A	N/A	3
Regional Policy Director	4	0	1	5
Regional Policy Manager	6	4	2	12
Regional Policy Officer	2	2	0	4
Regional Stakeholder	3	2	2	7
Local Authority Executive	1	1	0	2
Local Authority Manager	7	5	3	15
Local Authority Officer	6	3	2	11
Local Councillor	2	0	1	3
Total	31	17	11	62

Table 25: Respondents by type of organisation

	Yorkshire and the Humber	North East	South West	Total
Central Government Department	N/A	N/A	N/A	2
National Policy Commission	N/A	N/A	N/A	1
Regional Development Agency	3	1	1	5
Regional Assembly	2	3	1	6
Government Office	2	1	1	4
Regional local government association	2	1	0	3
Stakeholder organisation	3	2	2	7
Local Authority / Council	15	9	6	30
Other	4	0	0	4
Total	31	17	11	62

Table 26: Interviews by Stage of Research

	Yorkshire and the Humber	North East	South West	Total
Stage 1	16	7	4	27
Stage 2	22	11	8	41
Total	38	18	12	68

Workshops and consultation events

Regional Strategies and Climate Change workshop, Yorkshire and Humber Assembly, July 2007.

Regional Climate Change Action Plan review workshop, Yorkshire and Humber Assembly, July 2008.

Regional Climate Change Action Plan consultation workshop, Leeds City Council, March 2009.

Meetings

Yorkshire and Humber Regional Climate Change Executive Group meeting, September 2007.

Yorkshire and Humber Regional Energy Forum board meeting, December 2007.

Sheffield First Low Carbon Group meeting, January 2009.

Focus groups

Yorkshire and Humber Regional Assembly Sustainable Development team, June 2007.

Sheffield City Council Sustainable Development team, March 2009.