

Meaning Making and the Policy Process:

*The Case of Green Infrastructure Planning in the
Republic of Ireland*

by

Michael Lennon

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Cardiff University

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Abstract

Prior to 2008, reference to green infrastructure (GI) in Irish planning, advocacy and guidance documentation had been limited. However, by November 2011, GI was referenced in statutory guidance at national, regional and local levels, while also enjoying reference in many non-statutory planning policy and advocacy documents.

This thesis seeks to examine and explain the processes which facilitated the rapid emergence, evolutionary trajectory and institutionalisation of GI planning policy in Ireland. Specifically, the investigation seeks to critically examine *why* and *how* GI was introduced, interpreted and advanced in planning policy formulation in Ireland between November 2008 and November 2011. Situated within the field of interpretive policy analysis, the thesis adopts a discourse centred approach focused on the context sensitive constitution of the 'meaning(s)' of GI. The potential implications of such meaning(s) are also examined. The research involves extensive documentary analysis of both Irish and international planning policy related material. The investigation also involves the analysis of semi-structured interviews with 52 interviewees from the public, private and voluntary sectors. Information obtained from participant observation at 2 planning workshops is scrutinised.

The thesis provides a number of original empirical and theoretical contributions to knowledge. This is achieved by presenting a critical interpretive analysis of policy dynamics in a context where attention to 'meaning-making' is largely absent in academic literature regarding landuse planning. The research identifies, examines and discusses the influential roles played by planning rationalities, motivated agents, professional networks and timing in the dissemination and institutionalisation of a new policy initiative within Irish landuse governance. The thesis also provides a broader contribution to understandings of the policy process by presenting an innovative theoretical explanation of how representation and interpretation may shape the content, currency and consequences of policy.

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List of Abbreviations

ATC	Athy Town Council
AGMA	Association of Greater Manchester Authorities
BA	British Sociological Association
CA	The Countryside Agency (UK)
CABE	Commission for Architecture and the Built Environment
CCC	Carlow County Council
CCW	Countryside Council for Wales
CECC	Clare County Council
CF	The Conservation Fund (USA)
CGIF	Cambridgeshire Green Infrastructure Forum
CILT	Central Indiana Land Trust
CNT	Centre for Neighbourhood Technology (USA)
CSO	Central Statistics Office (Ireland)
DCC	Dublin City Council
DCLG	Department of Communities and Local Government (UK)
DLRCC	Dun Laoghaire Rathdown County Council
DoAF	Department of Agriculture and Food
DoAHG	Department of Arts, Heritage and Gaeltacht
DoAHGI	Department of Arts, Heritage, Gaeltacht and the Islands
DoCRGA	Department of Community, Rural and Gaeltacht Affairs
DoECLG	Department of Environment, Community and Local Government
DoEHLG	Department of Environment, Heritage and Local Government
DRA	Dublin Regional Authority
EC	European Community
EEA	European Environmental Agency
EPA	Environmental Protection Agency
ESRC	Economic and Social Research Council (UK)
EU	European Union
FCC	Fingal County Council
FI	Fáilte Ireland
GCC	Galway City Council
GDA	Greater Dublin Area

GI	Green Infrastructure
GLA	Greater London Authority
HC	Heritage Council
IC	Infrastructure Canada
IEEM	Institute of Ecology and Environmental Management
IEI	Institute of the Engineers of Ireland
IFA	Irish Famers Organisation
ILI	Irish Landscape Institute
IPI	Irish Planning Institute
KCC	Kildare County Council
KKCC	Kilkenny County Council
LI	The Landscape Institute (UK)
LPI	Land Policy Institute (USA)
MCC	Meath County Council
MERA	Mid Eastern Regional Authority
NDP	National Development Plan
NE	Natural England
NGO	Non-Governmental Organisation
NIA	Northern Ireland Assembly
NPWS	National Parks and Wildlife Service
NSS	National Spatial Strategy 2002-2020
NTA	National Transport Authority (RoI)
OCC	Offaly County Council
PCC	Plymouth City Council
PCSD	President's Council on Sustainable Development
QUANGO	Quasi Autonomous Non-Governmental Organisation
RIAI	Royal Institute of the Architects of Ireland
RICS	Royal Institute of Chartered Surveyors (UK)
RoI	Republic of Ireland
RPGGDA	Regional Planning Guidelines for the Greater Dublin Area
SC	Sports Council
SCC	Sligo County Council
SDCC	South Dublin County Council
SERA	South Eastern Regional Authority

SG	Scottish Government
SRA	Social Research Association (UK)
TCPA	Town and Country Planning Association (UK)
TEEB	The Economics of Ecosystems and Biodiversity
UCD	University College Dublin
UK	United Kingdom
USA	United States of America
UTF	Urban Task Force (UK)
WCC	Wicklow County Council
WDCC	Waterford County Council

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SECTION 1: INTRODUCTION TO THE THESIS

(Chapter 1)

This section introduces the reader to the thesis topic, provides a brief outline of the theoretical perspective adopted and specifies how the thesis provides an original contribution to knowledge. It comprises just one chapter.

Chapter 1 introduces the research aim, objectives and questions and the thesis. It also outlines the thesis structure.

CHAPTER 1: INTRODUCTION

1.1 Introduction

Policies are ‘aims or goals, or statements of what ought to happen’ (Blakemore and Griggs, 2007, 1). Consequently, the policy process is a site in which aspirations emerge, are debated and given representation. Scrutinising the public policy process thereby provides insight into how public interests are conceived, what these are deemed to be, and why some interests are given priority over others. In its broadest sense, this thesis seeks to provide such insight. The present chapter outlines how this is to be achieved. Thus, it begins by introducing the reader to the analytical perspective adopted in examining the policy process. Gaps in our knowledge of the policy process are then identified. How it is intended to address these lacunae is subsequently detailed. A summary of the case study examined in this thesis is supplied with the research aims, objectives and questions specified. A synopsis of the theoretical approach and methods employed is briefly provided. The chapter concludes with an outline of the thesis structure.

1.1.1 Meaning Making and the Policy Process

The policy process is conventionally understood as ‘applied problem-solving’ (Howlett et al., 2009, 4). From this position, policy making is conceived as a progression from problem identification to solution specification. Where difficulties arise in formulating such solutions, these are seen to be rectified by more information about the problem at hand (Guess and Farnham, 2011; Kraft and Furlong, 2010). However, what of problem ambiguity? What of when there exists a ‘state of having many ways of thinking about the same circumstances or phenomena’? (Feldman, 1989, 5). What happens when such ways of thinking are not normally seen as reconcilable, and thus, may generate vagueness, confusion and stress? (Zahariadis, 2003, 3). Here more accurate information may reduce uncertainty, but does not reduce ambiguity (March, 1994). This is because although related, ‘ambiguity’ differs from ‘uncertainty’. Whereas uncertainty refers to an inability to precisely predict something through inexactness or ignorance, ambiguity may be thought of as ambivalence (Criag and Martinez, 2005).

Consequently, in situations of ambiguity, neither problem identification nor solution specification can be so readily understood as ‘applied problem-solving’. Rather, they become enmeshed in ‘the messy realities of the public policy process’ (Howlett et al., 2009, 29). Here a conventional understanding of policy making fails as problem identification is rendered inconclusive and solution formulation is left irresolute. Thus, ‘more information is not the answer. The key is to understand how information is presented’ (Zahariadis, 2003, 21). Accordingly, in attempting to better understand the policy process,

We begin with the most important of all limits to high ambition. All our talk of “making” public policy, of “choosing” and “deciding”, loses track of the home truth...that politics and policy making is mostly a matter of persuasion. (Goodin et al., 2006, 5)

Hence, comprehending the ‘messy realities’ of the policy process involves attending to how policy persuasion works. This entails an investigation as to how the persuasive power of representation helps constitute the reality addressed by policy. Accordingly, in the context of policy studies, it may be conjectured that ‘representation is not a mirror of reality, but reality is an attribute of representation’ (Wagenaar, 2011, 59). By envisaging the policy process from this perspective, ‘Policy work, then, has to do with making meaning, and, in particular, with managing a variety of meanings’ (Colebatch, 2009, 129). Consequently, enhancing knowledge of the policy process necessitates an understanding of how reality is represented in policy debates through interpretations of signification, significance and applicability. Put simply, it requires attention to how ‘meaning making’ operates both in and through the policy process.

1.1.2 Interpretive Policy Analysis

This focus on the role of meaning making entails an appreciation that the reality both constituted and addressed by a policy cannot be understood simply through familiarity with facts alone. Instead, the reality of a policy is conceived to involve a ‘perceptual interpretive element’ (Kingdon, 1984, 115) wherein ‘sense making is an historically and socially contextualized process’ (Yanow, 2006b, 10). In this ‘interpretive approach’,

The meaning of things is neither natural or inevitable, but instead is socio-culturally specific. Meaning is a social product precisely because by acting in certain ways, individuals demonstrate their commitment to classifying a situation along particular lines.
(Inglis and Thorpe, 2012, 117)

It is through such meaning making processes that representations of reality are constructed, and the 'persuasion' of policy work gets done. Accordingly, an interpretive approach to policy analysis emphasises an understanding of policy realities by 'recognizing that objectivity typically means that we converse with people who agree with our standards of comparison' (Fischer, 2009, 153). Consequently, 'rather than asking the question "What are the costs of a policy?" the practitioner of interpretive policy analysis asks instead, "What are the meanings of a policy?"' (Miller et al., 2000, v).

Emerging during the early 1990s, academic literature focused on this 'interpretive turn' (Yanow, 2007b, 405) to policy analysis continues a steady path of growth (Hajer, 2011; Schwartz-Shea and Yanow, 2012; Wagenaar, 2011). This work seeks to unpack the 'black box' (Latour, 1987) of how the apparent objectivity of the reality addressed by policy may be constituted by representations of that world in policy formulation activity. Thus, 'Interpretive policy analysis goes behind the existing beliefs and their communication to examine how they came to be adopted' (Fischer and Gottweis, 2012, 18). Such study endeavours to answer complex questions regarding, 'What are the various ways in which we make sense of public policies? How do policies convey their meanings? Who are the "readers" of policy meanings? To what audiences do policies "speak"?' (Yanow, 1996, ix).

Much work within interpretive policy analysis presumes the policy process as an arena of struggle for dominance and control over issues of contested meaning (Howarth, 2010; Epstein, 2008). This thread of adversarialism is evidenced in the variety of conceptual frameworks dominating the terrain of interpretive policy analysis, be they in the form of: 'conflicts over language' in *discourse coalitions* (Hajer, 1995; 2003; 2005) and *narrative analysis* (Roe, 1994); the 'constant

struggles' of *policy paradoxes* (Stone, 2002); the 'us-them' of *interpretive communities* (Yanow, 2000; 2002); the 'ideological struggles' of *critical discourse analysis* (Fairclough, 2010) and *poststructural policy analysis* (Howarth and Griggs, 2012); or the 'intractable controversies' of *policy frames* (Schön and Rein, 1994). Even where such adversarialism is not centre stage, its existence is presupposed by foregrounding post-positivist methods of conflict avoidance, most prevalently in the form of normatively orientated 'collaborative planning' (Healey, 2005; 2012; Innes and Booher, 2003) or 'deliberative practice' (Dryzek, 2012; Fischer, 2009; Forester, 1999).

Significantly less interpretive policy analysis work has focused on understanding how meaning making operates through processes of policy persuasion in the absence of dispute or explicit attempts to avoid conflict. Although both Myerson and Rydin (1996) and Yanow (1996) provide some insight into how forms of representation may defuse disagreement in policy debates, they fail to supply a detailed description and explanation of the mechanisms through which meaning making may constitute the reality that resolves problematic policy ambiguity (see Chapter 12). Thus, there is a gap in our knowledge regarding the ways in which meaning making in the policy process facilitates the resolution of ambiguity and the dissolution of ambivalence through unanimous support for a policy proposal where there exists substantial potential for dispute. Indeed, there is a considerable gap in our understanding of how meaning making activities may suspend rather than resolve, potential disagreement on differences of interest. Likewise, there exists a gap in our appreciation of how meaning making may deflect attention from the discussion of logical inconsistencies in policy proposals, rather than confront them. Lacking is a comprehension of how such meaning making operates as a persuasive way to reduce potential friction consequent on the vagueness, confusion and stress engendered by problematic policy ambiguity. What is missing is an understanding of how the resolution of problematic policy ambiguity can occur rapidly and without apparent contest so that policy change '*just makes sense*' (Interviewee B16).

1.1.3 An Original Contribution to Knowledge

This thesis provides an original contribution to knowledge by directly addressing the deficit in our understanding of how meaning making effects policy change without conflict, despite reasonable cause for such. It achieves this by examining and explaining the emergence, evolution and institutionalisation of a new policy approach, which despite much scope for dispute, was widely supported and formally adopted in the apparent absence of disagreement or critical analysis. Employing an interpretive approach and attending to an appreciation of context, a case study method is used to enable detailed investigation of the role played by meaning making in the unchallenged ascension of a new policy approach. Specifically, this thesis,

- (a) Analyses how meaning making operated in issue representation and interpretation.
- (b) Examines how forms of representation and interpretation engendered a persuasive power capable of suspending traditional disparities of interest and deflecting criticism on possible logical inconsistencies in policy proposals.
- (c) Appraises how such persuasive power resolved problematic policy ambiguity and dispelled ambivalence through the apparent provision of policy direction.

In addition, the case study examined in this thesis provides an original contribution to knowledge by,

- (d) Investigating a landuse planning approach whose rationale has remained largely immune from critical inquiry, and
- (e) Probing the role played by meaning making in a jurisdiction where an in-depth interpretive scrutiny of landuse planning policy has not yet been conducted.

This detailed research facilitates an explanation of *why* and *how* the emergence, evolution and institutionalisation of a new policy approach may engender the reality addressed by policy. Such research also reveals *whose* interests are served by this policy reality. Additionally, this research permits deductions on *what* implications may arise from the institutionalisation a new policy approach. In so doing, this thesis enables the examination and explanation of how this policy reality reflects and reinforces the prevailing rationalities of planning practice. It is in such endeavours that this thesis provides an original contribution to knowledge.

1.2 The Case Study

1.2.1 Interpretive Policy Analysis in Ireland

Between 1995 and 2008 the Republic of Ireland experienced considerable economic, demographic and urban growth (Kirby, 2010; O'Hagan and Newman, 2011). During this period, landuse governance struggled to negotiate the complex planning and environmental policy issues associated with unprecedented pressures for urban and infrastructural development (Davies, 2008; McCann, 2011; Yarwood, 2006). While growth rates significantly reduced post-2008, policy issues associated with over a decade of intense development demands remain (Kitchin et al., 2012a). Keeping pace with such growth, and subsequently addressing its consequences, have preoccupied planning policy activity in Ireland for almost two decades. It is against this backdrop that new policy concepts have been sought to solve multiple complex and pressing landuse governance issues.

Despite the emergence of new governance initiatives to address the problematic policy ambiguity associated with such growth and post-growth issues (Taylor, 2005; Walsh, 2010a), an interpretive approach to planning policy analysis in Ireland is limited (however see Walsh, 2010b). Indeed, following the emergence of the fiscal crisis in September 2008, planning policy analysis work in Ireland is predominantly focused upon addressing post-growth issues concerning the economic consequences of unfinished residential developments (O'Connor, 2011) and the formulation of policy initiatives to stimulate town centre regeneration (IPI, 2010). This work largely ignores the part played by concept representation in the policy

process, focusing instead upon the quantitative assessment of aggregated numerical data and the financial appraisal of options to remedy pre-determined problems (Kitchin et al., 2012b). What limited academic literature exists regarding the interpretive analysis of Irish planning policy focuses primarily upon conflict and contest (O'Rourke, 2005; Scott, 2008a; 2012). Consequently, in line with a broader gap in our understanding of the policy process, there remains a lacuna in our knowledge regarding the role played by meaning making in the ascension of undisputed planning policy concepts in Ireland. This thesis seeks to address this knowledge deficit.

Resultant from Ireland's relatively small population of just 4.6 million (CSO, 2011), and limited number of planning authorities (see Chapter 5, section 5.2.2), tracing the emergence, evolution and institutionalisation of such an undisputed policy concept in Ireland is facilitated by the restricted number of actors concerned with its advocacy in planning policy formulation. This restricted administrative and spatial context thus renders it feasible to comprehensively chart the path of a new policy concept's development and confidently identify the roles played by different actors in its advancement.

1.2.2 Green Infrastructure

In November 2008, Fingal County Council organised a green infrastructure (GI) conference in Malahide, North County Dublin, Ireland. Prior to this, mention of GI in Irish landuse planning advocacy and guidance documentation had been limited (Tubridy and O Riain, 2002; UCD et al., 2008). However, following this conference, reference to GI in such documentation increased considerably over the subsequent three years. Indeed, by November 2011, the GI concept was cited in Irish statutory planning policy at national, regional and local levels, while also enjoying significant representation in many non-statutory planning policy and advocacy documents.

Despite the swift emergence and institutionalisation of GI in Irish planning policy, by November 2011 the concept still lacked a unanimously agreed definition. In addition, a review of the concept's history in Ireland reveals that interpretations of

GI's meaning evolved and broadened considerably since it was first cited in 2002. Nevertheless, close scrutiny of how various agents construe GI's meaning reveals that the diverse interpretations of GI are united by a common thread, namely the concept's applicability to a spectrum of broadly conceived 'green' spaces and its specification as 'infrastructure' – something of necessity that can be planned and delivered in remedying the existing or predicted problems of development.

It is in this sense of manifesting a different, yet broadly shared perspective on how a particular set of problems should be addressed that the GI concept can be considered a new 'policy approach' to the planning and management of broadly conceived 'green spaces' so as to deliver specific functions for society. Although 'change' to existing policy may constitute an important element in this process through its aggregated affects and effects at particular levels of the policy hierarchy, the emergence of the GI concept as a new policy approach permeates multiple levels of the policy hierarchy, and in so doing, potentially alters the governance of many issues. Hence, the emergence of GI as a new policy approach refers to amendments in 'the principles' by which green spaces are governed, rather than simply policy change.

Thus, consideration of the emergence and institutionalisation of the GI concept as a new policy approach in Ireland begs a number of important research questions, foremost among which is *why* did the concept emerge in Irish planning policy debates, *what* does it mean, and *how* have these meanings evolved? No sooner have such questions being broached than an additional series of closely associated queries emerge as to *who* advanced the concept and *why* did they chose to do so, *how* was the concept advocated, *why* did it attract so much attention, and by *what* means was it institutionalised? Such enquiries form the basis of the research presented in this thesis, and as such, are reflected in the project's research objectives and questions.

1.3 Research Aim, Objectives and Questions

1.3.1 Research Aim

The *research aim* of this thesis is to address a gap in our knowledge of the policy process regarding the important role of meaning making in the initiation, promotion and adoption of a new policy approach. Specifically, this research aims to investigate and elucidate the means by which this may occur in the absence of conflict, despite considerable potential for dispute. The thesis aims to analyse, understand and explicate the ways in which forms of representation and interpretation resolve issues of problematic policy ambiguity and provide direction in policy situations of solution ambivalence. In so doing, this research aims to explore, examine and explain the manner by which meaning making activities may constitute the reality addressed by policy. In this way, the thesis seeks to investigate if such meaning making activities reflect, reinforce, alter or dissolve the prevailing rationalities of planning practice.

1.3.2 Research Objectives

The *research objectives* of this thesis are to investigate, comprehend and explain the emergence, evolution and institutionalisation of the GI concept in an Irish planning policy context from its reintroduction in November 2008 to its widespread representation in statutory planning policy documentation in November 2011. Accordingly, examining *why* GI emerged in planning policy debates and *who* promoted it form central elements of the analysis. Closely associated with this is an examination of *how* GI was advocated in planning policy formulation. This provides a foundation upon which to develop an understanding and explanation of how forms of concept communication and representation in the policy process affect both the promotion and adoption of a new policy concept as ways in which to resolve an array of policy issues. Consequently, a key research objective of this thesis is to examine and comprehend the processes by which the GI concept was disseminated, and how these processes influenced the interpretation of GI's meaning. This facilitates inference as to the potential implications of the institutionalisation of GI in landuse planning policy in Ireland. Thus, intrinsic to these research objectives is an examination and explanation of the role played by

meaning making in the emergence, evolution and institutionalisation of GI in an Irish context. As such, this thesis seeks to provide both an empirical and theoretical contribution to our knowledge of policy process dynamics generally, and our understanding of landuse planning policy in particular.

1.3.3 Research Questions

This thesis seeks to answer five interrelated *research questions* that facilitate an in-depth response to both the empirical and theoretical aim and objectives of the research. These are namely,

- (1) *Why has the GI concept emerged and why is it advocated as a planning approach?*
- (2) *What does 'GI' mean and how is such meaning constituted?*
- (3) *How are meanings framed and advanced by different parties seeking to promote a GI planning approach?*
- (4) *By what means is GI disseminated and institutionalised within the landuse planning system?*
- (5) *What are the potential implications of the institutionalisation of a GI planning approach in Ireland?*

1.4 Theoretical Approach and Method

Both the theoretical approach and methods employed in this thesis have been formulated to directly meet the research aim, objectives and questions outlined above. Specifically, the research is premised on a 'constrained idealist' ontology wherein an external world is not denied, but rather,

...the existence of an external world places both constraints and opportunities on the reality-constructing activities of social actors, but regard[s] social constructions as having a high level of autonomy from it. (Blaikie, 2010, 17)

Harmonising with this ontological perspective is an epistemology of 'social constructionism' in which knowledge is neither revealed from an external reality nor formulated by reason independent of such a reality (Berger and Luckmann, 1966). Rather, this epistemological perspective holds that 'knowledge is the outcome of people having to make sense of their encounters with the physical world and with other people' (Blaikie, 2010, 22). As concisely summarised by Hannigan,

...social constructionism does not deny the considerable powers of nature. Rather, it asserts that the magnitude and manner of this impact is open to human construction. (Hannigan, 2007, 31)

This thesis reflects such ontological and epistemological perspectives by employing a discourse centred interpretive approach focused on the constitution and implications of the meaning of GI in an Irish context. Here, meaning is understood as comprising interpretations of GI's signification, significance and applicability. Situated within the field of interpretive policy analysis (Fischer, 2003; Hajer, 1995; Howarth, 2010; Roe, 1994; Schön and Rein, 1994; Stone, 2012; Yanow, 1996), this entails an exploration of the context dependent constitution of meaning, and consequently, the potential implications of such meaning(s) (Schwartz-Shea and Yanow, 2012; Wagenaar, 2011). In so doing, the thesis engages an investigation of how a policy's reality is discursively constructed. This demands attention to the role played by symbolic language, acts and objects as 'carriers of meaning' (Yanow, 2000, 17) in structuring the processes that give rise to ontological suppositions and their associated epistemological assumptions (Burke, 1966; Schiappa, 2003). Through a hermeneutic analysis of meaning in context (Gadamer, 2004; Schaffer, 2006; Soss, 2006), the investigation focuses upon how the interpretation of GI through the prism of prevailing professional rationalities influences perspectives on what it is deemed to signify and its traction within policy debates.

A case study research design is employed to examine and explain the constitution of meaning in context. Although a grounded theory method is applied, attention is given to extant theories both of the policy process and social constructionism in

offering ‘sensitising concepts’ (Bryant and Charmaz, 2007; Charmaz, 2006) for explaining the interpretation and advancement of GI as a planning policy approach.

The thesis includes extensive documentary analysis of both Irish and international planning policy related material. The research also involves the analysis of semi-structured interviews with 52 interviewees from the public, quasi autonomous non-governmental organisation (QUANGO), non-governmental organisation (NGO) and private sectors. Participant observation was also undertaken to supplement the documentary analysis and interviews. The triangulation of these research methods and data sources enabled the formulation of an explanatory hypothesis of the emergence, evolution and institutionalisation of the GI planning policy approach in Ireland between November 2008 and November 2011.

1.5 Thesis Structure

This thesis is structured into five sections. These are namely: Introduction to the Thesis; Literature Review and Theoretical Approach; Methodology; Case Study; and Discussion. These sections are subdivided into thirteen chapters.

Section 1: Introduction to the Thesis

Chapter One is the present chapter, whose function is to introduce the reader to the research aim, objectives and questions, as well as to outline the thesis structure.

Section 2: Literature Review and Theoretical Approach

Chapter Two provides a review of academic literature with respect to how GI has been interpreted and applied. As a detailed analysis of the introduction, application and development of GI in Ireland is provided in Chapters Five and Six of the Case Study Section, this chapter reviews GI related academic literature emanating from other jurisdictions. Specific attention is given to the interpretations of GI in North America, the European Union and the United Kingdom where the review indicates use of the concept is most prevalent. Academic literature on GI emanating from these jurisdictions is critically appraised.

The chapter concludes by outlining how this thesis seeks to address deficits in knowledge regarding GI's interpretation, emergence and representation in landuse planning policy.

Chapter Three outlines the theoretical approach adopted in the thesis. It identifies the Multiple Streams Framework (MSF) as offering the most effective means by which to structure an investigation of GI's emergence, evolution and institutionalisation in Ireland. Both the benefits and constraints of the MSF are critically appraised, with its use justified by reference to how its primarily macro-level theoretical assertions may be employed to configure a detailed consideration of the part played by meaning making in the policy process. Subsequently, a thorough review is undertaken of the merits and limitations of academic literature concerning the role played by discourse in the policy process. This chapter thereby provides the theoretical foundation that facilitates the explanation of the case study presented and discussed in subsequent sections of the thesis.

Section 3: Methodology

Chapter Four provides an outline and justification for the research methods employed in the thesis. Discussed and defended is the interpretive logic adopted in the investigation. Also described and explained is the decision to employ a case study research design. Additionally, this chapter provides detail as to the methods employed in the analytical process and justifies the application of these. An explanation of the role played by both research methods and data source triangulation is also presented. Furthermore, this chapter gives considerable space to an account of the data gathering methods employed in the research.

Section 4: Case Study

Chapter Five provides the context for the study by reviewing the emergence and evolution of the GI concept in Ireland between 2002 and 2011. This reveals a picture of the concept's development from an ecologically centred 'networked' approach to conservation planning into a perspective on an expanding selection of green spaces that emphasises the services such areas provide in aiding physical,

social and economic development. In tracing the concept's evolution, this chapter identifies and discusses the phases in the development of the GI concept in Ireland, namely the 2002-2007; 2008; and the 2009- 2011 periods.

Chapters Six to Ten analyses the emergence, evolution and institutionalisation of the GI planning policy approach in Ireland between November 2008 and November 2011. Chapter Six begins by identifying and discussing the initial impetus for introducing the term 'green infrastructure' into an Irish planning policy context. Chapter Seven then investigates and outlines the processes influencing the interpretation of GI and the implications of such understandings. Specifically discussed is the role of discourse in constituting assumptions of both what GI entails and how it may be implemented in planning activities. Chapter Eight extends this discussion by outlining how the processes steering the interpretation of what GI means prompts readings of it that resonate with the prevailing rationalities of Irish planning practice. Demonstrated is how such views are fortified by apparent familiarity with the evolving discourse's language and its consequent subsuming of antecedent tangential narratives, such as those concerning ecological networks and non-motorised transport infrastructure. Chapter Nine expands the investigation to explore how meanings are framed and advanced by different parties seeking to promote GI as a planning policy approach. Specifically addressed is how a degree of latitude in the interpretation of what GI means facilitates its stipulation as a solution to an assortment of problematic issues. Chapter Ten develops the discourse centred exposition presented in previous chapters by focusing upon an examination of policy entrepreneurialism on the increasing practitioner use of GI. This is undertaken by exploring the channels of concept dissemination and integration into planning guidance. As such, this chapter offers an explanation of how the GI concept was institutionalised.

Section 5: Discussion

Chapters Eleven and Twelve discuss the findings presented in previous chapters relative to extant academic literature. Particularly, Chapter Eleven considers the potential implications of GI's institutionalisation into policy on landuse governance

in Ireland. Chapter Twelve addresses deficits in our knowledge of the policy process by offering an exposition of the role played by meaning making in the initiation, promotion and adoption of a new policy approach. This chapter furnishes a model of causal processes that account for how the discursive constitution of a policy's reality influences how the principles of policy intervention are conceived and implemented. As such, these chapters employ the original empirical work discussed in Section 4 (Chapters 5-10) to present innovative contributions to our theoretical knowledge of the policy process.

Chapter Thirteen concludes the thesis. This chapter provides an overview of the analysis, an outline of its findings and a discussion of research contributions. An identification of the study's limitations is also furnished and some suggestions for future research offered.

The relationships between the thesis sections and chapters are detailed in Table 1.1. This table also illustrates how the thesis has been configured to facilitate a structured and comprehensive response to the research questions. In so doing, it shows how the thesis has been organised to meet its research aims and objectives.

Table 1.1
Relationship Between Thesis Chapters and the Research Aim, Objectives and Questions

Section		2		3	4						5		
Chapter Number		2	3	4	5	6	7	8	9	10	11	12	13
Chapter Title		What is GI?	Theoretical Approach	Methodology	Context	Narrative Production	Naming Attributes & Effects	Rationality Resonance	Narrative Modality	Agent Activity	Potential Implications	Theorising the Policy Process	Conclusions & Contributions
Research Aim		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Research Objectives		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Research Questions	RQ1: Why has the GI concept emerged and why is it advocated as a planning approach?	✓			✓	✓							✓
	RQ2: What does 'GI' mean and how is such meaning constituted?	✓			✓	✓	✓	✓	✓				✓
	RQ3: How are meanings framed and advanced by different parties seeking to promote a GI planning approach?	✓				✓		✓	✓	✓			✓
	RQ4: By what means is GI disseminated and institutionalised within the landuse planning system?								✓	✓			✓
	RQ5: What are the potential implications of the institutionalisation of a GI planning approach in Ireland?										✓		✓

SECTION 2: LITERATURE REVIEW & THEORETICAL APPROACH

(Chapters 2 and 3)

This section positions the thesis within pertinent academic literature. It first discusses the variety of interpretations of GI. Following this, a detailed discussion and justification of the theory consulted and employed in the thesis is presented. This furnishes the theoretical foundation essential to the case study analysis provided in Section 3. This section consists of two chapters.

Chapter 2 provides a review of academic literature with respect to how GI has been interpreted and applied.

Chapter 3 outlines the theoretical approach adopted in the thesis.

CHAPTER 2: WHAT IS 'GREEN INFRASTRUCTURE'?

2.1 Introduction

Investigating the emergence, evolution and institutionalisation of GI in Ireland necessitates a review of academic literature discussing how GI has been interpreted and applied. No academic literature has been identified regarding the specific use of GI in an Irish context. However, one of the objectives of this thesis is to provide a detailed analysis of the introduction, application and development of GI in Ireland. This is presented in Chapters 5 and 6. Consequently, this chapter reviews GI related academic literature emanating from other countries. In doing so, a brief but global review of the term's interpretation and application is undertaken. Deducing from this that the term GI is most frequently employed in North America, the European Union (EU) and the United Kingdom (UK), an appraisal of how GI has been interpreted in these contexts is undertaken. It is deduced from this review that there is a deficit of academic study critically appraising the term's employment. Thus, the chapter concludes by identifying how this thesis seeks to provide an original contribution to knowledge through addressing identified lacunae in academic literature regarding GI's interpretation, emergence and representation in landuse planning policy.

2.2 What is 'Green Infrastructure'?

Academic literature specifically employing the term 'GI' is limited. What does exist suggests that GI has a diverse lineage. Many academics identify its antecedents as efforts focused on addressing habitat fragmentation (Karhu, 2011; Sandström, 2002; 2008). Others trace its origins to a growing consciousness in the nineteenth century of a need to provide recreational access to green spaces for urban populations while concurrently addressing problems associated with flooding and public health (Benedict and McMahon, 2006; Mell, 2008). However, common to most, although not all, interpretations of GI is reference to 'networks'. This may be manifested in policy discussion wherein reference is made to GI as founded upon 'ecological networks' (Jongman and Pungetti, 2004; Opdam, 2002; Opdam et al., 2006), recreation focused 'greenway networks' (Fábos, 2004; Little, 1990), or

varying combinations of these (Walmsley, 2006). Such combinations often expand ecological and recreation networks focused planning concepts to include climate change adaptation functions (Ahern, 2007; Gill et al., 2007; Gill et al., 2009; Handley et al., 2007) and/or urban growth management (Amati and Taylor, 2010; Thomas and Littlewood, 2010).

This shared focus on networks suggests common ground for a unanimous interpretation of GI's meaning. Therefore, it is interesting to note that a review of academic literature citing GI reveals significant differences in understandings as to what it entails. This is reflected in the fact that much of the academic literature on GI frequently allots considerable attention to a discussion on how to define what GI means (Ahern, 2007; Benedict and McMahon, 2002; Dapolito Dunn, 2010; Mell, 2009; Sandström, 2002; 2008; Tzoulas et al., 2007; Wright, 2011). In many cases, such efforts assume the form of comparing and contrasting several competing definitions in an effort to formulate an all-encompassing description (Kambites and Owen, 2006; Mell, 2008). This has involved a search for the underlining 'principles of the GI concept' (Benedict and McMahon, 2006; Walmsley, 2006), which it is believed once identified, may be used to guide the formulation and implementation of GI planning policy. A number of such 'principles' are reoccurring in the academic literature, namely:

- *physical connectivity/networks*
(Benedict and McMahon, 2006; Karhu, 2011; Kambites and Owen, 2006; Mell, 2010; Sandström, 2002; Walmsley, 2006; William, 2012)
- *multiple socio-economic and ecological benefits*
(Ahern, 2007; Benedict and McMahon, 2006; Dapolito Dunn, 2010; Kambites and Owen, 2006; Mell, 2009; 2010; Tzoulas et al., 2007)
- *multifunctionality*
(Ahern, 2007; Benedict and McMahon, 2006; Dapolito Dunn, 2010; Handley et al., 2007; Kambites and Owen, 2006; Mell, 2010; Tzoulas et al., 2007)

- *a plan-led approach*
(Gill et al., 2007; Kambites and Owen, 2006; Mell, 2010; Walmsley, 2006)
- *an evidence based approach*
(Ahern, 2007; Benedict and McMahon, 2006; Gill, 2006; Gill et al., 2009; Handley et al., 2007; Kambites and Owen, 2006; Wickhama et al., 2010)

Other ‘principles’ such as *accessibility to resources* (Mell, 2010), *stakeholder involvement* (Dapolito Dunn, 2010) and *long term commitment* (Benedict and McMahon, 2006), are also referred to in the academic literature but are not cited as frequently. Despite such commonalities, efforts to synthesise definitions in fostering clearer delineations of meaning have served as much to expand and add vagueness to interpretations of the term’s signification as they have to clarify its meaning. Consequently, Wright (2011, 1003) has noted ‘a growing discomfort with the ambiguity of the concept among practitioners’ in England who seek ‘...an explicitly defined meaning of “green infrastructure”’. As discussed in the sections that follow, such anxiety is likely compounded by varying advocates from multiple quarters advancing differing interpretations of what the concept means. This has resulted in a situation where ‘the actual definitions of green infrastructure vary significantly depending on the focus of the document and the work of the researchers who compiled it’ (Mell, 2008, 79). Indeed, variations of interpretation emanate from numerous sources, with limited academic reference made to the term in Dutch (Hajer, 2003)¹, Swedish (Sandström, 2002; 2008), German (Hasse, 2010), Brazilian (Herzog, 2010) and New Zealand (Ignatieva, 2010) contexts regarding ‘networked’ approaches to nature conservation planning (Jongman et al., 2004; Jongman and Pungetti, 2004). Citation of GI has also been made in an Australian context with regard to the engineering of ‘green walls and roofs’ (Rayner et al., 2010; Williams et al., 2010), and on the African continent with respect to models for urban water and waste management (Abbot, 2012).

¹ Hajer’s (2003) analysis focuses on contested policy issues surrounding GI rather than an appraisal of GI in the Netherlands.

However, the idiom 'GI' is most frequently employed in northern hemisphere anglophone nations, primarily those of North America and in the UK. It has also emerged as a concept advanced by the EU. Thus, it is on North American, EU and UK interpretations of GI that this literature review primarily concentrates.

2.2.1 North American Interpretations of GI

The greatest volume of planning activity specifically termed GI has been undertaken in the USA. Both Mell (2008; 2010) and Kambites and Owen (2006) suggest that interpretations of GI in the USA² have traditionally emphasised ecological aspects of the concept before its social or economic facets. Although this view is substantiated by reference to various completed planning strategies (CF, 2007; CILT, 2009), practitioner produced guidance (Williamson, 2003), and some academic literature (Walmsley, 2006; Weber et al., 2006), it does not accurately reflect the diversity of practitioner and academic readings of how GI is comprehended in the USA. Indeed, much of what is specifically referenced as GI by planning practitioners in the USA has centred on urban storm water management as opposed to ecological conservation (Brown and Caldwell et al., 2011; Chau, 2009; NYC, 2010; USEPA, 2004)³. Here, GI is perceived as a technical solution for flooding mitigation by employing the strategic use of planting to facilitate rainwater attenuation and thereby reducing the risk of inundation. Although, the provision of new habitats is forwarded as a collateral benefit of such activity, the primary function of these plans is flood risk management. Additionally, a more functionally encompassing interpretation of GI has been advanced for several years by the federal government via The President's Council for Sustainable Development (PCSD), who when endorsing the concept in 1999 asserted,

While traditional conservation focuses on environmental restoration and preservation, it often neglects the pace, shape, and location of development in relationship to important natural

² While both Mell (2008, 2010) and Kambites and Owen (2006) discuss 'North America', a review of their citations indicates that they are solely referring to the USA and not Canada or Mexico.

³ It is noted that a *Green Infrastructure for Clean Water Act* was introduced into the 111th US Congress in June 2010 but was not enacted. This Bill was reintroduced into the 112th US Congress in May 2011. It was referred to committee for discussion on 26th May 2011 but has not yet proceeded beyond this stage.

resources and amenities. Green infrastructure strategies actively seek to understand, leverage, and value the different ecological, social, and economic functions provided by natural systems in order to guide more efficient and sustainable land use and development patterns as well as protect ecosystems. (PCSD, 1999, 64)

Rather than reflecting the ethos of ‘traditional conservation’ as claimed by Mell (2008; 2010) and Kambites and Owen (2006), GI is presented here as a departure from ‘environmental restoration and preservation’ in seeking to acknowledge the various ‘functions provided by natural systems’ in a way that facilitates more efficient and sustainable land use. Thus, the interpretation of GI offered by the PCSD is not that of ecological preservation, but rather that of (‘sustainable’) development enablement. This view of social, economic and ecological commensurability was echoed in an academic context when in 2002 GI was proclaimed as ‘the ecological framework needed for environmental, social and economic sustainability’ (Benedict and McMahon, 2002, 12). Such a view was subsequently expanded and advocated by the same authors when four years later they portrayed GI as the maximisation of benefits from a fusion of the ‘smart growth’ planning narrative (Alexander and Tomalty, 2002; Geller, 2003) and the reasoned possibility of a counterpoint concept of ‘smart conservation’. Here, it is asserted that,

Just as smart growth focuses holistically, strategically, and systematically on the development needs of the community, smart conservation focuses holistically, strategically, and systematically on conservation needs...Green infrastructure capitalises on what is best about smart growth and smart conservation. (Benedict and McMahon, 2006, 12)

Ahern (2007) expands such ideas by outlining an interpretation of GI wherein multifunctional landuse commensurabilities are facilitated in accommodating urban growth while concurrently providing new habitats. Such a view has been further broadened from a focus on environmentally sensitive physical and economic urban growth to accommodate other possible benefits not normally associated with conservation. These views are represented in both academic studies and

practitioner strategies focused on 'greening' the built environment so as to promote healthy communities (Dapolito Dunn, 2010), boost recreation based tourism development (LPI, 2012), and provide a generally more amiable living environment (Entrix, 2010).

There is a nascent but growing support for GI in Canada. Here, GI promotion has centred on a technological interpretation of the term, with a particular focus on urban wastewater treatment (Podolsky and MacDonald, 2008). Notably, in 2009, the Government of Canada established a Green Infrastructure Fund. The function of this program is to allocate funding to GI projects deemed to assist Canada's economic development. While projects that promote cleaner air, reduced greenhouse gas emissions and cleaner water are specified as eligible for funding, most endowments have been provided to aid the rehabilitation of large scale urban waste waster infrastructure (IC, 2012).

This varying array of functional interpretations of what GI entails has led some of its promoters to conclude that the term as understood in North America is not so much a design concept as much as it is 'a philosophy or organizational agenda strategy that provides a framework for planning conservation and development' (Benedict and McMahon, 2006, 15). However, the particulars of such a 'philosophy' are left largely unspecified with understanding of what GI entails 'tailored to appeal to diverse constituents with message points that address a particular professional discipline or resource issue' (William, 2012, 17). Consequently, interpretations of GI in North America appear to encompass a broad suite of assorted ideas including those with a primary focus on ecological conservation (Weber et al., 2006; Williamson, 2003), stormwater management (Brown and Caldwell et al., 2011; Chau, 2009; CNT, 2010; Podolsky and MacDonald, 2008), recreation provision and tourism development (LPI, 2012), health (Dapolito Dunn, 2010), and the enhancement of urban appearance (Entrix, 2010). Other interpretations encompass all of the above uses (Benedict and McMahon, 2002; 2006) or a more limited selection of mulitple uses (Ahern, 2007; Walmsley, 2006).

Further obscuring clarity as to what GI means is the referencing as GI by some USA based academic literature (Benedict and McMahon, 2002; 2006; Ahern, 2007) of an assortment of fêted design publications with different foci (Little, 1990; McHarg, 1969; Olmstead, 1971). This is complicated by the propensity of this same academic literature to cite programmes from countries outside North America as GI, even though such programmes vary in their objectives and are not normally referred to as GI by those involved in their development (Beatley, 2000; Jongman and Pungetti, 2004).

Nevertheless, what these various interpretations share – their ‘philosophy or organizational agenda’ (Benedict and McMahon, 2006, 15) – is a belief in the ability and necessity of planning, designing, constructing and managing spatial typologies to deliver desired benefits from particular environmental resources, be they watercourses, green open spaces or tree lined streets. Thus, those who advocate GI presuppose the requirement for proactive rather than reactive landuse intervention so as to supply and/or enhance the specific benefits accruing from managing the environment.

Additionally, a feature common to both academic and practitioner literature emanating from North America is the uncritical advocacy of GI. No literature has been located that seeks to critically appraise ‘why’ GI has emerged in planning debates, ‘how’ it is promoted, ‘who’ is advancing it, or ‘why’ they chose to endorse it. Furthermore, critical appraisal, as opposed to unquestioning advocacy, as to ‘what’ are the potential implications of the institutionalisation of GI in planning practice, is conspicuous in its absence.

2.2.2 European Union Interpretations of GI

The EU⁴ has informally supported GI since 2009 (Sylwester, 2009), with its formal endorsement commencing in 2011 (EC, 2011). In an EU context, GI is primarily interpreted as a 'networked' approach (Silva et al., 2010) to the safeguarding of ecosystems services provision for the mutual benefit of socio-economic and ecological requirements (Sundseth and Sylwester, 2009). While noting that 'no single widely recognised definition of green infrastructure is identified in the literature' (EEA, 2011, 6), the EU has advanced the view that,

The concept of Green Infrastructure emphasizes the importance of ensuring the provision of ecosystem goods and services for society and the value of functionally and spatially connected, healthy ecosystems. (Karhu, 2011, 7)

This focus on the society 'servicing' dimensions of GI resonates with other initiatives endorsed and engaged in by Directorates-General of the European Commission that seek to reconcile ecological conservation with economic growth. Most notable of these is a programme on *The Economics of Ecosystems and Biodiversity* of which the EU is a partner with a number of governments and international organisations in seeking to apply 'economic thinking to the use of biodiversity and ecosystems services' (TEEB, 2010, 3). Whilst at first this may appear to differ from North American comprehensions of the concept, interpretation of GI by the EU encompasses the multitude of understandings of North American academics and practitioners by focusing on GI as a means to ensure the provision of ecosystems services in facilitating economic growth. Accordingly, the EU advocates a broadly encompassing version of GI similar to that of some USA advocates (Ahern, 2007; Benedict and McMahon, 2002; 2006), by including a broad array of functions beneath the aegis of 'ecosystems services' (Karhu, 2011). These include stormwater management, biodiversity conservation, climate change adaptation and recreational space provision. Hence, it is asserted that,

⁴ The EU is used here in reference to the organs of the European Union, including the European Commission and the various Directorates-General (Departments), Services and Agencies associated with it.

Green infrastructure can provide environmental, economic and social benefits...Investment in green infrastructure...provides jobs and business opportunities and thus contributes to biodiversity objectives and to a green, resource-efficient and low-carbon economy. (EEA, 2011, 35)

In this sense, GI is interpreted as a means to facilitate efficient, yet environmentally sensitive, economic growth. The EU does not specify a method on how to plan the GI that it is claimed can permit such development. However, it supports the concept through collating and publicising various projects considered to represent exemplars of GI activities (Sylwester, 2009). Many of the projects indicated as possible prototypes for application throughout EU member states vary in the issues they address and rarely employ the term 'GI' (Sundseth and Sylwester, 2009). As such, the understanding of GI forwarded by the EU is more an aspiration for 'networked' focused planning activities (Silva et al., 2010) that facilitate commensurabilities between ecological conservation and economic development than it is a currently exercised set of defined practices (EEA, 2011). It is in this context that the European Commission has formally endorsed GI, conceiving it as a means to meet its targets for biodiversity protection (EC, 2011) in a manner that does not compromise economic development (Silva et al., 2010). As with the case of North America, no academic literature critically appraising interpretation(s) of the concept in an EU context has been identified.

2.2.3 UK Interpretations of GI

What is specifically termed 'GI' in Europe is most prolifically represented in literature emanating from the UK. Here there has been continuous growth in the application of the GI idiom regarding landuse planning activities. The term GI has been advanced under various readings in Welsh (TEP, 2011) and English (PCC, 2010; LCRP, 2010; CGIF, 2011) planning policy and proposed statutory guidance (DCLG, 2010), as well as in non-statutory guidance by The Scottish Government (SG, 2011), and the advocacy activities of planning focused QUANGOs (CABE, 2009; NE, 2009). Despite this, a surprisingly limited quantity of academic literature has been published concerning GI in the UK. As with the case in North America, the

particular interpretation of GI varies between authors. Notwithstanding such variations, the majority of this work shares a focus on urban areas, although Davies et al. (2006) have advocated its applicability to the rural environment, with Amati and Taylor (2010) noting its potential as a peri-urban planning mechanism to contain metropolitan growth. Perhaps the most restricted interpretation of GI in the UK centres on its understanding as a planning strategy to facilitate climate change adaptation (Gill, 2006; Gill et al., 2007; Handley et al., 2007; Kazmierczak et al., 2010). Although acknowledging the possible benefits of GI for recreation, non-motorised transport and habitat provision, GI is here primarily interpreted as a design tool for mitigating the current and predicted adverse affects of the urban heat island (Gill et al., 2009). However, Kambites and Owen (2006) represent a more common reading of the concept by forwarding a broad and encompassing interpretation of the term. Indeed, these authors supply a long list of GI's advocated functions and benefits, ranging from educational and recreational resource provision through to landscape protection and local economic development. In so doing, they conclude that spatial, socio-ecological, user and administrative 'connectivity is an inherent attribute of green infrastructure' (Kambites and Owen, 2006, 490). This broadly encompassing view is echoed by Mell (2008; 2009; 2010), who offers an overview of GI's interpretation in a UK context with a particular concentration on the north east of England.

While considerable effort is expended on advocating the benefits of GI, vagueness as to what it signifies is evident in much UK practitioner literature (LI, 2009a; 2009b; RICS, 2011; TCPA, 2011), government sponsored advocacy (CA, 2006; CABE, 2009; UTF, 2005), and national planning policy in England (DCLG, 2008). As with the case in North America, such ambiguity is compounded by the propensity of many of the concept's UK advocates (Kambites and Owen, 2006; Mell, 2008; NE, 2009; TCPA, 2004) to label celebrated historic planning publications as GI (Fairbrother, 1970; Gehl, 1987; Howard, 1965 (1902); Little, 1990; McHarg, 1969; Olmstead, 1971), or to classify selected planning programmes from other countries as GI, even though such programmes are not normally referred to as such by those engaged in their formulation and implementation (Gobster and Westphal, 2004; Jongman et al.,

2004; Jongman and Pungetti, 2004; Opdam, 2002). This has increased latitude for interpretation of the term, with for example, some studies employing the term to primarily describe planning for environmentally sensitive access to green open spaces in urban areas (GLA, 2008; TCPA, 2004), while others largely interpreting it as a means to facilitate regional economic development (AGMA, 2011; Ecotec, 2008; LCRP, 2010), and yet others endorsing it principally in the context of climate change adaptation (NWCCP, 2011). In the limited academic literature acknowledging the uncertainty of GI's signification, it has been suggested that the lack of an fixed definition is a positive trait by proposing that, 'Ambiguity has been an attribute in that it allows the concept to adapt to the varied requirements of different spatial and temporal situations' (Wright, 2011, 1014). Thus, as with the majority of international academic literature on GI, UK academics predominantly adopt an uncritical stance to its advocacy, remaining largely silent regarding potential policy dilemmas resultant from confusion concerning what the term may mean to the different parties advocating it.

However, with an uncommon focus on the analysis of GI policy discourse rather than its uncritical promotion, Thomas and Littlewood (2010) infer a different interpretation of GI by examining it not in terms of its advocated multifunctionality, but instead choosing to investigate its potential 'as a strong discursive competitor for the green belt' (Thomas and Littlewood, 2010, 204). Although noting a growing popularity in the term's employment, they nevertheless conclude that GI is unlikely to easily displace the 'political resilience' of green belt policy approaches to containing urban sprawl. Furthermore, these authors present a more nuanced critical appraisal of what GI implies. Specifically, they uniquely conjecture that GI may be conceived of as a form of 'ecological modernisation' (Carter, 2007; Dryzek, 2005; Hajer, 1995; Lundqvist, 2000), wherein assumptions on the possibility of reconciling economic development with ecological conservation are advanced through the concept in furnishing arguments that propose "'win-win' outcomes for nature and economy' (Thomas and Littlewood, 2010, 212). Suggesting that GI may offer a means of 'lubricating the frictions' (2010, 212) found between economic

development and the protection of nature, they refer to the critical interpretive analysis work of Schön and Rein (1994) in suggesting that:

In a policy discourse setting dominated by economic growth targets and entrepreneurial development agencies, such as in the English regions, the relatively weak policy discourses around nature and environment are looking for 'strong' policy discourses to 'hitch' to so they can gain greater strategic purchase...until the recent development of GI there have been few policy hooks available to achieve such hitching within English spatial policy.
(Thomas and Littlewood, 2010, 212)

However, these authors fail to develop this line of examination, with their analysis on the potential role of GI's discursive constitution in advancing ecological modernisation concluding at this juncture. Wilson and Hughes (2011) also explore political discourses surrounding urban green spaces, but fail to adequately discuss GI, uncritically noting only in their closing comments that 'green space discourses are now increasingly coming under the over-arching umbrella of 'green infrastructure' (Wilson and Hughes, 2011, 226). Consequently, with the exception of the one analysis by Thomas and Littlewood (2010), both academic and practitioner literature in the UK is largely uncritical of GI, seeking more to promote its benefits than critically appraising the reasons for its emergence, the form of its evolution, or the potential consequences of its institutionalisation.

2.3 Conclusion

This review of GI specific literature demonstrates a preoccupation in academia with GI advocacy. Few have shown an interest in critically examining what factors facilitate GI's growing popularity in landuse planning policy despite ongoing vagueness regarding its signification (Wright, 2011). As such, there is a gap in the literature investigating 'why' GI is being advanced by multiple parties whose interests are traditionally conceived as largely incompatible (e.g. urban growth and ecological protection). This thesis endeavours to address this knowledge gap.

Additionally, the above review of literature suggests that despite attempts by many of its advocates to delineate ‘the principles’ defining GI (Benedict and McMahon, 2006; Kambites and Owen, 2006; Mell, 2010; Walmsley, 2006), understanding ‘what’ the term signifies is not so much about locating a universally applicable definition within academic literature on GI. Rather, it concerns an appreciation of the context contingent functions GI is seen to serve by those employing it. Established from this review is a pervasive conviction within academic literature on GI in the ability and necessity of planning, designing, constructing and managing spatial typologies to deliver specifically desired benefits from particular environmental resources. This utilitarian focused orientation is accompanied by a presupposition on the requirement for proactive rather than reactive landuse governance. Nevertheless, this literature review reveals a deficit of studies appraising how these interpretations may serve to advance agent specific policy issues, most of which may pre-date the ascendance of GI in planning debates. Thus, this thesis ventures to address this knowledge deficit by investigating ‘what’ interpretations are advanced by ‘whom’, ‘why’ they are advocated, and ‘how’ they are promoted.

Furthermore, the review of GI specific literature suggests a widespread supposition that GI planning facilitates commensurability between numerous landuse functions normally considered as conflicting (e.g. urban growth and ecosystems conservation). The review also identifies a dearth of academic study exploring ‘how’ the particularities of GI’s discursive constitution may influence such assumptions and how these affect the rationalities underpinning planning policy formulation (except to some extent Thomas and Littlewood, 2010). Similarly, there is an absence of critical policy analysis on the potential implications of the institutionalisation of these rationalities in the planning system. It is an ambition of this thesis to address this shortfall.

Thus, this thesis seeks to address identified lacunae in academic literature regarding GI by engaging in a critical analysis of ‘why’ GI has emerged, ‘how’ it is advocated, ‘who’ is promoting it, and ‘what’ may be the implications of its institutionalisation.

To accomplish this, a consideration of the explanatory merits and limitations of policy process literature is first necessary. Thus, it is to a review of such literature that the following chapter now turns.

CHAPTER 3: THEORETICAL APPROACH

3.1 Introduction

As previously discussed in Chapter 2, interpretations of the problem(s) addressed by GI varies widely among those who advocate it as a policy solution. The review also indicated that the concept itself is not clearly defined despite efforts by many of its promoters to delineate ‘the principles’ that underpin it (Benedict and McMahon, 2006; Kambites and Owen, 2006; Walmsley, 2006). Consequently, understanding ‘what’ GI signifies involves appreciating the context dependent purposes it is seen to serve by those employing it, rather than deriving a generalised and universally applicable definition (Boscarino, 2009). Accordingly, investigating the emergence, evolution and institutionalisation of GI in Ireland necessitates an identification of ‘who’ is promoting it and an understanding of ‘what’ GI is said to do as a means to facilitate an explanation of ‘how’ it is interpreted and ‘why’ it has gained traction in policy formulation. In this sense, answering the research questions of this thesis involves discerning and explaining the processes that influence the interpretations and currency of the rationalities GI represents. Such rationalities form the interpretive foundations upon which perceptions of legitimacy are built (Coicaud, 1997; Foucault, (1969) 1972; Yanow, 1996).

In this manner, GI can be conceived as a ‘policy approach’, wherein a policy approach is understood to reflect rationalities through the implicit commonalities of policies comprising a broadly shared perspective on how a particular set of problems should be addressed. In the present case, such problems concern multiple issues related to landuse planning. Consequently, appreciating GI as a new policy approach entails understanding it as the emergence of a new, or at least a different perception of how a set of landuse planning problems should be attended to. Although ‘change’ to existing policy may constitute an important element in this process through its aggregated affects and effects at particular levels of the policy hierarchy, the emergence of such a new policy approach permeates multiple levels of the policy hierarchy, thereby altering governance of a particular issue or set of

issues. In this sense, appreciating the emergence of GI involves attention to ‘the principles of governance’ in relation to a perceived issue or set of issues. ‘Governance’ is here understood as the activity of establishing, affirming or changing the principles employed to mediate current or potential conflicts in administering contemporary conditions or planning for the future (Gibbs et al., 2002; Gibbs and Jonas, 2000; Meadowcroft, 2002; Paavola, 2007; Sampford, 2002).

As such, the principles of governance are manifested in the meanings that are given expression both in the policy proposals forwarded by the promoters of GI and those who subscribe to it as a policy approach. Thus, an understanding of the role of interpretation and representation in the policy process is necessary. Accordingly, cognisance must be shown in the research process that the ‘facts’ of a situation are perceived through the accounts given of them by interpreting agents (Fischer, 2003; Rabinow and Sullivan, 1992; Schön and Rein, 1994; Yanow, 2007a). This is not to deny the concept of ‘objectivity’ per se, but rather to acknowledge that ‘the styles of reasoning that we employ determine what counts as objectivity’ (Hacking, 2002, 160-161). Such an interpretive approach thereby assumes a form of ‘constrained idealist’ ontology. Here, it is contended that,

...the existence of an external world places both constraints and opportunities on the reality-constructing activities of social actors, but regard[s] social constructions as having a high level of autonomy from it. (Blaikie, 2010, 17)

Hence, an interpretive approach emphasises an epistemology of ‘social constructionism’ by maintaining that knowledge is neither revealed from an external reality nor formulated by reason independent of such a reality (Berger and Luckmann, 1966; Searle, 2010). Here, knowledge is conceived as ‘the outcome of people having to make sense of their encounters with the physical world and with other people’ (Blaikie, 2010, 22). This focus on intersubjectivity or shared knowledge accentuates the generation and transmission of meanings through varying degrees of collective interpretations regarding signification, significance and applicability (Crotty, 1998; Holstein and Gubrium, 2011; Wetherell et al., 2001). Accordingly, an ‘interpretive science’ (Geertz, 1973; Hiley et al., 1991; Taylor, 1971)

questions how our understanding of the world 'is framed through the discourses of the actors themselves, rather than fixed in nature' (Fischer, 2007, 102).

This concern with the role of interpretation therefore operates on the 'philosophical claim that meaning does not merely put a particular affective or evaluative gloss on things, but that it is somehow constitutive of political actions, governing institutions, and public policies' (Wagenaar, 2011, 4). Consequently, it is argued that explaining the emergence, evolution and institutionalisation of GI in Ireland requires appraising the adequacy of extant policy process theory in facilitating a comprehension of meaning making in and through policy.

Thus, this chapter begins by reviewing those theories of the policy process that currently dominate policy studies. From this examination, the Multiple Streams Framework (MSF) is identified as the most effective means by which to structure an investigation of GI's emergence, evolution and institutionalisation in Ireland. Both the benefits and constraints of the MSF are critically appraised and its use subsequently justified by reference to how its macro level theoretical assertions may be employed to configure a detailed consideration of the part played by meaning making in the policy process. A thorough review is then undertaken of the merits and limitations of academic literature concerning the role played by discourses in the policy process. This is engaged so as to help discern the mechanisms by which meaning making through discourse constitutes and communicates both perceptions of the reality to which a policy approach addresses and the rationalities implicit within such an approach. Therefore, this review of academic literature directly responds to the research questions posed by the thesis.

3.2 Studying the Policy Process

3.2.1 Steering Through a Diversity of Views

Public policy scholarship has 'a long history and a short past' (Howlett et al., 2009, 17) wherein there is a long tradition of investigating the actions of government (Moran et al., 2009; Heywood, 2007; Wolff, 2006), while the systematic examination of policy using academic frameworks dates back just six decades

(Birkland, 2005; Peters, 2005). However, over this comparatively short period, interest in the study of the policy process has grown significantly and is characterised by a considerable number of overlapping, yet discrete perspectives (Cairney, 2011; John, 1998; Sabatier, 2007b). Thus, contemporary public policy research may be understood as,

...a loosely organized body of precepts and positions rather than a tightly integrated body of systematic knowledge, more art and craft than genuine "science". (Goodin et al., 2006, 5)

This has led some to bemoan the field of policy studies as 'a babel of tongues in which participants talk past rather than to one another' (Bobrow and Dryzek, 1987, 4). Navigating this diversity may be rendered less onerous a task through an appreciation that public policy research is largely partitioned between knowledge *for* policy and knowledge *of* the policy process (DeLeon and Martell, 2006; Parsons, 1996; Gordon et al., 1997). Knowledge 'for' policy principally refers to knowledge produced through empirical evaluation and normative assessment, thereby concerning the ex-ante marshalling of information to assist policy makers and the ex-post appraisal of initiative implementation (Colebatch, 2009; Hill, 2009). In contrast, knowledge 'of' the policy process is centred on the 'why' and 'how' of policy making (James and Jorgensen, 2009; Nowlin, 2011). It is less focused on normative appraisal and more concerned with,

...finding out why governments pay attention to some problems and not others (agenda setting), why policy changes or remains stable across time, and where policy comes from. (Smith and Larimer, 2009, 6)

Given the focus of the present study on examining the policy process as both constituting and revealing rationalities through the varying interpretations of a policy's meaning, this thesis primarily focuses on the 'why' and 'how' of policy making. It is thereby concerned with knowledge 'of' the policy process.

A diversity of theoretical approaches have been applied to studies of the policy process. These include, but are not limited to, conceptual frameworks borrowed from: rational choice (Ostrom, 2011; Scharpf, 1997); historical (Rayner, 2009;

Sanders, 2006; Thalen, 1999); and sociological institutionalism (Béland, 2005; 2009; Hay, 2006; Scott, 2008b); network focused analysis (Compston, 2009; Kenis and Schneider, 1991; Murdoch, 2000; Rhodes, 1997; 2006); work informed by science and technology studies (Burgess et al., 2000; Collins et al., 2009; Latour, 2005); and Marxist inspired approaches (Howlett, 2010; O'Sullivan, 2003); in addition to work guided by varying forms of structuration theory (Crowley, 2006; Delmas, 2002; O'Sullivan, 2010); and post-structuralist analysis (Gottweis, 2003; Howarth, 2010). However, since early 1990s, academic debate regarding knowledge 'of' the policy process 'has been clearly dominated by three major referenced approaches' (Real-Dato, 2009, 117). These are namely the Advocacy Coalition Framework, Punctuated Equilibrium Theory and the Multiple Streams Framework. Such dominance is widely reflected in scholarly literature regarding policy process theory (Birkland, 2005; Cairney, 2011; Hill, 2009; John, 1998; Sabatier, 2007b; Smith and Larimer, 2009). Thus, critically evaluating the harmonisation of such frameworks with an interpretive ontological and epistemological perspective facilitates charting of a pragmatic course through the confusing field of rival conceptual approaches by avoiding the unfeasible task of trying to review a continually expanding galaxy of theories sourced in a multiplicity of disciplines and subsequently applied 'to' the policy process. Nevertheless, where the reasoning of such non-policy process specific theories furnishes potentially useful insight for studies 'of' the policy process, the particulars of such theories may be considered and their benefit critically assessed.

3.2.2 The Advocacy Coalition Framework

The Advocacy Coalition Framework (ACF) was initially formulated by Paul Sabatier (1988) and Han Jenkins-Smith (1990), and subsequently developed by Sabatier in conjunction with various scholars (Sabatier and Jenkins-Smith, 1999; Sabatier and Weible, 2007; Weible et al., 2011; Zafonte and Sabatier, 1998). Focused on the behaviour of individuals concerned with specific policy issues, the ACF is centred on the activity 'of participants who regularly seek to influence policy' within a policy subsystem 'characterized by both a functional/substantive dimension (e.g. water policy) and a territorial one (e.g. California)' (Sabatier and Weible, 2007, 192).

The ACF offers a potentially beneficial means to engage a study 'of' the policy process. In particular, its coalition centred focus, attention to policy subsystem dynamics and cognisance of context influences on policy change provides a systematic approach to 'understanding the constellation of ideas, institutions, and interests that converge in any policy activity' (Klein and Marmor, 2006, 908). However, the ACF is founded upon a number of ontological and epistemological presuppositions which render it unsuitable for an interpretive analysis of the emergence, evolution and institutionalisation of GI in Ireland.

Firstly, the ACF assumes that advocacy coalitions comprise participants bound together by the 'glue' of policy core beliefs (Sabatier, 1998, 103). Unclear however is how such beliefs are constituted, with ACF theorists appearing to 'take these beliefs as a priori' (Hajer, 1995, 71). This presumption deems communication as solely a process of information transference rather than as a mode of meaning making. Therefore, communication is perceived as simply reflecting an objective external reality rather than constituting the beliefs manifested in the principles of governance. This limitation is further compounded by the associated epistemological commitment of ACF theorists to the testing of falsifiable hypotheses (Sabatier and Weible, 2007). Such an allegiance to the deductive logic of natural science presupposes policy activity as grounded in universally shared objective 'facts' rather than varying degrees of intersubjective consensus on the interpretation of reality. Consequently, the framework's ontological and epistemological premises render it unsuitable for an investigation of the role played by the varying manifestations of intersubjective knowledge inherent to meaning making in the policy process.

Secondly, the ACF is predicated on 'a strong rationalist idea about cognitive change' (Hajer, 1995, 71) wherein it is assumed that those proposing a means of problem remedy do so following careful consideration of the issue and devise a solution specifically in response to it (DeLeon, 2006; DeLeon and Vogenbeck, 2007; Wagner, 2007). This logic presupposes linear reasoning from issue to issue resolution and assumes that those presenting such a policy solution have a clear, singular

appreciation of what the problem is (Bacchi, 2009; Dunn, 2004). Consequently, this epistemological perspective 'does not suggest a way of understanding how policy makers deal with ambiguities and how ambiguity might relate to policy changes and learning' (Hajer and Laws, 2006, 256). Therefore, the explanatory potential of the ACF is limited regarding the emergence of a policy approach, like that of GI in Ireland, where such an approach is perceived to remedy a broad spectrum of environmental, economic and social problems traditionally characterised by issues of problem and solution ambiguity.

Thirdly, where the ACF does account for the rapid emergence of a new policy, this is perceived as occurring in response to 'rapid change in the external world [that] gives 'shocks' to the policy-makers by disrupting stable patterns of interests and exchanges' (John, 1998, 171). Such 'shocks' may include economic crises (Sabatier, 1988) or environmental disasters (Albright, 2011). Resultant from this causal assumption, the benefit of the ACF for an investigation of GI in Ireland is limited due to its swift emergence where no reference to a specific external shock is made.

Finally, the ACF is predicated on adversarial politics and by its author's admission 'is probably most suited to the complexity of pluralist regimes' (Sabatier and Weible, 2007, 200). Presuming competition rather than consensus in seeking the realisation policy objectives (Sabatier, 1998; 2007b; Zafonte and Sabatier, 1998), the explanatory potential of the ACF is thereby curtailed in situations where subscription to the policy approach occurred in the absence of contest regarding meaning or applicability, such as that of GI's emergence in Ireland.

3.2.3 The Punctuated Equilibrium Theory

In contrast to the ACF, the role of meaning making in constituting perceptions of the reality addressed by a policy is given greater prominence in the Punctuated Equilibrium Theory (PET). Originally developed by Baumgartner and Jones (1991; 1993) with specific reference to budgetary and taxation policy in North America, PET has been applied to a range of policy areas (Rapetto, 2006; Robinson, 2004)

and jurisdictions (Alexandrova et al., 2012; John and Margetts, 2003; Mortensen, 2005).

Building upon the work of Anthony Downs (1972) regarding agenda setting, PET seeks to explain how a long period of policy ‘equilibrium’ may be ‘punctuated’ by challenges to the policy work of subsystem actors consequent on the disproportionate allocation of attention. Therefore, PET theorists propose that the policy agenda periodically functions by ‘attention-driven choice’ (Nowlin, 2011, 50), in which the dominance of an existing policy image becomes subject to dispute, experiences comparatively rapid change and subsequently settles into another period of stable equilibrium wherein a new policy image may emerge and become dominant (Baumgartner and Jones, 2012; Birkland, 2005; Cairney, 2011; Hill, 2009).

PET’s concentration on the interpretation of a ‘policy image’ as the mechanism for both stability and change provides a useful way in which to conceive the role played by meaning making in the policy process. Also of potential benefit to the investigation of GI’s swift emergence in Ireland is the theory’s attention to rapid policy change, as opposed to the protracted process of policy orientated learning that primarily concerns the ACF (Sabatier, 1988; 1998; Sabatier and Jenkins-Smith, 1999; Sabatier and Weible, 2007; Weible et al., 2011). Additionally, in drawing parallels with the ACF, PET’s focus on the concept of a policy subsystem offers a coherent portrayal of the interplay between actors, institutions and ideas in policy development (see section 3.2.2). However, a number of the theory’s premises render problematic its employment for an investigation of GI’s emergence, evolution and institutionalisation in Ireland.

Firstly, PET theorists view actors within a subsystem as seeking to resist pressure for change and exclude those not considered beneficial to the advancement of the policy image they advocate (Baumgartner and Jones, 2007). When change does occur, it is perceived by subsystem actors as a challenge to their legitimacy in developing policy (Baumgartner and Jones, 1993). Thus, PET reflects its origin within the context of North American congressional politics by assuming a pluralist

form of adversarial policy development. Here, competition rather than consensus for policy change is emphasised. This renders aspects of PET problematic in instances where non-adversarial and widespread consent in policy advocacy occurs (Weible, 2008), such as in the case of GI's emergence in Ireland.

Secondly, PET may be criticised for its presumption that the stimulus for change is wholly external to the policy subsystem, be it by way of increasing public interest or attention from the political arena. This problem is exacerbated by a focus on the influence of the media in directing concern towards the activities of actors within a policy subsystem (Baumgartner and Jones, 1993). Indeed, by negating the motivation and/or potential for actors either within or allied to the policy subsystem to seek transformation of the extant policy approach, PET ignores the possibility for internally initiated reorientation of the principles of issue governance (Goodman and Steckler, 1989; John, 1998).

Thirdly, while emphasis is placed on the 'venues' (Jones and Baumgartner, 2005) wherein challenges to extant policy images may take place, for example political debates or via the legal system (Baumgartner and Jones, 2007), the mechanisms employed in reframing a policy image are not specified. Indeed, by foregrounding the importance of public and political attention allocation in explaining 'why' a policy approach may rapidly change, PET theorists have displayed a general bias towards quantifiably measuring changes in issue interest and attitudes (Baumgartner and Jones, 1993; Rapetto, 2006; Robinson, 2004), rather than clarifying the processes by which such rapid change occurs consequent to changing perceptions of meaning. This has rendered PET ineffective at explaining the processes by which a new policy approach ascends onto a decision agenda primed for change following the dissolution of a previously dominant policy image. Thus, PET is better at explaining the dissolution of a policy approach than it is the emergence of a new one. As the present investigation concerns the emergence of a new policy approach, the benefits of PET may be limited to explaining perceptions of deficiencies with the policies GI replaces.

3.2.4 The Multiple Streams Framework

In contrast to both the ACF and PET, the Multiple Streams Framework (MSF) is primarily concerned with explaining 'how' agenda-setting occurs. Consequently, it presents a more advantageous theoretical structure for elucidating the emergence, evolution and institutionalisation of GI in Ireland. Deriving from the analytical work of John Kingdon (1984) regarding policy initiation in the United States Congress, the MSF proposes the analytical separation of decision situations into a series of independent streams conceived as 'problems', 'policies' (solutions) and 'politics'. Outcomes are consequent on the way in which these streams are coupled. The MSF theorises that the coupling of these streams at critical junctures results in the greatest potential for public policy agenda change.

The MSF presents a number of benefits for the study of GI's emergence, evolution and institutionalisation in Ireland. Firstly, through asserting the fundamental position occupied by issue and solution representation in attaching problems to policies, the MSF implicitly assumes the centrality of presentation and perception in this coupling process (Zahariadis, 2003). Here it is presupposed that the 'facts' surrounding an issue may be socially constructed rather than objectively given. Thus, the ontological premise of the MSF gives prominence to the role of meaning making in the constitution and interpretation of the reality addressed by a policy.

Secondly, unlike the ACF, the epistemological objectives of the MSF do not entail the generation and testing of falsifiable hypotheses (Sabatier and Weible, 2007). Rather, the MSF is focused on the context contingent factors that facilitate the process of coupling. Deriving from its foundation in the Garbage Can Model (Cohen et al., 1972; March, 1997; Olsen, 2001), the MSF emphasises the policy process influences exerted by participation, timing, as well as the socio-economic, environmental and political conditions against which policy activity operates. MSF scholars conceive such context contingent influences as frequently effecting counter intuitive possibilities wherein solutions may be specified in advance of problem identification. This differs from the linear logics of both the ACF and PET which suppose circumstances of temporal progression from problems to solutions.

Consequently, the MSF offers a conceptual means to structure an explanation of how meaning making may operate via the coupling process in a seemingly idiosyncratic fashion to supply apparent clarity in moments of problematic policy ambiguity. Thus, by attending to the contexts of policy activity, the MSF provides a theoretical means by which to configure an explanation of both 'why' and 'how' a new policy approach may emerge. As such, the MSF provides assistance in answering the research questions posed in this thesis.

Thirdly, in addition to explaining 'how' the agenda-setting process operates, the MSF furnishes a conceptual framework for explaining how this may rapidly occur. Furthermore, this explanation is not predicated on stimuli external to the policy subsystem, be they exogenously sourced 'shocks' (Sabatier, 1998) or the attention of public and political actors not normally involved in policy activity (Baumgartner and Jones, 2007). Instead, the MSF permits an understanding of how a policy speedily ascends the decision agenda by virtue of participant activity 'within' the policy subsystem and against normal socio-economic, environmental and political circumstances - although this does not preclude the swift placement of issues on the agenda during periods of crisis and/or intense public attention (Birkland, 1997; 2004).

Finally, while pluralist politics is facilitated by the MSF, unlike the premises of both the ACF and PET, it is not dependant on adversarial forms of policy development. Indeed, MSF theorists hold that policy development may occur through a process of consensus (Kingdon, 1984; Zahariadis, 2007). Consequently, the MSF proffers a useful conceptual structure in which to configure an explanation of the emergence, evolution and institutionalisation of GI in Ireland, which as demonstrated in Chapters 5-10, occurred in the absence of problem or policy dispute.

3.3 Core Elements of the MSF

The MSF pivots on the idea of 'coupling' wherein problems are connected with policies against a backdrop of favourable political conditions. Timing is of the essence in coupling these three 'streams' of problems, policies and politics, with the

identification and exploitation of opportunities for policy advancement perceived as a crucial element in explaining the ascension of proposals onto the decision agenda. This coupling is thought to result from the strategic action of specific agents termed 'policy entrepreneurs'. Thus, to appreciate the operation of the MSF, it is necessary to understand how such policy entrepreneurs are conceived.

3.3.1 Policy Entrepreneurs

Kingdon (1984) deduces from his study of agenda setting activities that certain motivated actors may exhibit significant ability in highlighting an awareness of specific policy problems, presenting policy solutions, building coalitions of support for an advocated solution and securing policy change. He argues that such advocates achieve success because they demonstrate a high degree of entrepreneurial ability in coupling the problem, policy and politics streams. He labels such advocates of policy change, *policy entrepreneurs*. Academic literature discussing the attributes of policy entrepreneurs share a number of key themes. Although interrelated, these may be broadly interpreted and classified as *personal disposition*, *professional position*, *propitious connections*, *political acumen* and *presentation skills*.

Personal Disposition

Literature discussing policy entrepreneurialism is either explicitly or implicitly grounded in the supposition that the interests of such agents are motivated by more than habitual adherence to insipid activity (Kingdon, 1984; Lieberman, 2002; Mintrom and Norman, 2009; Roberts and King, 1996; Schneider et al., 1995). Indeed, Kingdon (1984) identified 'sheer tenacity' or persistence as a central characteristic of policy entrepreneurs.

Professional Position

Kingdon (1984) proposes that an entrepreneur usually has some 'claim to a hearing'. This claim has one of three sources: 'expertise', as for example over scientific, technical or legal issues; an 'ability to speak for others', as is the case of a leader of a powerful interest group; or a politically sanctioned 'decision-making

position' (Kingdon, 1984, 189). An additional dimension to this is provided by Teodoro (2009) who suggests that the adoption of policy innovations is related to the career paths and organisational mobility of senior public servants. Specifically, such administrators may carry ideas with them during movement between jobs or are given scope to advance new policy following promotion to a decision-making position.

Propitious Connections

Related to the 'professional position' of a policy entrepreneur, but differing through a focus on rapport rather than mandate, Kingdon (1984) places particular stress on the significance of political connections to entrepreneurial activity. Zahariadis (2007) supports Kingdon's assertions by surmising from his study of British politics that the more successful entrepreneurs in the realm of public policy are those who have greater access to policy decision-makers.

Drawing upon previous research (Mintrom and Vergari, 1996), Mintrom and Norman (2009) further emphasise the role of 'connections' by proposing that entrepreneurs are most successful in effecting policy change when they exploit their personal and professional relationships both within and outside a particular group of policy advocates (Lieberman, 2002; Mintrom, 2000). This phenomenon has been discussed, substantiated and expanded by Koski (2010) who concludes that professional networks are an important factor in the dissemination of a policy concept in cases of issues not enjoying high profile 'agenda attention' (Allen, 1999). Such low-salience issues include difficult to understand technical issues or policies applying to a narrow set of professionals (Balla, 2001).

Political Acumen

Kingdon (1984) suggests that 'negotiation skill' is an essential attribute of successful policy entrepreneurs. Similarly, but with greater explanation, Mintrom and Norman (2009) propose the significance of 'social acuity' in entrepreneurial activity. This they conceive as the understanding displayed by entrepreneurs of the ideas, motives, and concerns of others in their local policy context. It is envisaged that

those entrepreneurs who enjoy a cordial relationship with actors both internal and external to the groups advocating a particular policy initiative, instigate, maintain and promote consensus with others.

Additionally, it is proposed that 'leading by example' (Mintrom and Norman, 2009, 653) is a potentially important trait characteristic of entrepreneurial activity. It is speculated that this can significantly contribute to the winning of credibility among other actors and hence consolidate momentum for change (Knotter, 1996). Thus, it is through 'political acumen' that 'propitious connections' are realised.

Presentation Skills

Mintrom and Norman (2009) in quoting previous research by Mintrom and Vergari (1996) assert that because problems are invariably associated with multiple attributes, how those problems are defined and which problem attributes are highlighted in policy discussions may determine which actors assign attention to them. Viewed in this way, the definition of policy problems is always a political act, rooted in, and mediated by 'the anticipation of future constraints' (Kingdon, 1984, 145) such as budgetary limitations, value acceptability and perceptions of 'technical feasibility' (Zahariadis, 2003, 80). As actors who seek to promote policy change, policy entrepreneurs allocate considerable attention to problem definition. Among other things, this can involve presenting evidence in ways that suggest a crisis is at hand (Hulme, 2009; Stone, 1997), finding ways to highlight the failures of current policy (Crowley, 2006), and attracting support from actors beyond the immediate scope of the problem, thereby expanding the 'policy space' (Real-Dato, 2009) of those advocating a policy initiative.

Therefore, the various themes shared by academic literature construe policy entrepreneurs as possessing motivation and creativity in negotiating the potential constraints and opportunities presented by their professional and personal contexts. Central to this is the role of persuasion in the activities of such agents. As persuasion is intrinsically related to the forms of representation induced by meaning making activities (MacRae Jnr, 1993), the concept of policy

entrepreneurialism supplies a useful way of identifying, investigating and explaining the activities of agents in the emergence, evolution and institutionalisation of the GI planning policy approach in Ireland. However, fully appreciating the role of entrepreneurship in the policy process requires an understanding of how the MSF conceives the various 'streams' that are 'coupled' through the processes of meaning making activities.

3.3.2 Problem Stream

Key to the MSF's problem stream is the role played by issue representation. This centres on the associated activities of 'problem posing' and 'problem definition', each of which are discussed below.

Problem Posing

Kingdon suggests that 'comparison' and 'categories' contribute to the identification of problems. Citing the example of the Soviet Union's early dominance of the space race, Kingdon theorises that 'comparison', between past performance and/or between the performance of others lead to the re-evaluation of circumstances previously considered unproblematic as objectionable.

Additionally, when discussing the reclassification of handicapped⁵ accessibility in public transport during the 1970s from a design to a civil rights issue, Kingdon (1984, 117) speculates that 'categories' are a particularly important facet of problem definition. Expanding on this, Kingdon conjectures that the emergence of a new category is a 'signal public policy event' (Kingdon, 1984, 119) that delineates ways of perceiving a problem. However, it is through the processes of 'problem definition' that a 'perceptual, interpretive element' (Kingdon, 1984, 115) transforms the problems posed through comparison and categories into specific issues requiring attention.

⁵ 'Handicapped' is the term used by Kingdon (1984, 117)

Problem Definition

MSF theorists hold that problem definition operates by way of 'indicators', 'focusing events' and 'feedback' (Zahariadis, 2003; 2007). According to Kingdon (1984, 97), change in an issue indicator can be perceived as the failure of an existing approach (also see Stone, 2002). Therefore, he postulates that 'constructing an indicator and getting others to agree to its worth becomes major preoccupations of those pressing for policy change' (Kingdon, 1984, 98). Furthermore, in drawing from a large bank of interview data (Kingdon, 1966), he asserts that the more quantifiable an indicator the more power of attention it enjoys relative to 'problems that are less countable' (Kingdon, 1984, 98).

Noting that problems are often not self-evidenced by indicators, Kingdon suggests that attention may be captured by a 'focusing event' such as a crisis (Keeler, 1993), disaster (Birkland, 1997; 2004) or the personal experience of the policy maker (Zahariadis, 2003).

Both Kingdon (1984) and later Zahariadis (2007) also outline the importance of feedback from previous or contemporaneous programs in helping to define the format in which a condition is perceived as a problem. Successful implementation of a solution regarding one problematic issue may spill over onto another by suggesting possibilities for the amelioration of a negatively perceived condition, whose possible solution is perceived as similar to that which has worked elsewhere (Boscarino, 2009).

Therefore, this framework offers a useful way to configure an explanatory account of how meaning making functions in constituting the problematic reality to which a policy approach is orientated. In doing so, the MSF provides a clear foundation upon which to study 'why' and 'how' issues become interpreted as problematic, and are thereby primed for coupling with proposals in the policy stream. However, fully appreciating the processes by which this occurs necessitates an understanding of how the MSF conceptualises policy stream dynamics.

3.3.3 Policy Stream

In theorising the policy stream, Kingdon (1984) outlines how a multitude of ideas are generated among communities of policy specialists such as bureaucrats, academics and researchers who share a common interest in a single or linked policy area(s) such as environmental, criminal, transportation or health policy. According to the MSF, the survival and rise to fruition of ideas within the policy stream is heavily dependent on their perceived 'technical feasibility', 'value acceptability' and 'budgetary implications'.

Technical feasibility refers to the predicted ease of implementation of a policy. In a study of subsurface train line deterioration in the United States during the 1970s, Kingdon concludes that the degree of perceived complexity of an idea affects its uptake (Kingdon, 1984, 139). MSF scholars also maintain the importance *value acceptability* by arguing that policies which are aligned with the values of a wide array of specialists enjoy a better chance of adoption than those which are not (Kingdon, 1966; Kingdon; Zahariadis, 2007). With reference to the importance of *budgetary implications*, Kingdon discusses how the perceived excessive costs required by proposals that sought to upgrade surface and metro rail services in the USA inhibited their palatability among communities of specialists operative in that policy area (Kingdon, 1984, 144).

Thus, the MSF conceives the policy stream as a means by which to organise the interpretive conditions that permit and constraint the endurance of a policy idea. It achieves this by coherently configuring the criteria against which policy entrepreneurs seek to formulate persuasive arguments (Edelman, 2001; Majone, 1989). Consequently, the policy stream supplies a useful means by which to structure an explanation of the role played by meaning making in the promotion of policy ideas. Nevertheless, fully appreciating how such meaning making activities may operate within the MSF requires consideration of the framework's 'politics stream'.

3.3.4 Politics Stream

The third and final stream of the MSF hypothesis concerns the political context against which a proposed new policy ascends onto the decision agenda. Kingdon's (1984) examination of debates regarding medical health insurance and the activities of the Department of Transport in the USA during the 1970s leads him to conclude that the politics stream consists of three elements, namely, the 'national mood', 'organised political forces', and administrative or legislative 'turnover'. The concept of the national mood theorised by Kingdon refers to the notion that a fairly substantial number of individuals in a given country tend to think along common lines and that this shared general perception changes from time to time in discernible ways. In linking national mood to the influence of organised political forces, Zahariadis (2007, 73) notes that in the case of conflicting views, politicians may formulate an image of balanced support and opposition which allows adaptability in response to an altering mood or weight of interest group pressure by tilting this balance, thereby affecting the issue's prominence or obscurity. In addition to the above, administrative or legislative turnover may affect the policy agenda as those assuming office prioritise different issues (Teodoro, 2009).

By reworking the view of the Garbage Can Model regarding the existence of a choice situation stream (different 'garbage cans'), the MSF hypothesises that occasions such as administrative turnover, focusing events, or alterations in the national mood provide opportunity windows for entrepreneurs to 'couple' or join together the three streams of problems, policies and politics.

3.3.5 Opportunity Windows

Referred to variously as 'policy windows' (Kingdon, 1984; Zahariadis, 2007), 'windows of opportunity' (Kingdon, 1984) and 'opportunity windows' (Howlett et al., 2009; Kingdon, 1984), MSF theorists view such windows as moments of opportunity for entrepreneurs to promote their policy solutions or garner attention for their problems. Here entrepreneurs in seeking to advance a policy proposal attach problems to policies and match these to events in the political stream when capitalising on the opening of an opportunity window.

Researching in the area of forestry policy, Boscarino (2009, 426) has substantiated these deductions by finding that two advocacy groups, the Sierra Club and the Wilderness Society, engaged in 'problem surfing' so as to attach 'their solution of sustainable forestry to different policy problems at different times'. In accordance with Kingdon's hypothesis of a politics stream, Boscarino (2009) also notes how both groups were responsive to broader issues of public debate, including climate change and the economy, altering the content of their arguments to reflect increasing media coverage of such issues (Nowlin, 2011).

In essence therefore, the MSF hypothesis of agenda setting and alternative policy specification may be summarised as follows,

A complete linkage combines all three streams – problems, policies, and politics – into a single package. Advocates of a new policy initiative not only take advantage of politically propitious moments but also claim that their proposal is a solution to a pressing problem. Likewise, entrepreneurs concerned about a particular problem search for solutions in the policy stream to couple to their problem, then try to take advantage of political receptivity at certain points in time to push the package of problem and solution. At points along the way, there are partial couplings: solutions to problems, but without a receptive political climate; politics to proposals, but without a sense that the compelling problem is being solved; politics and problems both calling for action, but without an available alternative to advocate. But the complete joining of all three streams dramatically enhances the odds that a subject will become firmly fixed on a decision agenda. (Kingdon, 1984, 211)

3.4 Critical Evaluation of the MSF

3.4.1 General Merits

The MSF's departure from a model of incremental policy development (Braybrooke and Lindblom, 1963; Lindblom, 1959) and its focus upon swift policy emergence has given it particular resonance among analysts exploring rapid changes in policy agenda setting (Birkland, 1997; 2004; Hill, 2009). Furthermore, the importance

given to entrepreneurial activity in the 'coupling process' facilitates a nuanced understanding of the role particular agents play in issue representation and advancement in the policy process (Boscarino, 2009; Zahariadis, 2003; 2007).

3.4.2 Specific Benefits

The MSF presents a number of specific benefits for the study of GI's emergence, evolution and institutionalisation in Ireland. Firstly, through foregrounding the roles of representation and interpretation in the coupling process, the MSF gives prominence to the role of meaning making in the constitution and interpretation of the reality addressed by a policy. As such, it harmonises with the ontological and epistemological premises of social constructionism intrinsic to an interpretive study of the policy process.

Secondly, the MSF provides an alternative to much policy process theory by avoiding presuppositions on the adversarial nature of policy development (Baumgartner and Jones, 1991; 1993; 2007; 2012; Sabatier, 1988; Sabatier and Jenkins-Smith, 1999; Sabatier and Weible, 2007) or the reduction of agent motivation to utility maximisation (Compston, 2009; Kenis and Schneider, 1991; Kiser and Ostrom, 1982; Scharpf, 1997). Consequently, the MSF supplies a beneficial explanatory framework in which to configure an understanding of policy process dynamics wherein the emergence, evolution and institutionalisation of a policy approach occurred in the apparent absence of disagreement or contest, as in the case of GI in Ireland.

Finally, MSF scholars advance an understanding of policy process dynamics wherein solutions may be formulated in advance of problem identification. This differs from the linear logics of most policy process theory (e.g. the ACF and PET), in which new policy is assumed to emerge in a temporal progression from problem identification to solution specification. Accordingly, the MSF proffers a conceptual means to configure an explanation of both 'why' and 'how' a new policy approach may emerge through the specification of a policy solution to a multitude of problems. Indeed, drawing on research conducted in Britain, France and Greece, Zahariadis

(2003; 2007) concludes that the MSF is best viewed as a theoretical device for examining policy change under conditions of problematic 'ambiguity'. Specifically, he asserts that the MSF facilitates an understanding of the key role played by entrepreneurs in the persuasive representation of information. As such, he contends that,

In a world replete with ambiguity, the most important aspect of entrepreneurial activity is not to pursue self-interest, but to clarify or create meaning for those policy makers and others, who have problematic preferences. (Zahariadis, 2003: 21)

In this way, Zahariadis postulates that entrepreneurs are important meaning suppliers in their coupling efforts. Accordingly, the MSF proffers a beneficial explanatory framework in which to configure an account of how meaning making activities influenced the emergence and evolution of GI in Ireland by effecting interpretations of resolution to such issue ambiguity and thereby facilitated the institutionalisation of a new policy approach. Thus, the MSF supplies a conceptual structure in which to construct an explanation of 'why' GI emerged, 'how' it emerged and evolved, 'what' ideas it advances, 'who' promoted it and 'why' they did so. Consequently, the MSF assists an elucidation of the rationalities underpinning the principles of landuse governance embodied by the GI planning policy approach.

On balance, the MSF supplies more benefits than constraints for the study of the Irish GI story between November 2008 and November 2011. Nevertheless, a number of limitations to the framework's explanatory potential have been identified. These are discussed below.

3.4.3 Limitations

Although the individual elements of the MSF furnish a useful means by which to conceptualise the policy process, there is a lack of analytical clarity regarding a number of the framework's components. Specifically, the conceptions of 'opportunity windows', 'entrepreneurs' and the 'politics stream' are inadequately restrictive and/or vague.

Conception of Opportunity Windows

Neither Kingdon (1984) nor those who have most actively sought to apply the MSF in their research (Zahariadis, 2003; 2007; Zahariadis and Allen, 1995) have furnished a detailed description of how different forms of policy windows may be constituted. Instead, MSF theorists have preferred to focus upon the characteristics of the different streams or the role of entrepreneurs in coupling these streams against the backdrop of a policy window. This has drawn critical comment from scholars attempting to apply the MSF to local issues (Robinson and Eller, 2010). Through a review of MSF related literature, Howlett, Ramesh and Perl (2009, 105) have attempted to address this failing by suggesting that policy windows may be understood with respect to their origin in problems or policy and their degree of regularity (Cobb and Primo, 2003; Tepper, 2004). However, certain deficiencies with the theory remain largely unresolved. Indeed, whereas hypothesising the existence of opportunity windows is a useful mechanism to explore the temporal dynamics of the policy process, Kingdon's (1984) repeated assertions as to the short duration of such windows without actually specifying the likely period of their opening, requires clarification.

Associated with this issue is an additional criticism regarding how both the originators of the MSF (Kingdon, 1984) and most researchers working with the framework (Birkland, 1997; 2004; 2005; Zahariadis, 2003; 2007; Zahariadis and Allen, 1995) conceive the impetus for a window of opportunity. While entrepreneurs are generally considered to be proactive, here they are thought to 'respond' to a window of opportunity perceived as opening in either the problem, policy or politics streams. However, this disregards the role potentially played by entrepreneurs in advancing a particular interpretation of either an extant condition or policy proposal so as to 'create' a window of opportunity.

Conception of an Entrepreneur

In following Kingdon, public policy theorists generally envisage an entrepreneur as an individual (Koski, 2010; Mintrom, 2000; Mintrom and Norman, 2009). However, it is plausible that such entrepreneurs could be coalitions of entrepreneurial

bureaucrats, politicians, scientists, a QUANGO or NGO (Boscarino, 2009). Such aggregated actors may not only carry more weight of influence by virtue of size, but may also facilitate the continuation of a specific advocacy project long after the individual(s) who first proposed it has departed the realm of policy advocacy.

Conception of the Politics Stream

A significant problem with the MSF is the general imprecision as to what constitutes the politics stream. This element of the MSF is the least developed aspect of the hypothesis (Sabatier, 2007b). Of chief concern here is the importance Kingdon (1984) allocates to the 'national mood'. Although assertions that the politics stream may include both 'organised political forces' and personnel 'turnover' provides useful orientation, Kingdon's concern with the influence of the national mood renders the politics stream somewhat difficult to empirically substantiate given the vagueness of this assertion. Whereas Zahariadis (2007) has attempted to argue the relevance of this concept, his failure to empirically demonstrate its pertinence invites continuing uncertainty regarding its use in understanding the policy process.

3.4.4 From a Structuring Framework to an Explanatory Theory

The representation of problems and policy solutions is intrinsic to the coupling process of the MSF. Thus, meaning making activity is implicit to its account of policy process dynamics. However, as more a 'framework' for structuring investigation than a theory of explanation (Ostrom, 2011; Schlager, 2007), the MSF does not specify how such meaning making occurs, or how it is possible to investigate this process. Thus, a more nuanced approach to the understanding of policy advocacy is required to enhance the explanatory potential of this framework. Specifically, it may be possible to conceive such 'meaning' as being generated by entrepreneurs developing and conveying their ideas through discursive practices. In such an understanding, attention would need to be devoted to how entrepreneurs articulate their policy ideas in a manner that is both convincing in cognitive terms and persuasive in normative terms.

However, ideas in discourse must not only 'make sense' within a particular meaning context, rather the discourse itself must be patterned according to a given 'logic of communication,' following rules and expressing ideas that are socially constructed and transmitted within a given discursive setting (Hart, 2008; Litfin, 1994; Ockwell and Rydin, 2006; Rydin, 2003; Schmidt, 2012; Steffek, 2009; Tait and Campbell, 2000). Therefore, discourses may be imagined to thrive when speakers 'get it right' by addressing their comments to the 'right' audiences at the 'right' times in the 'right' ways (Schmidt, 2008; 2010; 2011; 2012). As such, it may be postulated that entrepreneurs, be they experts, speakers on behalf of others or well positioned decision-makers (Kingdon, 1984) are likely to use their connections (Koski, 2010), negotiating skills (Rogers, 2003) and social acuity (Mintrom and Norman, 2009) to build coalitions and potentially lead by example through employing the potential of discourse in defining problems and solutions in ways that facilitate their coupling. Consequently, investigating how entrepreneurs endeavour to 'get it right' in their discourses, and the circumstances in which they succeed or fail, may be understood as a means by which to 'access' (Sherratt, 2006, 19) the presuppositions upon which policy is founded, and so be employed to examine the principles of governance implicit to a policy approach. As such, adequately understanding the policy process requires scrutinising the role of discourse in meaning making. Therefore, answering the research questions posed by this thesis necessitates discourse analysis.

3.5 Discourse Analysis

Although a broad church of many different perspectives (Wetherell et al., 2001), discourse theorists are united by a desire to describe, understand and explain particular phenomena in the context of their occurrence rather than establish generalisations or test universally applicable hypotheses (Andersen, 2008; Mills, 2004). They maintain that it is not reality in an observable or testable sense that shapes social consciousness and action, but rather it is the ideas, beliefs and values that discourses evoke about the causes of satisfactions and discontents that mould comprehension and intent (Fischer, 2003). Thus, in contrast to empiricist epistemologies (Ayer, 1966; Gane, 2006; Popper, 1959), discourse theorists are

preoccupied with exploring how, in what context and for what reasons, discourses are constructed, contested and changed by whom and when (Jørgenson and Phillips, 2002; Phillips and Hardy, 2002). As an implication of this approach, discourse analysis theories start from the assumption that all forms of human communication, be it conveyed via language, objects, acts or practices, is socially meaningful and that these meanings are shaped by social, cultural and political conditions of period-specific contexts (Bourdieu, 1982 (1991); Dreyfus and Rabinow, 1982; Fairclough, 1992; Torfing, 1999).

Fundamentally, discourse theories hold that all knowledge is discursively constructed through shared understandings of context-specific meaning (Medina, 2005). In this manner, a discourse can be appreciated as a 'shared way of apprehending the world' (Dryzek, 2005, 9). Discourse theorists do not contend that there is no world external to discourse, but instead argue that comprehensions of this world are mediated by discourse. It is this mediating process that prompts the perceptions of objectivity that is conceived to constitute 'what counts as Real' (Schiappa, 2003, 178). Thus,

Discourse theory does not dispute in any way the realist assertion that matter exists independently of our consciousness, thoughts and language. The contention is that nothing follows from the bare existence of matter. Matter does not carry the means of its own representation...Rather, intelligible social forms are constructed in and through different discourses. Hence, a particular piece of land can be constructed as habitat for an endangered species by a group of biologists, a recreational facility by the urban population, fertile farm land by local farmers, or a business opportunity by urban developers. (Torfing, 2005, 18)

Therefore, discourse analysis refers to the process of scrutinising the practices employed in the construction of discourses and the influences of discursively mediated interpretations. It follows that those engaged in discourse analysis treat a broad spectrum of linguistic and non-linguistic material as 'text' that enables interpreting subjects to experience the world through language, acts, objects and practices (Ricoeur, 1973; Yanow, 1996). This permits discourse theorists to draw

upon and formulate a series of concepts and methods in communication theory that are commensurate with its ontological suppositions (Howarth, 2000). By reference to this approach, discourse is here understood to be more than the 'mode of talking' synonymous with common parlance. Rather, it is conceived as a specific and cohesive ensemble of ideas, concepts and categorisations that are produced, reproduced and transformed in a particular set of practices and against the background of a specific social, temporal and spatial context (Epstein, 2008; Hajer, 1995). Applied to the formulation of policy concerning the interface between society and the environment, Feindt and Oels note that,

Taking a discursive perspective allows one to understand how 'nature' and 'the environment' are continuously 'produced' through environmental policy making, planning, research and development as well as through everyday practices. It also allows one to ask if the environmental policy is about nature and the environment at all or rather about the redistribution and reconfiguration of power in the name of the 'environment'.
(Feindt and Oels, 2005, 163)

Hence, examining 'how' agents couple problems to policies through the use of discourse in providing clarity of meaning to landuse policy ambiguity furnishes a way by which to investigate 'how' the context contingent interpretations of such clarification influences the principles of landuse governance. Additionally, attention to 'what' is communicated through discourse permits an examination of how such rationalities evolve over time, as well as facilitating inference on the possible implications of a policy's institutionalisation.

This is primarily achieved through an appreciation of the ways in which discourses function to regularise how a particular issue is perceived both ontologically and epistemologically, and thus how the basic principles of social action are structured in relation to it (Fischer, 2003; Fischer and Forester, 1993). Thus, discourses have formative power in configuring shared understandings and human interactions with both the social and physical worlds (Barry, 2007; Coates, 1998; O'Neill, 2008). As such, realities are never understood simply through familiarity with facts alone. Rather, realities are conceived to involve a 'perceptual interpretive element'

(Kingdon, 1984, 115) which is organised by particular discourses that transmit context specific meanings that both constitute, and are constituted by, systems of knowledge (Gadamer, 2004). Against this, discourse theorists assert that questions of truth and falsity are not resolved by a theory-independent world of phenomena. Instead, such questions are seen as relative to the standards of authentication established by particular systems of knowledge which are related to specific places during certain periods (Foucault, (1969) 1972; Nietzsche, 2000). Consequently, discourse analysis shifts the focus from objective truths to a 'will to truth' (Foucault, 1976; 1977a; McNay, 1994; Sheridan, 1980). This reflects the complex set of relationships between knowledge that is produced during a particular period and the rules by which new knowledge is generated (Hacking, 2002). Therefore, within a particular period, discursively associated meanings construct similarities in the systems of knowledge operative at a conceptual level, despite often dealing with different subject matters (Dreyfus and Rabinow, 1982; Smart, 1985).

Used parsimoniously as a backdrop to an analysis of specific discourses, rather than as the object of such an analysis, this comprehension of how standards of authentication are context dependent can provide a means for understanding how some concepts gain traction in debates among parties schooled in specific modes of thought. This can be seen to reinforce Schmidt's (2011) contention that the ideas in a discourse must not only 'make sense' within a particular meaning context, but that the discourse itself must be patterned according to a given 'logic of communication,' following rules and expressing ideas that are socially constructed and transmitted within a given discursive setting. Thus, employing discourse analysis facilitates an examination of how problems and policies may be coupled in a way that resonates with the prevailing presuppositions of knowledge legitimacy in a particular context. In so doing, it enables an investigation into how meaning making may provide clarity in moments of problematic policy ambiguity. Accordingly, discourse analysis may be used to address the deficiencies of the MSF in explaining 'why' certain policy proposals emerge and 'how' the successful coupling of problems with policies is achieved. However, examining how policy entrepreneurs employ discourse in meaning making so as to advance certain policy

solutions, implies an effort to denaturalise what is assumed as 'the truth about a reality'. Thus, the task is not to evaluate whether statements are true or false, but rather to investigate 'how' such 'truths' are mobilised. In other words, the job is to study 'how' meaning making engenders the apparent legitimacy of a policy approach. For as noted by Epstein,

The 'truth' is potent. Its power is wielded in particular discursive economies of power. Thus, it becomes necessary to assert the relativity of truth claims and to consider them in relation to the particular configuration of power relations within which they obtain. More generally, studying discourses is a means to taking a critical step out of what the discourses actually say in order to observe what they do. (Epstein, 2008, 13)

Consequent on these 'discursive economies of power', actors occupied with discursive activity are positioned relative to the subject of that activity. Discourses thereby part constitute the identities of social actors by creating particular 'subject positions' (Hajer, 1995). Put simply, discourses specify the power and positions from which social actors can communicate and act with influence. The power relations inherent in the use of discourses may be both constraining and enabling on the actors who engage in their use (Crampton and Elden, 2007; Danaher et al., 2000; McHoul and Grace, 1993). Foucault ((1969) 1972) elucidates this idea by arguing that who says what, where, when and how, and with what influence, is shaped through the evolution of discursive rules that constitute 'enunciative modalities'. He therefore places emphasis on the need to investigate the many ways in which different actors are bestowed the mandate to speak authoritatively on issues consequent on their positions.

One limitation on the ability to authoritatively pronounce on an issue is the capacity to present arguments grounded in what are perceived as valid forms of knowledge (Benton and Rennie-Short, 1999; Litfin, 1994; Mills, 2003; 2004; Steffek, 2003; 2009). As legitimate governance in modern western democracies is set against the backdrop of an historical legacy wherein justifiable action is seen to follow sequentially from 'objective' knowledge acquisition (Barker, 2001; Fry and

Raadschelders, 2008), the possession of valid (objective) knowledge is a key determinant on the ability to authoritatively pronounce on an issue. Such valid forms of knowledge habitually partition the world into apparently self-evident dichotomies of true and false, objective and subjective. This 'naïve realism' (Audi, 2003; O'Brien, 2006; Sayer, 2000) is the ground of modernist rationalities that view the universe as comprising 'autonomous actors and an independent reality' (Wagenaar and Cook, 2003, 140). In this way, 'the general state of reason' (Foucault, (1969) 1972) delimiting the legitimacy of knowledge in modern western democracies, and thus the power to govern in such contexts, is set in an ability to underpin governing activity by an appeal to knowledge which appears to have been conceived in accordance with the rules of such modernist rationalities (Aronowitz, 1988; Gane, 2004; Weber, 1922). Flyvbjerg (1998) extends this idea by showing that it is the 'appearance' of such rationalities rather than a genuine concern with their use that is important in power-imbued governing activity.

This 'knowledge dependence' (Gottweis, 2003, 256) of governing activity has important implications for the emergence, evolution and institutionalisation of a new planning policy approach. Specifically, as the perceived legitimacy of landuse policy generally relies on reference to such modernist rationalities (Fischer, 2003; Flyvbjerg, 1998; Rydin, 2003), the capacity of a proposed policy to resonate with prevailing interpretations as to what comprises such valid knowledge is likely to exert significant influence on its adoption by those positioned within planning and allied professional disciplines (Freidson, 1986; Petts and Brooks, 2006). Furthermore, those in a position to enunciate such knowledge are thereby likely to assume identities constituted by power relationships, and enjoy relative to others, the ability to identify, control and legitimise the very issues taken to be the subjects of deliberation (Torgerson, 2005). In this sense, 'the question of who should have the authority to make definitional decisions amounts literally to who has the power to delineate what counts as Real' (Schiappa, 2003, 178).

Although Kingdon (1984) does not specifically reference the role of discourse in reflecting or constituting 'enunciative positions', it may be inferred that policy

entrepreneurs seeking to advance a particular policy would have to ensure that its presentation resonates with the prevailing rationalities operative within the policy formulation arena. This would be a requirement for such an advocated policy solution to be bestowed with the persuasive influence necessary to facilitate placement on the decision agenda.

Kingdon's study of agenda setting dynamics directs attention to the importance of 'causal stories' (Stone, 1989; 1997) in furnishing the 'collective centring' (Hajer and Laws, 2006, 260) that allows constellations of actors to coalesce around a series of associated storylines. Such 'collective centring' of different interests has been widely described as a 'discourse coalition' (Epstein, 2008; Fischer, 2003; Hajer, 1993; 1995; 2003; 2005; 2006; Hajer and Versteeg, 2005; Runhaar, 2009; Wagenaar, 2011). These coalitions comprise the well of support for a policy. Therefore, the size of a discourse coalition and 'who' it includes is likely to affect 'how' the coupling process occurs. Specifically, the composition of such a coalition may significantly influence the way a policy evolves, the pace with which it ascends the decision agenda, and both the degree and speed with which it is subsequently institutionalised. Consequently, an appreciation of discourse coalitions is necessary for a nuanced understanding of the role played by meaning making activities in explaining 'why' a policy emerges, 'who' promotes it, 'how' it is advanced, and 'what' are the principles of governance embodied within it.

3.5.1 Discourse Coalitions

Based upon research concerning acid rain related debates in Great Britain and the Netherlands during the 1980s, Hajer theorises that 'discourse coalitions',

...are defined as the ensemble of (1) a set of story-lines; (2) the actors who utter these story-lines; and (3) the practices in which this discursive activity is based. Story-lines are here seen as the discursive cement that keeps a discourse-coalition together. The reproduction of a discursive order is then found in the routinization of the cognitive commitments that are implicit in these story-lines.
(Hajer, 1995 65)

As the keystone in this discourse coalition hypothesis, storylines have a number of essential qualities. Hajer (1995, 63) outlines these as follows,

- (I) *They function in distilling the complexity of a problem and often involve discursive closure*
- (II) *They create easily comprehensible solution possibilities that also frequently involves discursive closure*
- (III) *They have a ritualistic dimension which through repetition gives permanence and perceived validity to their content*
- (IV) *They allow different actors to expand their appreciation and discursive proficiency on an issue beyond their disciplinary expertise or experience*

In this theory, storylines are conceived as forming tropes or shortcuts into broader narrative schemes that configure events and actions into a unified order which identifies the larger patterns to which they contribute (Throgmorton, 1993). This organising process operates by connecting diverse phenomenon and stipulating the causal chain of effects that each phenomena has on each other (Kaplan, 1993; Roe, 1994). Therefore, storylines not only convey meaning, they also offer those who subscribe to them a way of perceiving the phenomena under examination (Fischer, 2003). In other words, storylines orientate interpretations, and in doing so, they help constitute reality for those who subscribe to them (Paltridge, 2006).

Thus, Hajer's theory of discourse coalitions offers a useful means by which to investigate both 'why' and 'how' policies and problems may be coupled in shaping the meanings that provide clarity to problematic policy ambiguity. Of specific benefit to the present study is his contention that the power of storylines to form such coalitions is deriving from their capacity to facilitate 'discursive affinities' (Hajer, 1993; 1995; 2005). These are envisaged as separate elements that have similar cognitive or discursive structures and so tacitly suggest a logical mutuality. Such affinities do not primarily refer to agents and their intentions, but instead allude to the influence of discursive formats on the perception of reality. Thus, for example, an agent may not comprehend the technical details of an argument but

may be confident in asserting that it 'sounds right' (Hajer, 1995, 67). Furthermore, Hajer theorises that in the case of a particularly strong affinity, discursive elements not only resemble one another, but an exchange of terms or concepts may exist. He terms this phenomenon 'discursive contamination' (Hajer, 1995). Consequently, discursive affinities and contaminations may be thought to function in clustering interpretations of meaning that share a broadly aligned logic rather than an issue specific assertion. In this way, the various agents comprising a discourse coalition can be conceived as capable of forming associations in their support for the reasoning upon which an array of discursive affinities and contaminations are able to successfully operate. This is achieved by permitting latitude in interpretation of the particular problems or policies perceived to be addressed by the expressions that prompt discursive affinities and contaminations. Accordingly, discursive affinities and contamination may be seen as both reflecting and constituting the reality on which the rationalities of policies are based. In the case of landuse planning wherein the perceived legitimacy of policies is generally reliant on reference to modernist rationalities (Hawkesworth, 2012; Throgmorton, 1993), the influence of discursive affinities and contaminations in sustaining and expanding a discourse coalition among planners and allied professionals is likely to be predicated on their ability to resonate with 'the traditional view' (In't Veld, 2009, 121) of a 'technical-rational model' (Owens et al., 2004, 1945) of knowledge production conceived as operative within planning practice (Flyvbjerg, 1998; Rydin, 2003; 2007). Indeed,

Policy analysts and planners have frequently claimed that their work is based on rationality and objective reason. 'Facts' supporting arguments in policy making are generally supported by such claims to rationality. (Richardson, 1996, 282)

As noted above (see section 3.1), the emergence of a new planning policy approach is conceived as identifiable through the implicit commonalities of various new policies comprising a broadly shared perspective on how a particular set of problems should be addressed. Thus, studying 'what', 'why' and 'how' certain discursive affinities and contaminations connect different policies may be employed

as a means by which to identify the rationalities underpinning the principles of landuse governance embodied in a new planning policy approach.

Whereas Hajer's discourse coalitions hypothesis focuses largely on the role of language (Hajer, 1993; 1995; 2003; 2005; 2006; Hajer and Versteeg, 2005), a discourse perspective may be 'concerned with any type of signifying practice, that is, any practice that functions as a site for the production of meaning' (Epstein, 2008, 186). Thus, in addition to language, it is also important to remain attentive to the role of acts and objects as 'carriers of meaning' (Yanow, 2000, 17) in consolidating the coupling of problems to policies that are prompted by discursive affinities and contaminations. As such, language, acts and objects comprise symbols that weave a 'web of signification' (Allan, 2005, 12) in structuring the reality both constituted by, and addressed in, policy work (Fischer, 2003; Howarth and Torfing, 2005; Stone, 1997; Wagenaar, 2011). However, each 'symbol is a social convention' (Yanow, 2000, 14) whose meaning is broadly agreed upon but not delineated (Eder, 1996; Gold and Revill, 2004; Simmons, 1993). Thus, symbols communicate through connotation rather than denotation (Chandler, 2007; Edelman, 1964; Fiske, 1990). Where such symbols are perceived to connote knowledge legitimated in accordance with accepted disciplinary standards, such as those in landuse planning, they may be conceived as representing factual statements and thereby meet approval (Ockwell and Rydin, 2006; Swaffield, 1998).

Seen in this light, symbols can offer the medium through which diverse motivations, expectations and values are synchronised to enable accord between numerous interests (Cobb and Elder, 1983; Fischer, 2003). Consequently, symbols may help facilitate coupling of problems to policies by allowing policy entrepreneurs and a wide array of interpreting agents to shape their associations in various contexts through emphasising different elements of the storylines which they help to construct and disseminate. In this way, symbolic language, acts and objects may enable the plasticity of meanings necessary to ensure the successful coupling of various problems to policies across a spectrum of issues and institutional contexts. Accordingly, symbolic language, acts and objects may furnish the connotations

which 'will to truth' (Foucault, 1976, 55) the facts that enable the formation, maintenance and expansion of a discourse coalition.

3.5.2 Symbolic Language

By attending to the symbolic role of language as both constituting and carrying the meanings engendered in policy work 'language becomes part of data analysis for inquiry, rather than simply a tool for speaking about an extra linguistic reality' (Shapiro, 1981, 14). Appreciating this constitutive role thereby requires attention to 'what happens when people draw on the knowledge they have about language...to do things in the world' (Johnstone, 2007, 3). Drawing on such knowledge entails mediating communication through the context contingent linguistic conventions that supply the pre-conditions for the process of discourse-formation (Lemke, 1998, 91). Central to this is the part language plays in the categorisation of experience, and as such, fostering 'mental constructs in a world that has only continua' (Stone, 1997, 378). Yanow (2002) suggests that these constructs are central to the policy process through their influence in structuring perceptions of the reality upon which policy is directed.

Indeed, the MSF views categorisation as an important aspect of problem definition. This is reflected in the study undertaken by Kingdon (1984, 117) into the role played by classification in civil rights debates in the USA during the 1970s wherein it is demonstrated that categories functioned in structuring the interpretation of the content they signify through connotation. However, categories are not 'fixed', 'innate' or 'given' phenomena. Rather, classification can be understood to entail an interpretive choice based on conclusions regarding the relative importance of some features over others. Hence, categories emphasise elements deemed commensurate within their delineations and the possible associations between groupings. As a corollary, categories help silence those elements which they do not deem to be significant (Bowker and Leigh-Star, 1999). In this way, 'it is through categorization that the specific sense of something is constituted' (Potter, 1996, 177). Consequently, categories imply certain attributes about that which is classified (Yanow, 2000), such as for example, the ability of that contained within a

category to be designed and delivered as 'infrastructure' via the landuse planning system. Accordingly,

Language is capable not only of constructing symbols that are highly abstracted from everyday experience, but also of 'bringing back' these symbols and appresenting them as objectively real elements in everyday life. In this manner, symbolism and symbolic language become essential constituents of the reality of everyday life and of the common-sense apprehension of this reality. (Berger and Luckmann, 1966, 55)

Given their potential to configure the world in an apparently logical format, language induced categories thus offer an important symbolic apparatus open to use by those seeking to locate meaning in situations of ambiguity (Gregg, 2006). Be they the product of unintentional evolution or deliberate application, they may function as essential elements in constituting the storylines that couple problems to policies. This is facilitated by their capacity to be drawn on as quotations, references and heuristic devices to partition the world and thereby shape realities. As such, the configuration of categories through language 'profoundly shapes our view' (Fischer and Forrester, 1993, 1), and in this way, may be used to delineate what can be considered as legitimate knowledge.

However, engendering forms of reality by categories need not be done explicitly. Instead, 'The fundamental legitimating 'explanations' are...built into vocabulary' (Berger and Luckmann, 1966, 112). In this way, 'the mere act of naming an object or situation decrees that it is to be singled out as such-and-such rather than as something other' (Burke, 1973, 4). Therefore, the naming process may be conceived as process of reality construction (Potter, 1996, 82). It is in this context that Burke (1966) advances a 'theory of entitlement' wherein he proposes a reversal of the intuitive understanding that 'words are the signs of things' by suggesting that 'things are the signs of words' (Burke, 1966, 360-361). As explained by Schiappa,

To “entitle” something – “X” – is not only to give X a title in the simple sense of assigning X a name or label, but it is also to give X a particular status. For example, to describe X as “an object” is to assign X an ontological status somewhat different than labelling X “an event” or “a vague feeling”. (Schiappa, 2003, 114)

Hence, Burke proposes that naming may ‘entitle’ reality. It is through this process of entitlement that presuppositions of how something can be known may be stimulated. In cases such as that of GI, where an agreed definition is absent (see Chapter 2, section 2.3), a term may be employed so variously that it becomes ‘underdetermined in meaning and overdetermined in figuration’ (Allen, 2000, 2) such that the boundaries between literal and figurative expression are blurred. Here, the frontiers separating exact speech and analogy may become porous as understandings of that which is named tack back and forth between connotations and denotation (Barthes, 1957 (2009)). In this sense, language may become ‘at once literal and figurative, and hence intrinsically metaphorical’ (Orr, 2003, 162). In such instances, ontological and epistemological presumptions may be transferred from familiar concepts onto new abstract ideas whose definition is still in flux (Moran, 1995). Thus, new meaning may be acquired by drawing upon existing knowledge of something known and familiar. Schön (1993) has demonstrated how in a policy context this may be observed in the use of metaphors to orient attention towards novel ideas. Metaphors facilitate this as they are both fundamentally conceptual in nature but grounded in everyday experience (Kövecses, 2002; Knowles and Moon, 2006; Lyon, 2000). Accordingly, ‘the essence of metaphor is understanding and experiencing one kind of thing in terms of another’ (Lakoff and Johnson, 1980, 5). Therefore, metaphors are heuristic devices that comprise the juxtaposition of two superficially dissimilar elements in a single context (Hausman, 2006; Richards, 1936 (1965)).

As has been demonstrated by Myerson and Rydin (1996) with respect to environmental policy, although metaphors may initially appear as merely descriptive, they function by directing perception (Black, 1962; Ricoeur, 1975 (2002)). Consequently, while they may offer new insights into phenomena, they

may simultaneously help conceal elements of those phenomena (Goatly, 1997; Ortony, 1993; Semino, 2008). Like categories, metaphors emphasise certain aspects of things and obscure others, thereby organising perceptions of reality and suggesting appropriate actions in response to such perceptions. It is their conventionality, tacit knowledge potential and the similarities in their broadly shared sense of meaning among a community of interpreters, that masks the power of metaphors to shape action (Boyd, 1993; Yanow, 1996). Put simply, the power of metaphors resides in their ability to mould action in response to the perceptions of the meanings they provoke (Hart, 2008). In this way, metaphor may be employed in coupling problems to policies in a manner that reduces ambiguity through the transference of ontological and epistemological connotations from the familiar onto a new 'coupling' idea. Furthermore, in time, and through frequent use, the connotations of such metaphorical reasoning may evolve into what are increasingly perceived as denoted 'facts' (Barthes, 1957 (2009); Beardsley, 1958 (1981)). Here, metaphor may be conceived as providing 'fixity' (Gregg, 2006) or stability of meaning to problematic policy ambiguity such that it becomes more description than analogy in a 'will to truth' (Foucault, 1976, 55). Thus, metaphors may evolve from models 'of' a situation to models 'for' it (Yanow, 2000, 43). Should the language of the metaphor(s) used in this coupling process facilitate discursive affinities and/or contaminations, metaphor may provide a powerful means by which to create, sustain and expand a coalition of support for a policy or series of policies orientated to a reality entitled by language (Schiappa, 2003, 115). Consequently, it is conceivable to think that the strategic use of metaphor may assist the emergence and evolution of a new policy approach.

3.5.3 Symbolic Acts

'Acts stand in a representational relationship to the meanings understood or intended to underlie them' (Yanow, 2000, 74). Thus, acts offer windows onto the rationalities which underpin a policy approach. Indeed, the symbolic quality of acts as carriers of meaning suggests their potential for use in consolidating the apparent provision of clarity and direction that facilitates the coupling of problems to policies. Frequently prominent among these is the act of counting (Collins et al.,

2009; Evans, 2007; Flyvbjerg, 1998; Hajer, 1995; Sanderson, 2002). As noted by Kingdon (1984, 98), quantified information 'acquires a power of its own that is unmatched by issues that are less countable'. Thus, statistics may be employed in a 'will to truth' (Foucault, 1976, 55) by asserting a 'claim to "factual" status and the elevation of information into objective knowledge' (Myerson and Rydin, 1996, 21). It is in this way that the act of counting may be conceived as symbolically directed to establishing the 'numinous legitimacy' (Clark and Majone, 1985, 16) of objective scientific inquiry that conveys meaning seemingly independent of those who engage in the measurement exercise. However, the very act of counting can also serve a normative function by implying a need to do something. Hence, in quoting efforts to quantify unemployment in the U.S.A. during the 1930s, Stone (1997, 167) notes how the deed of measuring usually implies 'a need for action, because we do not measure things except when we want to change our behaviour in response to them'. Furthermore, Fischer (2003, 171) suggests that 'By establishing recognisable boundaries, counting can normatively function like metaphors'. In this way, counting may be conceived as a symbolic act that helps constitute the reality of a policy approach.

Additionally, quantifying endeavours may be ambiguous, particularly when they concurrently suggest explicit and implicit stories that blur the boundaries separating value and instrumental rationality (Flyvbjerg, 1998). Consequently, the act of measuring, the methodologies used and the results of such exercises can be patterned in ways that establish the normative validation of a proposal through their integration into storylines of rectitude and rationality (Hannigan, 2007). As such, statistics can be employed by entrepreneurs to enhance the potency of a utopian or dystopian storyline, thereby helping to tacitly or overtly communicate meaning in a way that orientates interpretation and prompts action (Dryzek, 2005; Meadows et al., 1972). Moreover, it may be possible that the ostensible numeracy of a storyline can house or reference an implicit narrative that functions independently of the would-be meaning of the numbers. For example, Fischer (2003, 172) suggests that 'a hidden message is often transmitted in the very act of counting.' In this scenario, the process of quantification itself may serve as a tacit

message signifying that something occurs frequently enough, or is of a sufficient importance, to merit numerical examination, and thus should be taken seriously. In this way, measuring can be understood as a symbolic act that may be used to shape interpretations of reality and/or provide clarity of meaning in situations of problematic policy ambiguity.

Another symbolic act potentially germane to the emergence of a new policy approach is the act of comparison. Kingdon (1984) proposes that comparison with both the circumstances of another and/or one's past performance may provoke the reconceptualisation of an existing condition as a problem (see section 3.3.2). In this way, comparison may be considered a symbolic act through its role in constituting the meanings that may be employed to direct perception in advancing a policy proposal. Consequently, the act of comparison may assist the process of coupling problems to policies. Also, just as there is a concern with connoting legitimacy through the scientific objectivity of counting, so too does the symbolic act of comparison suggest a concern for neutrality. Such concern may be particularly strong in the bureaucracy of landuse governance whose legitimacy is reliant on its perceived ability to operate independently of personal or vested interests (Owens et al., 2004; Rydin, 2003; Swain and Tait, 2007).

This attention to an appearance of impartiality in structuring and communicating the validity of knowledge claims has been termed 'stake inoculation' (Potter, 1996, 125). Central to this is the relationship between the identity of those referencing a knowledge claim, those identified as producing such a claim, and that upon which the claim is made (Smith, 2006). The stake inoculating potentials and properties of such relationships were explored by Erving Goffman (1979; 1981) and elucidated in his theory of 'footing'. Goffman's hypothesis refines presumptions on the simple distinction between addresser and addressee by theorising the various roles transcending this dichotomy through proposing a threefold typology of reference (Tannen, 1993). Focused on 'the production or reception of an utterance' (Goffman, 1981, 128), he theorises three discrete roles available in all forms of reference, be they explicitly or implicitly delivered. These are namely the *principal*,

whose position the piece of speech is supposed to represent; the *author*, who does the scripting; and the *animator*, who says the words (Levinson, 1988). As such, the theory of footing contends,

The notions of animator, author, and principal, taken together, can be said to tell us about the “production format” of an utterance.
(Goffman, 1981, 145)

These distinctions between *principal*, *author* and *animator* may be employed in structuring the symbolic act of comparison by exerting influence on the appearance of neutrality (Harré, 2001) through positioning the ‘animator’ as ‘just passing something on’ (Potter, 1996, 143). Indeed, ‘it is through the paraphernalia of footing that speakers managed their personal or institutional accountability’ (Potter, 1996, 122). Several studies have explored the role of comparison in directing the interpretation of problems and policies (Epstein, 2008; Kingdon, 1984; Zahariadis, 2003). Nevertheless, instances where the theory of ‘footing’ has been applied in analysis of ‘how’ this process was undertaken are rare in policy studies, with such use largely confined to media studies (Clayman, 1992; Goodwin, 2006; Tolson, 2006). However, employed in the examination of how perceptions of impartiality are shaped through the process of comparison, the theory of footing may help elucidate ‘how’ meaning making activity operates within the coupling process proposed by the MSF. Thus, this research innovatively employs the theory of footing to investigate how advocates of GI position themselves within debates concerning planning policy formulation (see Chapter 8).

3.5.4 Symbolic Objects

In addition to the symbolic use of language and acts, the work of both initiating and consolidating the coupling of problems to policies may be assisted through the meanings constituted and carried by symbolic objects. Indeed, Yanow notes that,

Policy meanings are communicated and interpreted not just through policy and implementation agency language, but also through objects – physical artifacts – initiated or modified by policy language and/or by agencies as they enact that language.
(Yanow, 2002, 62)

In the context of landuse planning whose focus is inherently spatial, one of the most prevalent objects employed in professional activity is the map. The symbolic quality of cartography and map use rests on connotations of 'veracity' and 'integrity' (MacEachren 1995, 337). These are specified as the implications of temporal and attributive precision commonly associated with impressions of accuracy in mapping, and the presumption of impartiality in the activities of scientifically schooled cartographers (Dorling and Fairbairn, 1997). As such, the plans produced with and through maps facilitate the 'stake inoculation' (Potter, 1996, 125) necessary for the enunciative modalities (Foucault, (1969) 1972) that favourably position agents within discourses of apparent scientific objectivity. Consequent on such epistemological assumptions, maps may 'connote a directness in representation which prompts users to overlook the fact that maps are representations' (MacEachren, 1995, 339).

Thus, map-making is a form of meaning-making (Cosgrove, 1999; Daniels et al., 2011) wherein the 'medium of communication is ultimately connected with the message it communicates' (Yanow, 2000, 17). Rather than neutral, maps as symbolic objects and the carriers of meaning thereby possess their own affordances and constraints (Crampton, 2003), which are 'already charged with cultural signification' (Eco, 1976, 267). Consequently, 'In 'plain' scientific maps, science itself becomes the metaphor (Harley, 1992, 241). Nevertheless, such condensation of scientific legitimacy in cartography may not only entail resonance with presumptions of proper planning methods, rather it may concurrently involve shaping perceptions of that which is presented (Wood, 1992). As stated by Kitchin et al.,

Mapping is epistemological but also deeply ontological – it is both a way of thinking about the world, offering a framework for knowledge, and a set of assertions about the world itself. (Kitchin et al., 2009, 1)

Thus, maps as symbolic objects may not only embody presumptions on legitimate forms of knowledge, they may also orientate interpretations of the reality they claim to represent. As such, the 'will to truth' (Foucault, 1976, 55) of information

presented in cartographic form may enable map authors to legitimately expound 'an' interpretation of something as 'the' interpretation via reference to an apparent objective reality grounded in the 'numinous legitimacy' (Clark and Majone, 1985, 16) of science. Through the production of symbolic objects, cartography thereby allows map authors to legitimately proclaim the 'facts' of a situation from an advantageous enunciative position via appeal to the seeming objectivity engendered by stake inoculation. Put simply, maps legitimate that which is enunciated.

For a map to connote a 'truth' relative to the suppositions of its audience, the activity of map making must be selective in content (Monmonier, 1991). Thus, selectivity requirements permit the use of maps as devices that channel interpretation by highlighting and discounting the aspects of the reality its author's seek to construct (Blacksell, 2006; Corner, 1999). Consequently, maps function similarly to metaphors as both instruments of communication and a means of persuasion (Pickles, 2004). This has been demonstrated for example in the work of Evans, who in a case study of wildlife corridor creation in Birmingham outlines how 'maps used in the strategic and development control planning processes...constitutes a major arena in which ecological factors are mediated against wider political pressures' (Evans, 2007, 141). As such, the symbolic qualities of maps may be employed in coupling problems to policies by offering clarity of meaning and providing direction for action on issues of problematic policy ambiguity.

3.5.5 Myth

In functioning as the 'carriers of meaning' (Yanow, 2000, 17), symbolic language, acts and objects are central to the production of policy myths. These forms of narrative are social constructions embedded in a particular time and place. They offer an account of reality which through allusion to the symbolic qualities of their composite storylines supply 'figures of resolution' (Myerson and Rydin, 1996, 181) to issues of problematic policy ambiguity. This is achieved by presenting clarity of meaning on the identity and nature of problems, as well as suggesting how such

problems may be remedied. The term 'myth' is employed here to designate a 'narrative created and believed by a group of people which diverts attention from a puzzling part of their reality' (Yanow, 1996, 191). The idea of myth forwarded in this context is not conceived as an evaluation of a narrative's veracity, as myths are neither true nor false in the empiricist sense. Rather, discernment of their 'truthfulness' is dependent on subscription to their narrative (Bottici, 2007). As such, 'myth' in the context of policy analysis refers to a particular narrative format that facilitates subscription by a broad range of issue-specific interests through proffering apparent commensurability in situations where plausible discrepancies may coincide. Myths achieve this by suspending conflict in 'masking the tensions between or among incommensurable values' (Yanow, 2000, 80) and deflecting attention away from prospective logical inconsistencies or potential incompatibilities in that which is articulated (Charteris-Black, 2009). Consequently, a policy myth may be central to facilitating the emergence, maintenance and expansion of a discourse coalition. This potential may be enhanced by the capacity of myths to implicitly legitimate the actions which their narrative begets (Barthes, 1957 (2009)). Myths evolve from the interpretation of meanings communicated via the symbolic language, acts and objects employed in forwarding particular interpretations of problems and policies. Thus, use of symbolic language, acts and objects in the construction of a policy myth may provide a powerful tool to entrepreneurs seeking to advance a particular policy concept (Kingdon, 1984). By enabling the suspension of potential inconsistencies, contradictions and conflicts, myths offer a means by which to couple solutions with problematic preferences in situations of problematic policy ambiguity.

3.6 Conclusion

As noted by Howlett et al, (2009, 9), 'public policy-making is rarely as simple a matter as either analysts or policy-makers might wish for'. This has led some to exclaim that 'there is no general theoretical framework tying together the study of public policy' (Smith and Larimer, 2009, 15) but rather that such study comprises 'a babel of tongues in which participants talk past rather than to one another' (Bobrow and Dryzek, 1987, 4). Successfully negotiating this babel involves more

than assuming that agents are simply 'muddling through' (Lindblom and Woodhouse, 1992) the policy formulation process. Rather, it entails an appreciation that 'Policies are intentions, the product of creative human imagination' (Goodin et al., 2006, 19). Thus, 'Given the staggering complexity of the policy process, the analyst must find a way of simplyfying the situation in order to have any chance of understanding it' (Sabatier, 2007a, 4). However, the student of policy must be vigilant in seeking to achieve this as elucidating upon the ascension of new policy requires explanation that is 'parsimonious to be sure, but not over simplified' (Greenberg et al., 1977, 1543).

Locating a framework in which to structure such an explanation requires attention to the presumptions on which much policy process work is based. A great deal of this work seeks to derive 'generalizable knowledge and principles that can be applied to achieve policy goals across domains and settings' (Hajer and Laws, 2006, 251). To facilitate the production of such 'generalizable knowledge', most policy process theory presupposes a linear logic wherein new policy is assumed to emerge in a temporal progression from problem identification to solution specification. However, this position 'does not suggest a way of understanding how policy makers deal with ambiguities and how ambiguity might relate to policy changes (Hajer and Laws, 2006, 256). Given the emergence of GI in Ireland as a response to problematic policy ambiguity (see Chapter 6), what is thus required is a conceptual structure that is not predicated on such sequential reasoning. The Multiple Streams Framework (MSF) developed by Kingdon (1984) presents such a conceptual structure. This framework departs from the presuppositions of most policy process theory by configuring an explanation of the policy process in which contextual influences may effect the counter intuitive process wherein solutions may be formulated in advance of problem identification. Accordingly, the MSF proffers a conceptual means to configure an explanation of both 'why' and 'how' a new policy approach may emerge through the specification of a policy solution to a multitude of problems. This has lead Zahariadis (2007; 2003) to conclude that the MSF is best viewed as a theoretical device for examining policy change under conditions of 'ambiguity'.

Additionally, most policy process theory involves presumptions on adversarial forms of policy development (Baumgartner and Jones, 1991; 1993; 2012; Sabatier, 1988; Sabatier and Weible, 2007). However, as this thesis seeks to investigate the largely uncontested ascension of GI policy in Ireland, what is required is a non-adversarial based concept of the policy process. Whilst formulated in the context of a pluralist political system, the MSF presents such a framework through supplying a conceptual structure that is not premised on assumptions of adversarialism to explain policy process dynamics.

Nevertheless, there are numerous deficiencies with the MSF, the most prominent of which are its vague concept of a 'politics stream' (Robinson and Eller, 2010), lack of clarity with regards to how 'windows of opportunity' should be conceived (Howlett et al., 2009) and the unclear representation of a 'policy entrepreneur' (Koski, 2010). Whereas efforts have been made to address these, (Zahariadis, 2003; 2007; Zahariadis and Allen, 1995), the MSF remains best suited to broadly identifying 'the elements and general relationships among these elements that one needs to consider' (Ostrom, 2011, 8), rather than providing a context sensitive means of explanation for the specifics of a policy's emergence, evolution and institutionalisation.

Furthermore, as a new 'policy approach' comprising a broadly shared perspective on how a particular set of problems should be addressed, an understanding of 'who' advocated GI, 'what' it entails, 'why' it is promoted and 'how' it is advanced, moves beyond the explanatory potential of MSF in requiring more than just an account of a policy's placement on the decision agenda. Rather, it involves comprehending 'the principles' of landuse governance endorsed by GI. Consequently, this thesis eschews the formulation of the universally applicable definition sought by GI's academic advocates (Ahern, 2007; Benedict and McMahon, 2006; Mell, 2008; Walmsley, 2006). Instead, it endeavours to discern and explain the causal processes that influence the varying interpretations and currency of GI. In so doing, this thesis seeks to reveal the rationalities GI represents. Accordingly, policy process work that assumes rational actors seeking

utility maximisation (Compston, 2009; Kenis and Schneider, 1991; Scharpf, 1997) is not employed in this thesis. In its place is a focus on how 'sense making is an historically and socially contextualized process' (Yanow, 2006b, 10). Here, it is concurred with Hajer that,

Any understanding of the state of the natural (or indeed the social) environment is based on representations, and always implies a set of assumptions and (implicit) social choices that are mediated through an ensemble of specific discursive practices. (Hajer, 1995, 17)

Thus, investigating how such understandings are engendered and give force to policy rationalities necessitates concern for the representations constituted and communicated through discourses (Fischer, 2003). Although a comparatively recent addition to policy process theory, literature centred on the 'interpretive turn' (Yanow, 2007b, 405) to policy analysis that emerged during the early 1990s continues a steady path of growth (Hajer, 2011; Schwartz-Shea and Yanow, 2012; Wagenaar, 2011). While variously applied, this approach emphasises the importance of meaning making in the policy process. Consequently, significance is placed on the symbolic role of language, acts and objects as 'carriers of meaning' (Yanow, 2000, 17). It is these meanings which constitute, consolidate and manifest the rationalities underpinning a new policy approach, such as that of GI planning in Ireland. Thus, in this thesis attention is centred on how symbolic language, acts and objects are employed by entrepreneurs in 'coupling' problems to policies so as to create a 'discourse coalition' of parties with various interests, yet supporting a particular policy approach. This focus can thereby bridge the gap between the MSF's abstracted explanatory structure and the context sensitivity required to facilitate a comprehensive understanding of the emergence, evolution and institutionalisation of the GI planning approach in Ireland. It is by integrating the specifics of an interpretive approach with the structural abstractions of the MSF that the ensuing investigation seeks to answer the research questions posed in this thesis. However, employing this approach requires careful attention to methods of data gathering and analysis. Thus, the following chapter focuses on the methodology used in the application of this theoretical approach.

SECTION 3: METHODOLOGY

(Chapter 4)

This section provides a description and justification for the research methods employed in the thesis. It comprises just one chapter.

Chapter 4 presents a detailed account of how data was gathered. The chapter also explains and justifies the methods used in the analytical process.

CHAPTER 4: METHODOLOGY

4.1 Introduction

This chapter describes both the investigative framework structuring the thesis and the manner in which this examination was undertaken. The chapter begins with a discussion of the research strategy employed. Outlined is how the particular logic of this research strategy reflects and supports the interpretive approach advanced in the project. Subsequently considered is the project's 'case study' research design. Effort is taken to explain the appropriateness of the adopted research design in facilitating an interpretive approach. Additionally, care is taken to outline how the research design integrates with the research strategy in furnishing a robust means for investigating the research questions of the thesis. The chapter then provides a detailed outline of the *research methods* employed in the case study. This includes a description of the reasoning behind the use of a 'grounded theory method', the 'triangulation' of both investigative methods and data sources, and the process of theorisation. Finally, the chapter offers an account of how the thesis progressed from the integration of data and extant theory in generating an explanatory hypothesis to writing the narrative presented in subsequent chapters.

4.2 Research Strategy

4.2.1 Logics of Enquiry

Prior to specifying the methods used in collating and analysing data it is necessary to identify 'a procedure, a logic, for generating new knowledge' (Blaikie, 2010, 8). Such a logic is referred to as a study's *research strategy*. A research strategy guides the formulation of an investigative programme by furnishing the principles by which the *research design* and *research method* are devised. The most commonly referred to research strategies are 'deductive' and 'inductive'.

A deductive research strategy focuses upon testing a pre-formed hypothesis against data. Validity is measured against the ability of the theory to facilitate adequacy of explication and/or prediction. This form of research strategy seeks to explain phenomena through the application of general laws and thereby disengages

explanation from the complexity of context. While seeking to avoid such a context insensitive research strategy in the present study, the importance of appreciating existing theory is not denied. Rather, this study seeks to acknowledge the value of theories through endeavouring to employ them as 'sensitising concepts' (Bryant and Charmaz, 2007) that offer 'vantage points' (Charmaz, 2006) from which an analysis starts rather than ends. As such, existing theories assist the formulation of tentative ideas, which if later deemed irrelevant may be dispensed with rather than slavishly applied.

In contrast to a deductive research strategy which begins with a hypothesis, an inductive research strategy commences with the collection of data. This strategy focuses on the reasoning (induction) from collected data of generalisable explanations that may then be deductively applied elsewhere. The objective of this research strategy is thus the generation of new context-disconnected theoretical accounts rather than the testing of hypotheses. While the 'bottom-up' formulation of an explanation from collated information is generally adhered to in the present study, the disengagement with context in proposing generally applicable laws is not supported.

In addressing the perceived encumbrances of solitary reliance on either research strategy, a form of inductive-deductive hybridity has been forwarded as a means to facilitate greater balance in analytical logic (Fereday and Muir-Cochrane, 2006). This research strategy involves the inductive formulation of concepts which supplement and are interpreted within a deductively deployed theoretical explanation. In such instances the researcher is critically reflective in the application of a pre-formulated explanatory theory. Here, the deductive application of theory is employed more flexibly so as to allow space for inductively reasoned assessments. However, even where such critical reflection is practised, the deductive and inductive roots of this hybrid research strategy still foregrounds hypothesis application and conclusion generalisation over context sensitive explanation, even where an inductive sensitivity to context is exhibited. Furthermore, the part-predetermination of explanatory criteria does not allow

adequate opportunity to digress from the deductively predestined trajectory of explication should the inductive elements of the analysis suggest this as the most appropriate course of action (unless of course ‘hybridity’ is abandoned).

Consequently, this thesis attempts to avoid the logical constraints of deductively and inductively founded research strategies. In keeping with this project’s focus on the context specific interpretation of meaning, an *abductive* research strategy focused on exploring ‘situated’ agent understanding and opinion is first adopted. This is subsequently merged with a *retroductive* research strategy to facilitate the theoretical abstraction of analytical work in assisting the production of a context attentive ‘plausible account’ (Charmaz, 2006) that responds to the study’s research questions. As such, an abductive-retroductive synthesis is employed.

4.2.2 Abductive-Retroductive Synthesis

A research strategy focused on interpretive analysis seeks to avoid the employment of research strategies predicated on the assumption of empiricist systems of investigation that advance deductively applicable general laws of explanation or the possibility of their inductive generation (Fischer, 2003; Wagenaar, 2011). Rather, an empirical research strategy suitable to interpretive analysis pursues a ‘willed effort to understand from within’ (Yanow, 2006b, 11) so as to appreciate ‘how specific human beings in particular times and locales make sense of their worlds’ (Schwartz-Shea and Yanow, 2012, 10). Consequently, attention to context is fundamental to interpretive analysis. In the case of the present study, ‘context’ is understood as the spatial and temporal circumstances in which are situated the experiences and perceptions of those comprising the Irish landuse planning and allied professional fraternities between November 2008 and November 2011.

Adopting an abductive research strategy facilitates such context sensitivity by concentrating empirical investigation upon how agents subjectively and intersubjectively constitute their perception of ‘reality’ (Berger and Luckmann, 1966). Thus, in an abductive research strategy, the investigator seeks to ‘access’ (Sherratt, 2006, 19) the world of those constructing such realities so as to

appreciate in ‘their’ language and on ‘their’ terms the shared implicit knowledges, symbolic meanings and intentions which orientate understanding and action (Geertz, 1992). In this sense, an abductive research strategy facilitates a hermeneutic exploration of agent perspectives on the particularities of context constituted meaning (Palmer, 1969; Schmidt, 2006). This is achieved through systematically investigating the various ‘layers’ involved in the social construction of a reality (Berger and Luckmann, 1966). The most basic of these is the accounts that people give of both their actions and the actions of others. These descriptions furnish access to other ‘layers’ such as the ontological assumptions and the epistemological models people use to structure and explain the happenings of their world. The process of exploring these ‘layers’ is summarised by Blaikie (2010, 90) as follows (format as per original),

Everyday concepts and meanings
provide the basis for
social action/interaction
about which
social actors can give accounts
from which
social scientific description can be made
from which
social theories can be generated

This abductive process of moving from agent descriptions of social life to technical accounts of that social reality permits an amalgamation with a retroductive research strategy that moves beyond investigator empathy (Soss, 2006) with perceptions of a subject’s reality, to ‘the discovery of underlying mechanisms that, in particular contexts, explain observed regularities’ (Blaikie, 2010, 88). In the case of the current project, the ‘observed regularity’ is the continual growth in popularity among landuse and allied professionals of the GI concept between November 2008 and November 2011. By introducing a retroductive research strategy, the focus progresses from the technical account of agent perceptions to

an explanation of context associated patterns of activity (Glynos and Howarth, 2007). This is performed in an attempt to discern the processes ('underlying mechanisms') shaping the constitution of the shared realities identified via an abductive research strategy. The fruit of such work is the identification of a context sensitive explanation of the 'outcome' of such processes; namely the widespread adoption of the GI concept in Ireland and its representation in statutory planning policy by November 2011. Here the reasoning of outcomes is,

...not the 'end-points' but the 'collection-points' of empirical enquiry. They are not seen as 'laws of nature' or as 'societal laws'. They are not ever-present uniformities awaiting discovery in the form of 'empirical generalisations' made manifest through careful, repeated observation....outcomes are studied basically by finding out as much as we can about the mechanisms and contexts which sustain them. (Pawson, 2000, 297)

In this sense, 'retroduction is a process of working back from data, to an explanation, by the use of creative imagination and analogy' (Blaikie, 2006, 9). From such a context sensitive explanation, a more abstract hypothesis may then be inferred. In this manner, the hypothesis is not formulated until its content is already present in the explanation of the issue under examination (Hookway, 2000; Howarth and Griggs, 2012; Thayer, 1970). This contrasts with inductive accounts premised on the emergence of an universally applicable hypothesis from observing repeated instances of the phenomena under investigation, or deductive accounts that seek to test a pre-formulated 'higher-level hypothesis' (Hanson, 1958, 86). Thus, retroduction does not search for general laws, even if a wider set of inferences may be made as a result of context sensitive study (Howarth and Griggs, 2012). As noted by Hanson,

Deduction proves that something must be; Induction shows that something actually is operative; [Retroduction]⁶ merely suggests that something may be. (Hanson, 1958, 85)[Emphasis in original]

⁶ Hanson here refers to 'abduction'. There is some general confusion in academic literature between the use of the terms 'abduction' and 'retroduction'. However, in line with the references to Hanson's work made by Howarth and Griggs, (2012) and Glynos and Howarth (2007), as well as

Thus, a retroductive research strategy avoids the assumptions of inductive and deductive reasoning wherein the generalisations of social theory are thought to exist beyond the socio-temporal conditions of their production (Kuhn, 1970; Rorty, 1979). Rather, retroduction in social science research ostensibly adopts as its criteria of validity the degree to which under peer review ‘the posited hypothesis accounts for a problematized phenomenon by rendering it intelligible’ (Glynos and Howarth, 2007, 39). In this way, a retroductive research strategy acknowledges that all explanatory theory is provisional and forged in particular spatial and temporal circumstances, while simultaneously striving to produce the most robust exposition of the identified phenomena (Bacon, 2012; Malachowski, 2010; Ricoeur, 1973). Therefore,

In this picture, the ultimate “proof” consists in the production of narratives explaining problematized phenomena, which in turn depends partly on the relevant community of critical scholars.
(Howarth and Griggs, 2012, 335)

Of note here is that the synthesis of abductive and retroduction research strategies does not preclude the use of extant theory in generating an explanation. Rather, the sensitive employment of pre-existing social theory may be undertaken to supplement and/or assist the explication emerging from data analysis, provided care is taken to avoid the premature ‘impregnation of data by theory’ (Pawson, 2000, 283). This is achieved not through a linear trajectory from the data (induction) or via the application of a pre-formed explanatory hypothesis (deduction)⁷, but rather,

Interpretation moves from evidence to ideas and theory, then back again. There can be no set formulae, only broad guidelines, sensitive to specific cases. (Okely, 1994, 32)

the interpretation of ‘retroduction’ presented by Blaike (2010) and Pawson (2000), the term ‘retroduction’ has been employed here to refer to the process described.

⁷ This may result even where the hybrid inductive-deductive strategy advocated by Fereday and Muir-Cochrane (2006) is adopted.

As such, an abductive-retroductive synthesis facilitates not only answering questions centred on ‘what’ GI is (abductive) and ‘why’ it has emerged in Ireland (abductive-retroductive), but also those focused on the process directed query of ‘how’ its meaning was constituted, disseminated and institutionalised (retroductive). Importantly, this is achieved without reducing the role played by context in the construal of meaning, which as argued above, is fundamental to interpretive analysis. A diagrammatic representation of this synthesised abductive-retroductive research strategy is provided in Figure 4.1 below.

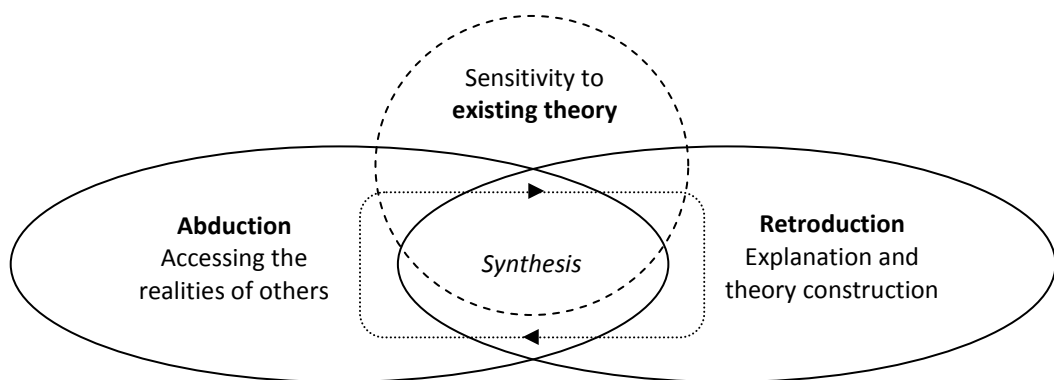


Figure 4.1
Diagrammatic representation of the synthesised
abductive-retroductive research strategy

4.3 Research Design

Just as a research strategy defines a project’s ‘logic’ (Blaikie, 2010, 8), so a research design ‘provides a framework for the collection and analysis of data’ (Bryman, 2008, 31) [emphasis added]. Thus, the choice of research design should reflect the logic of a research strategy in a way that facilitates greater focus on the object of analysis. Consequent upon its focus on contextually contingent meaning, interpretive research requires a form of research design that respects the conditions in which such meaning(s) is constituted, circulated and deciphered. As noted by Schwartz-Shea and Yanow,

The possibility of the multiplicity of meaning is one of the things that makes connections to context critical for both the conduct of interpretive research and its design: the reasons things take these particular forms and not others has to do with their specific contexts of time and place. (Schwartz-Shea and Yanow, 2012, 46)

In such instances where ‘the phenomenon under study is not readily distinguishable from its context’ (Yin, 1993, 3), a case study research design may be adopted so as to facilitate ‘inclusion of the context as a major part of the study’ (Yin, 1993, 3). Therefore, an important advantage of adopting a case study research design is that ‘the phenomenon being researched is studied in its natural context, bounded by space and time’ (Hancock and Algozzine, 2006, 15). Given the focus of the current investigation on the ‘meaning’ of GI in Ireland between November 2008 and November 2011, a case study research design focusing on Irish planning policy during this period is thus considered an appropriate ‘framework’ (Bryman, 2008, 31) to structure the empirical research and analysis process in a way that respects the spatial and temporal conditions of GI’s constitution and advocacy.

Resultant from Ireland’s relatively small population of just 4.6 million (CSO, 2011), and consequent limited number of planning authorities (see Chapter 5), tracing the emergence, evolution and institutionalisation of GI is facilitated by the restricted number of actors concerned. This circumscribed administrative, spatial and temporal context thus renders it feasible to comprehensively chart the path of GI’s development and confidently identify the roles played by different actors in its advancement.

A number of case study formats are identified and discussed in social science research methods literature (Bryman, 2008; Creswell, 1998; Travers, 2001). Although the labels attached to these vary between authors and a degree of overlap is evident (Berg, 2004; Mitchell, 2000; Stake, 1998; Yin, 2003), they may be assembled into five broad categories, namely; exploratory, experimental, illustrative, descriptive or explanatory (Ryan et al., 2002). While exploratory, experimental and illustrative case study designs may be respectively employed in

aiding definition, testing and demonstration, these case study formats are more concerned with the procedure or hypothesis under examination than with the 'formulation' of theory to explain specific phenomena within particular spatial and temporal limitations. In contrast, a descriptive case study design focuses on 'a complete description of a phenomenon with its context' (Hancock and Algozzine, 2006, 33), while an explanatory case study design may be employed in 'conducting causal studies' (Berg, 2004, 257). Consequently, as the present research focuses upon understanding 'why', 'what' and 'how' GI emerged and evolved (the 'phenomena') in Ireland between November 2008 and November 2011 (the 'context'), this project adopts a 'descriptive-explanatory' case study research design.

4.4 Research Methods

In a similar manner to the way a research strategy defines a project's 'logic' (Blaikie, 2010, 8) and a research design its 'framework' (Bryman, 2008, 31), so a research method defines the 'techniques' (Bryman, 2008, 31) for accessing, amassing and analysing data. As such, a project's research method follows from, integrates with, and supports its research strategy and design.

A grounded theory method⁸ (GTM) was adopted in the present project to configure the specific research methods employed in the collation and analysis of data. Rather than a 'theory' per se, GTM,

'...consists of systematic, yet flexible guidelines for the collection and analyzing of qualitative data to construct theories 'grounded' in the data themselves.' (Charmaz, 2006, 2)

As such, GTM is not so much a 'theory' in the conventional sense of 'explanation' as much as it is 'an approach to the generation of theory out of data' (Bryman, 2008, 541). A key element of GTM is the formulation of data-driven 'codes' (Bryant and Charmaz, 2007) rather than the deductive application of a pre-established

⁸ Grounded Theory Method (GTM) refers to a methodological logic. Grounded Theory (GT) refers 'to the result of using that method' (see Bryant and Charmaz, 2007, 3).

'codebook' (Fereday and Muir-Cochrane, 2006). In interpretive analysis, such a 'code' is,

...most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data...just as a title represents and captures a book or film or a poem's primary content and essence, so does a code represent and capture a datum's primary content and essence. (Saldaña, 2009, 3)

In this sense, a code is 'an analytical handle to develop abstract ideas for interpreting each segment of data' (Charmaz, 2006, 45). In GTM, the process of coding constitutes the process of moving beyond items in the data to the production of analytical interpretations (Holton, 2007).

While GTM presents a series of principles and practices centred on collating data, analysing this data, and subsequently offering an interpretive portrayal of the studied world (Lincoln et al., 2011), it essentially provides a 'flexible guide, not methodological rules, recipes and requirements' (Charmaz, 2006, 9). Although the original manifestation of GTM cautioned against the use of existing theory to explicate observations in data (Glaser and Strauss, 1967), its more recent advocates not only seek to accommodate the use of existing theory (Bex Lempert, 2007; Strauss and Corbin, 2008), but rather advance its vigilant application in furnishing the 'theoretical sensitivity' (Bryant and Charmaz, 2007, 17) that researchers may draw upon in 'developing their ideas about processes that they define in their data' (Charmaz, 2006, 17). In this way, the context sensitive, 'bottom-up', yet theory cognisant research method propounded by contemporary GTM harmonises with this project's abductive-retroductive research strategy and case study research design. Indeed, in complementing this project's research strategy, contemporary advances in GTM facilitate an analytical method that commences in the data and then moves,

...back and forth in an iterative-recursive fashion between what is puzzling and possible explanations for it...The back and forth takes place less as a series of discrete steps than it does in the same moment: in some sense, the researcher is simultaneously puzzling over empirical materials and theoretical literatures. (Schwartz-Shea and Yanow, 2012, 27)

A more detailed outline of how the GTM was employed in this research is presented in section 4.4.4 below. While GTM facilitates the configuration of a 'family of research methods' (Bryant and Charmaz, 2007, 11) in assisting the logical integration of research strategy, design and method, it does not inevitably equate with the 'credibility' (Lincoln et al., 2011) of the investigative process. To ensure this, the present study has employed the research method of triangulation.

4.4.1 Triangulation

Broadly conceived, 'Triangulation entails using more than one method or source of data in the study of social phenomena' (Bryman, 2008, 379). Although initially applied in the social sciences as a metaphor describing a form of research validity wherein multiple sources and methods 'converge' (Berg, 2004) in revealing a single empirical reality (Denzin, 2006), interpretive analysis employs a more nuanced perspective by exploiting triangulation to engender 'multidimensionality' in the research process (Silverman, 2004). Here,

...multidimensionality is consistent with the interpretive sensitivity to various forms or genres of data and to the possibility of complexity and richness that comes from working across genres. (Schwartz-Shea, 2006, 103)

This thesis thus employs the triangulation of both methods and data sources as 'a focus for promoting the quality of (the) qualitative research' (Flick, 2007a, 43) and extending the knowledge objectives of the investigation.

Drawing upon different methods of research is the reading of triangulation that attracts most attention in literature on qualitative research methods (Bryman, 2008; Hennink et al., 2011; Patton, 2002; Rapley, 2007). In essence, 'this refers to

combining different methods from different research approaches but within qualitative research' (Flick, 2007b, 66). Employing the triangulation of methods permits the extension of knowledge regarding an issue by consulting different information sources. Accordingly, the triangulation of methods should commence from different perspectives dependent upon the function to which such triangulation of methods is being put:

What is important is to choose at least one method which is specifically suited to exploring the structural aspects of the problem and at least one which can capture the essential elements of its meaning to those involved. (Fielding and Fielding, 1985, 34)

In the case of the current project, scrutinising GI's emergence through documentary analysis was employed in tracing the 'structural' (historical) development of the concept. This was supplemented with information from interviews. However, such interviews were primarily used to 'capture' the elements of 'meaning to those involved'. This entailed close attention to the identification and examination of the language, acts and objects that are significant carriers of meaning for those engaged in GI advocacy (Yanow, 2000). Such information was enhanced and correlated with participant observation and the analysis of evolving discourses within the collated documentation. This facilitated answering research question one: *Why has the GI concept emerged and why is it advocated as a planning approach?* Furthermore, it enabled the formulation of a response to research question two: *What does 'GI' mean and how is such meaning constituted?*

Documentary analysis, interviews and participant observation were also employed in (a) identifying those involved in GI advocacy, (b) tracing the processes employed to disseminate the GI concept and (c) delineate the course of its institutionalisation. This permitted a reply to research question three: *How are meanings framed and advanced by different parties seeking to promote a GI planning approach?* Likewise it enabled answering research question four: *By what means is GI disseminated and institutionalised within the landuse planning system?* The relationships between the thesis research methods and research questions is illustrated in Table 4.1.

Table 4.1
Relationship between Research Questions and Research Methods

Research Question	Documentary Analysis	Semi-Structured Interviews	Participant Observation
(1) <i>Why has the GI concept emerged and why is it advocated as a planning approach?</i>	✓	✓	✓
(2) <i>What does 'GI' mean and how is such meaning constituted?</i>	✓	✓	✓
(3) <i>How are meanings framed and advanced by different parties seeking to promote a GI planning approach?</i>	✓	✓	✓
(4) <i>By what means is GI disseminated and institutionalised within the landuse planning system?</i>	✓	✓	✓
<div style="display: flex; justify-content: space-around; align-items: center;"> ✓ Central method ✓ Supporting method </div>			

In addition to the triangulation of research methods, also employed was the triangulation of multiple data sources so as to facilitate a 'maximum of theoretical profit from using the same methods' (Flick, 2007b, 42). The specifics of how such methods and sources were used is discussed below in sections 4.4.4 and 4.4.5 where the progress from deskwork to textwork is outlined. Although for purposes of coherent presentation this is detailed as a series of phases, it is important to note that due to the contemporary nature of the project's subject matter, not all such phases occurred sequentially. Rather, some phases operated in parallel, such as the collation of documentation (deskwork), which continued until the completion of fieldwork. Such overlaps are illustrated on Figure 4.2 which details the timeline and indicates the four broad phases of the empirical research process, namely: *deskwork* (documentary analysis and fieldwork preparation); *fieldwork* (data gathering); *datawork* (post-fieldwork data analysis); and *textwork* (write-up). Each of these phases is discussed in detail below.

	2010	2011	2012
Deskwork	Oct.'10-March'11	April- Nov.'11	
Fieldwork		April -Sept.'11	
Datawork		Jan.'10-Sept.'11	Sept-Dec.'11
Textwork			Dec.'11-Oct. '12
		<i>Period of Primary Work</i>	<i>Period of Supporting Work</i>

Figure 4.2
Research Timeline

4.4.2 Deskwork

Deskwork comprised the initial phase of empirical research. This was primarily undertaken between October 2010 and March 2011, but continued with less intensity until the end of the data gathering period in November 2011. This phase of the research first involved a wide ranging review of statutory and non-statutory Irish planning related documents. In total, this entailed inspection of two hundred and three documents. From this, it was possible to confirm the first reference to GI in an Irish policy context. Of this number, a total of one hundred and seventy Irish planning related documents were collated to form a preliminary 'archive' (Foucault, (1969) 1972). This included all development plans for the twenty nine county councils, five city councils and five borough councils, in addition to the guidelines produced and/or operative within the eight regional authorities, between November 2008 and November 2011. Each document was subsequently reviewed several times so as to determine its potential relevance to the emergence and evolution of the GI story in Ireland. This facilitated the reduction of the Irish documentation archive to one hundred and twenty seven items prior to commencement of fieldwork in April 2011. However, due to the ongoing collation of pertinent material as it became available this figure increased to one hundred and thirty one items by conclusion of the data gathering period in November 2011 (see Figure 4.2).

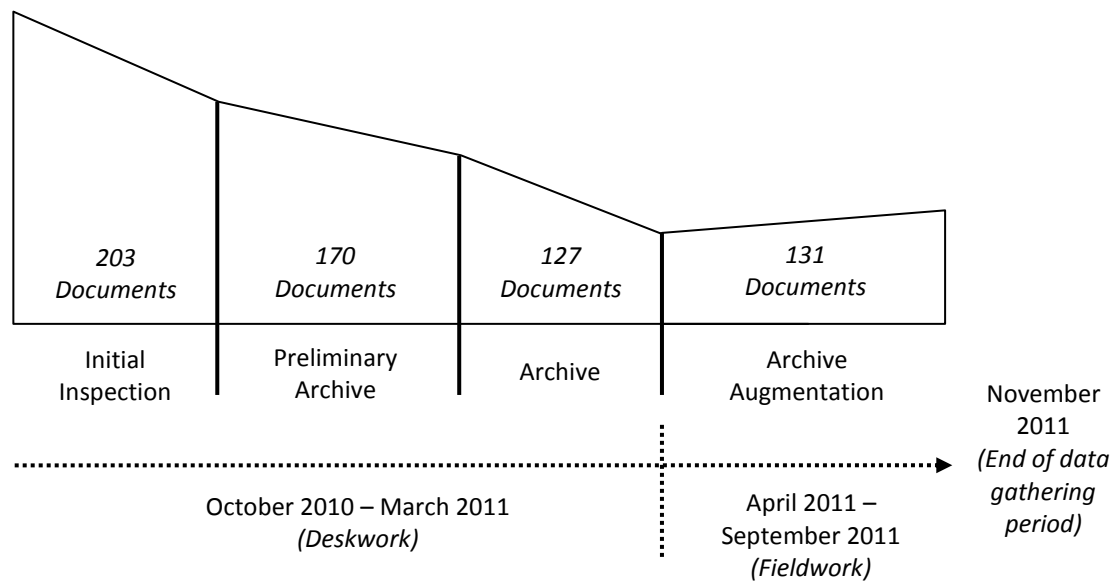


Figure 4.3
Documentary Archive Generation

Items referenced by documents in this archive were cross-checked to ensure comprehensiveness of the collated material. Where referenced documents were identified as absent, they were sourced, reviewed and included in the archive. This facilitated an analysis of referencing formats between documents and the context of these citations. Such analysis provided depth to an initial understanding of ‘why’ GI was advanced and ‘how’ the concept was interpreted and promoted by different parties seeking its institutionalisation. This trail of references was then followed in the construction of an international documentary archive. Amounting to just twenty two documents, the repeated references to the comparably limited content of this international document archive helped furnish a preliminary comprehension of ‘how’ referencing was used, ‘why’ it was employed, and ‘what’ meanings of GI were being constituted through such ‘intertextuality’ (Atkinson and Coffey, 2004).

‘Initial coding’ of this material was then conducted. This form of provisional analysis was employed to (a) explore ‘theoretical possibilities’ (Charmaz, 2006, 47) in the collated documentation as well as to aid in (b) the identification of interviewees and (c) the formulation of an interview guide for the fieldwork phase of the project. ‘In vivo’ coding was used here so as not to prematurely impose concepts on the documentary data, but rather facilitate discernment of recurring

'themes' from it (Rapley, 2007). Such a coding format involves marking the site of an identified moment of possible significance in the data (Saldaña, 2009). This was done by using a word or short phrase from the actual language found at that location in the text, or if applicable to multiple documents, a recurring term found within the archive.

Working iteratively between the themes suggested by this initial coding process, the study's five primary research questions, and a review of extant theory, a master interview guide was generated. This guide was designed so as to facilitate a specific investigation of 'why', 'what' and 'how' GI emerged and evolved in Ireland. Achieving this involved structuring the content of the master interview guide around a series of standard 'essential questions' (Berg, 2004) geared to elicit responses regarding specific desired opinions and/or information in respect to the study's five primary research questions. This provided 'consistency' (Bryman, 2008) in the interview data gathering process (see Appendices A and B).

Consequent to the initial documentary analysis it was possible to stipulate a 'purposive sample' (Hennink et al., 2011; Patton, 2002) of relevant interviewees drawn from a cross-section of national, regional and local government, as well as from the QUANGO, NGO and private sectors. Twenty nine interviewees were identified in this purposive sample. This excluded one 'pilot' interview⁹ in April 2011, 'to assess how effectively the interview will work and whether the type of information being sought will actually be obtained' (Berg, 2004, 90). These interviewees were categorised as to whether they were deemed likely to be crucial to the constitution, advocacy and institutionalisation of GI in Ireland, consequential to its promotion, or whether the function of interviewing them was to confirm their role (or lack thereof) in the emergence and evolution of GI in Ireland. This informed the planned sequencing of interviews during fieldwork with 'crucial' interviewees to be interviewed first, and 'consequential' and 'confirmation' interviewees to be subsequently interviewed in succession (see Figure 4.4).

⁹ It was not considered necessary to amend the master interview guide following this 'pilot' interview, although some alterations to use of the recording equipment were required.

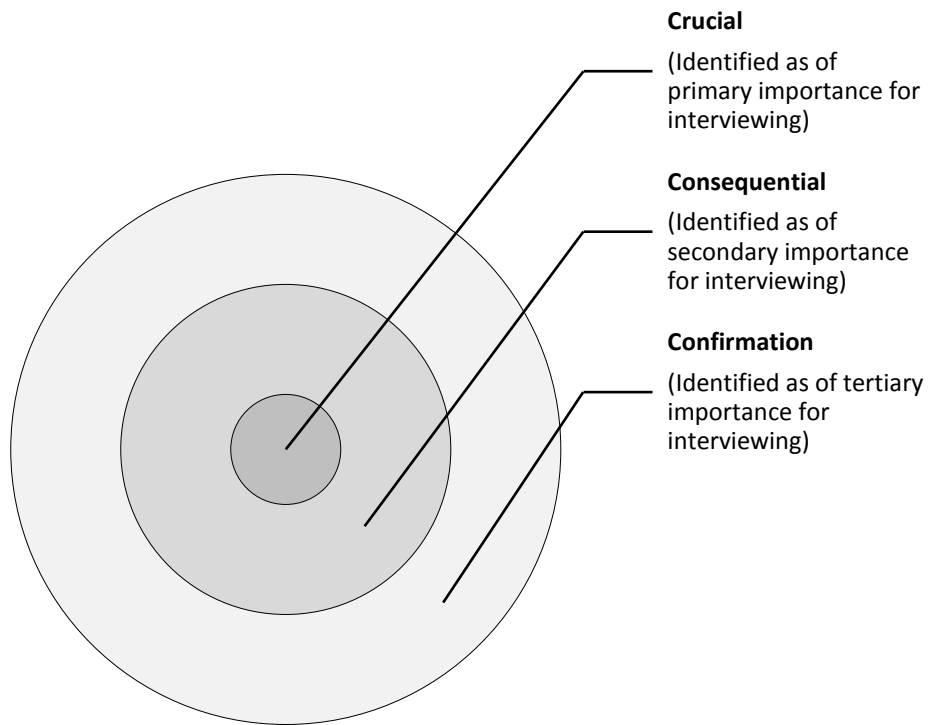


Figure 4.4
Relationship between interviewees
and the targeted interviewing sequence

Generation of this purposive sample permitted the inclusion on the master interview guide of questions specifically tailored to the context of the interviewee, which for example, may be related to their organisational affiliation, advocacy activity, and/or specialist knowledge. A number of 'probing questions' (Kvale, 1996) were also included in these interview guides so as to elicit elaboration upon responses given to previous questions. The interview guides thus presented a useful means by which to focus and maintain regularity in the interviewing process, rather than as schedules of questions to be slavishly adhered to (Patton, 2002). The master interview guide is included in Appendix A. Table 4A.1 in Appendix A details the relationship between the thesis research questions and the master interview guide.

4.4.3 Fieldwork

Fieldwork was undertaken between mid-April and early September 2011. This primarily involved interviewing. A semi-structured interview format was adopted as it enabled 'openness to change of sequence and forms of questions in order to follow up the answers given and the stories told by the subjects' (Kvale, 1996, 124). In this way, the interview format invited interviewees to 'express themselves openly and freely and to define the world from their own perspective' (Hancock and Algozzine, 2006, 40). A targeted and sequential approach to interviewing was adopted in accordance with the identification of 'crucial', 'consequential' and 'confirmation' interviewees during the generation of the purposive sample in the deskwork phase (see section 4.4.2). This prioritising ensured that all the initially identified 'crucial' and 'consequential' interviews were completed first, as arranging and conducting interviews was often time consuming. It was not possible to conduct one of the initially identified 'confirmation' interviews as this potential interviewee did not reply to phone messages or emails requesting an interview¹⁰.

At the closing of all interviews, interviewees were asked to suggest others who they thought pertinent to the advocacy of GI in Ireland. This form of 'snowball sampling' (Flick, 2007a) was used as it was considered unlikely that the purposive sample of interviewees formulated during deskwork would have comprehensively identified all agents pertinent to the advancement of the GI policy approach. Such snowball sampling thereby permitted both the expansion of the interviewee sample and the identification of those involved in the emergence and evolution of the GI concept in Ireland. However, care was taken to avoid 'enmeshing the researcher in the network of the initial participant interviewed...leading to or reinforcing the silencing of other voices' (Schwartz-Shea and Yanow, 2012, 87). This risk was countered by ensuring an adequate variety of non-associated and professionally diverse interviewees in the initial purposive sample. Additional interviewees were also identified during the fieldwork period as new documentary material emerged (see section 4.4.2). As with the initial purposive sample, additional interviewees

¹⁰ Interviewee identified as responsible for representing the Irish Farmers Association's position on GI.

identified by these processes were classed as 'crucial', 'consequential' or 'confirmation' and sequentially targeted for interview. These processes of interviewee identification and contact continued until saturation (Rubin and Rubin, 2005) was reached wherein it was determined that additional interviews would not add any new insights or perspectives significant to answering the project's research questions. Resultant from such processes, the initial purposive sample of twenty nine interviewees expanded to a total of fifty two interviewees. Fifty three interviews were conducted in total, with one interviewee¹¹ being interviewed on two separate occasions due to an interruption during the initial interview.

The process of interviewing initially involved phone or email contact with the potential interviewees in which the study's nature and purpose was outlined, and the format of the interview explained. Thus, effort was made to ensure that 'informed consent' was obtained from all interviewees prior to the interview. This entailed,

...giving sufficient information about the research and ensuring that there is no explicit or implicit coercion so that prospective participants can make an informed and free decision on their possible involvement. (ESRC, 2010, 39)

To strengthen the validity of this participant consent process, the tailored interview guide was emailed to the interviewee in advance of the interview. This also assisted in optimising interviewee response and helped maximise the often limited interview period¹². Early in the interview process it was ascertained that offering potential interviewees the option of a phone interview facilitated a more accommodating response. Thus, this option was presented to the majority of potential interviewees. Of the fifty three interviews, twenty one were conducted by phone, with the remaining thirty two conducted in person. Whether the interviews were conducted by phone or in person did not influence the interview

¹¹ Interviewee A2.

¹² Although most interviewees expressed their appreciation at this, it is noted that not all interviewees had reviewed the interview guide prior to the interview occurring.

length or topics discussed, with several phone interviews longer than interviews conducted in person. The average interview length was fifty eight minutes, although this varied, with the interviews of those identified as potentially ‘crucial’ and ‘consequential’ generally being longer than the interviews with those identified for ‘confirmation’ purposes. A summary of the distribution of interviewees is presented in Table 4.3 and Figure 4.5 below. Greater details regarding the interviews are provided in Appendix B.

Table 4.3
Summary of Interviewee Numbers relative to Governance/Professional Sector

Number of Interviewees	Professional Sector
2	National political <i>(former minister*; former ministerial advisor)</i>
3	Central government planning <i>(landuse/spatial, recreation, transport)</i>
5	Regional planning authority <i>(planner and ecologist)</i>
19	Local planning authority (executive) <i>(engineer, heritage officer, planner, public parks officer)</i>
1	Local planning authority (political) <i>(councillor)</i>
7	QUANGO <i>(heritage management, recreation, state assets management [bogs, forests], tourism)</i>
4	NGO <i>(nature conservation)</i>
11	Private consultancies <i>(architect, ecologist, GIS, landscape planner, surveyor)</i>
52	Total
* 23 March 2010 – 23 January 2011	

All interviews were recorded following the consent of the interviewee. Research notes of impressions, emerging ideas and items found particularly striking were taken immediately after each interview. The interview recordings were then sent to an external transcription service so as to maximise time for analysis of the interview content thereafter. All interview transcripts were vigilantly scrutinised while listening to the recordings in an attempt to detect and rectify any errors that may have occurred during transcription. The reviewed and corrected transcripts were subsequently emailed to all interviewees for proofing. Specifically, interviewees were invited to comment on the accuracy of the transcription. Of the fifty two interviewees, just two interviewees replied suggesting minor amendments. Such amendments represented additions to the text regarding points of clarification rather than comments on the accuracy of the transcription.

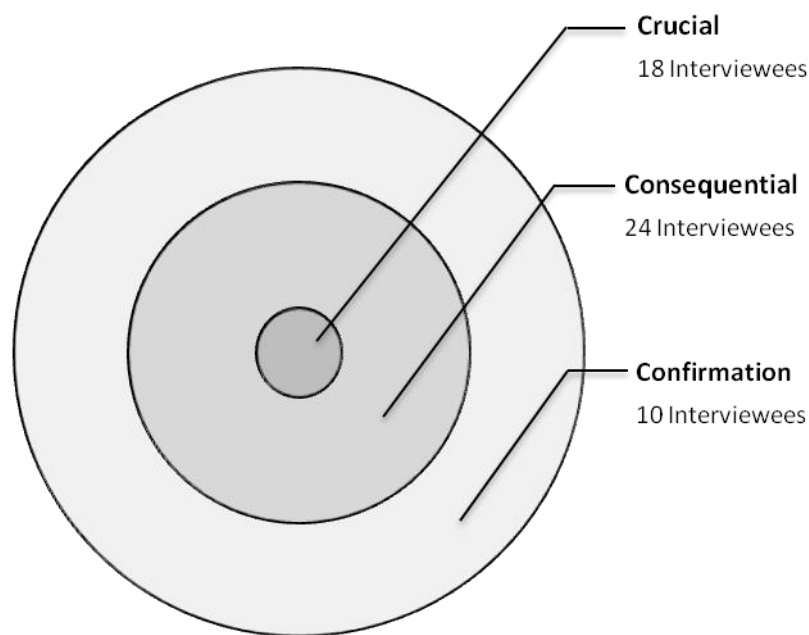


Figure 4.5
Distribution of interviewees relative to
the targeted interviewing sequence

Participant observation was used to complement deskwork and fieldwork in the identification of themes in GI's emergence and evolution. Although normally associated with ethnographic studies wherein 'the researcher immerses him- or herself in a social setting for an extended period of time' (Bryman, 2008, 697), participant observation can also entail broader 'social interaction in the field with subjects, direct observation of relevant events, formal and informal interviewing, some counting, collection of documents, and flexibility in the direction the study takes' (Gephart, 2004, 458). It was employed in the present research to furnish greater understanding of 'the logic that creates a particular pattern of thinking and doing' (Pader, 2006, 165). Participation in two separate workshops organised by Comhar SDC¹³ was undertaken in completing this element of fieldwork. The first of these events occurred in Dublin on 8th February 2010 and was wholly organised to facilitate the formulation and advocacy of a GI planning methodology for Ireland. Awareness of this workshop was attained from pre-fieldwork contact with a potential interviewee. The second workshop, also in Dublin, was held on 24th June 2010. This event formed part of a conference on The Economics of Ecosystems and Biodiversity (TEEB) and was designed to discuss how GI planning could assist 'the transferability of [the] TEEB approach, findings and recommendations to Ireland' (Comhar, 2010c). Awareness of this workshop was attained through monitoring of the Comhar SDC website. Notes on items and issues deemed pertinent to answering the project's research questions were taken at both events. These were subsequently augmented by more detailed notes directly following the workshops.

4.4.4 Datawork

Although a degree of data analysis permeated the entire research process¹⁴, the most in-depth and systematic scrutiny of gathered data occurred between September and December 2011. Efficient information administration and analysis during the datawork phase was facilitated through the use of QSR NVivo8 data management software. All interview transcripts were 'imported' into this software

¹³ The Irish Sustainable Development Council.

¹⁴ For example, in the relationship between documentary analysis deskwork and the tailoring of interviewee specific interview guides for fieldwork.

in Microsoft Word 2007 format. Collated material from the documentation archive was also imported into this software in PDF or Microsoft Word 2007 formats. Where this was not possible due to format issues¹⁵, the electronic documents were copied into Microsoft Word 2007 format and then imported into the QSR NVivo8 software. A grounded theory method (GTM) was employed in the analysis of this corpus. This involved four cycles of coding so as to facilitate the comprehensive abductive examination of the meaning(s) of GI. This abductive examination was subsequently used to inform the retroductive formulation of a context sensitive model of causal processes in the advocacy, evolution and institutionalisation of GI. In this way, coding operated as ‘the pivotal link between collecting data and developing emergent theory to explain these data’ (Charmaz, 2006, 46).

First Cycle Coding

The first cycle of coding was similar to the ‘initial coding’ process during the deskwork phase of research (see section 4.4.2). This involved attaching labels to segments of data, varying from a sentence to a short paragraph, so as to provide an ‘analytical handle’ (Bryant and Charmaz, 2007; Charmaz, 2006) to represent the content of that data and enable its easy retrieval for later analysis. As with the deskwork, this primarily entailed an ‘In Vivo’ coding process. However, ‘descriptive coding’ was also employed to summarise ‘in a word or short phrase – most often a noun – the basic topic of a passage of [the] qualitative data’ (Saldaña, 2009, 70). The entire corpus underwent three consecutive series of initial coding as new codes continually emerged during progression through the material. This recurring succession of initial coding concluded once it was determined that no new initial codes were emerging. Initial codes generated in the deskwork phase of research were incorporated, and where necessary, relabelled. This produced ‘a proliferation of codes’¹⁶ (Bryman, 2008, 552) from which the second cycle of coding began.

¹⁵ For example, where the information was only available on a webpage.

¹⁶ One hundred and five initial codes were generated.

Second Cycle Coding

In second cycle coding, 'First cycle codes (and their associated coded data) are reorganised and reconfigured to eventually develop a smaller and more select list' (Saldaña, 2009, 149). Here, uncommonly occurring codes were carefully reviewed and merged with other codes or dispensed with. When the latter occurred, the data content of the code was reviewed, and if considered appropriate, recoded. Frequently occurring codes deemed similar were also combined so as to avoid repetition. This phase of coding involved three successive reviews of the initial codes produced during first cycle coding. The reduced number of codes generated by this second cycle of coding thereby furnished the foundation for the third cycle of coding.

Third Cycle Coding

This cycle of coding involved 'emphasising the most common codes and those that (were) seen as most relevant about the data' (Bryman, 2008, 543). This cycle was characterised by the use of 'focus coding'; a 'streamlined adaptation of classic grounded theory's Axial Coding' (Saldaña, 2009, 155) wherein the process of code distillation extended to the production of several new codes by merging and/or subsuming many of those generated in the second cycle of coding. Where considered appropriate, codes generated in the second cycle were retained. As such, 'focused coding requires decisions about which initial codes make the most analytical sense to categorize your data incisively and completely' (Charmaz, 2006, 57). Thus, whereas 'initial coding' 'fractures the data into separate pieces and distinct codes' (Charmaz, 2006, 60), the progression through second and third cycles of coding 'entails reassembling the data by searching for connections' (Bryman, 2008, 543). In this sense, focus coding represented an increasing abstraction in the analytical process 'as a step towards a comprehensive understanding of the issue, the field and last but not least the data themselves' (Flick, 2007a, 101). Accordingly, it was at this level of coding that extant theory was permitted to consciously influence the evolving interpretation of the data. Two iterations of focused coding were undertaken so as to ensure a firm base upon which to engage in fourth cycle coding.

Fourth Cycle Coding

This cycle of coding represented the transition between the coding process and the integration of such codes into an explanatory theory. Here a series of abstracted 'concept codes' were extrapolated from the focused codes generated in the third cycle of coding. Those codes with the 'greatest explanatory relevance' (Strauss and Corbin, 2008, 104) were used to subsume and organise the previously generated focused codes. Where considered appropriate, new concept codes were also produced under whose label several of the focused codes were amalgamated. In this way, these concept codes 'not only conceptualize how [the] substantive codes are related, but also move [the] analytical story in a theoretical direction' (Charmaz, 2006, 63). The concept codes developed here reflect a synthesis between the data-driven codes and a wilful 'sensitising' (Bryant and Charmaz, 2007) to possible existing theoretical explanations for those patterns discerned in the coding process. As discussed in Chapter 3 (see section 3.2), an assessment of extant policy process literature revealed significant lacunae in considering the role of meaning making in the constitution, advocacy and adoption of new policies. Thus, although the Multiple Streams Framework was identified as supplying a useful means in which to strategically configure an investigation of meaning making in the policy process, no single existing theoretical explanation from academic literature was deemed adequate in assisting the formulation of concept codes with regard to the role played by meaning making in policy process dynamics. Rather, a diverse array of authors were consulted, whose works are broadly associated through sharing an interpretive approach to their topic of analysis (see Chapter 3, section 3.5). This enabled the generation of an innovative series of concept codes, and consequently, facilitated the formulation of a novel theoretical explanation of GI's emergence and evolution in Ireland. A summary description of the coding process is presented in Figure 4.6 and the codes developed are provided in Appendix C.

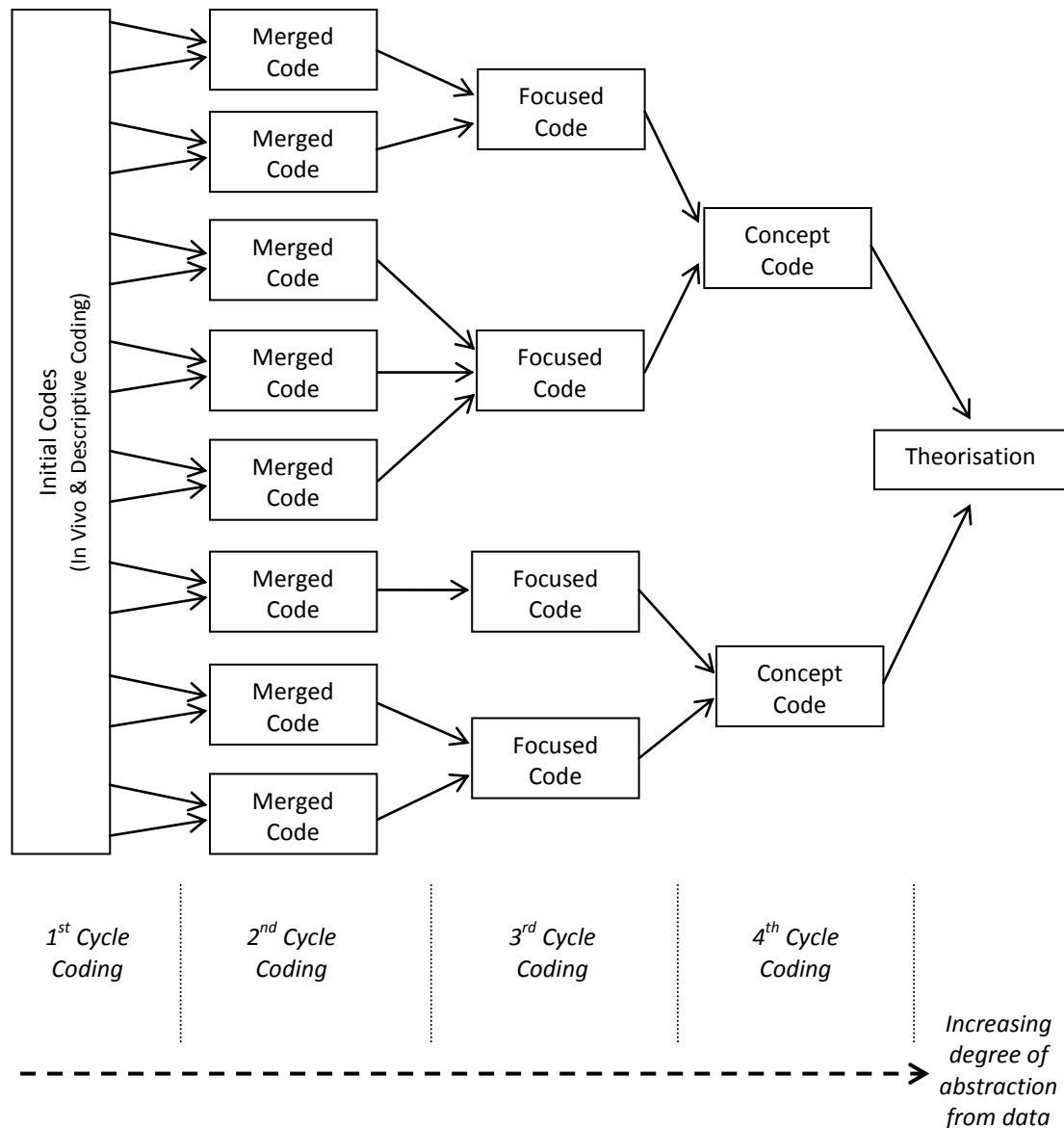


Figure 4.6
Summary diagram of the coding process

Theorisation

Complementing the coding process was the writing of ‘analytical memos’. Such memos serve as ‘sites of conversation with ourselves about our data’ (Clarke, 2005, 202). Accordingly, writing successive memos throughout the process was employed as a means to facilitate the condensation of evolving ideas; however, this was most evident during the third and fourth cycles of coding. Generating memos functioned as a ‘pivotal intermediate step between data collection and writing...’ (Charmaz,

2006, 72). Paralleling the production of memos was the use of 'diagramming' (Strauss and Corbin, 2008). Exploited as a way to hypothesise on possible theoretical relevance during the initial review of extant literature, such diagramming was extended into the datawork phase to tease out feasible relationships and construct analyses. As the datawork progressed these memos and diagrams were frequently reviewed and integrated in assisting the formulation of a more nuanced explanation of patterns in the data. As noted by Charmaz, (2006, 121),

Through sorting and integrating memos, you may explicate implicit theoretical codes which you may have adopted without realizing it...Diagramming sharpens the relationships among your theoretical categories.

The concept codes, analytical memos and diagrams were then compared and analysed against the notes from the participant observation elements of the fieldwork (see section 4.4.3). Special attention was given to identifying phenomena observed during the workshops that were also discerned in the coding process. Likewise, particular concentration was paid to the mention of issues in the fieldnotes that was considered potentially significant but not distinguished in the coding process.¹⁷ This facilitated the triangulation of analyses from the three data types employed during the project, namely; documents, interview transcripts and notes from participant observation. Considerable care was taken here to avoid 'fabricating evidence' through 'the unintentional, unconscious "seeing" of data that researchers expect to find' (Fereday and Muir-Cochrane, 2006, 90). Such care entailed maintaining constant vigilance via 'reflexivity', conceived here as the,

...self-conscious "testing" of these emerging explanations and patterns, including of what seems clear and what seems muddy...
(Schwartz-Shea and Yanow, 2012, 101)

As the research progressed from data management through to data interpretation and onto analyses triangulation and theorising, so too the detail contained in the analytical memos and diagramming increased. Here causal relations were

¹⁷ It is noted that none were discerned.

increasingly drawn between concepts and the analysed information organised accordingly. The ongoing iterative analysis back and forth between data and the emerging theory continued in a process of refinement until it was felt that an adequate explanatory hypothesis had been formulated.

4.4.5 Textwork

The 'textwork' phase commenced in December 2011 (see Figure 4.2). Although this primarily comprised the production of a manuscript, it is acknowledged that in accordance with the project's abductive-retroductive research strategy,

Writing itself has increasingly come to be seen as a way of world making, as words are carefully shaped into a logical, persuasive account. This perception emphasizes the extent to which writing is, itself, a method – a method of analysis and discovery...(Yanow, 2006b, 20)

Thus, textwork extended 'the further refinement of ideas' (Rapley, 2007, 127). Efforts were made to describe a theory of 'causal mechanisms that hover close to context' (Glynos and Howarth, 2007, 41), rather than producing an excessively abstracted account that disconnects the explanation from the spatial and temporal circumstances of its production. In assembling the multitude of analytical memos and diagrams, the evolving hypothesis was first organised into a series of 'themes' (Charmaz, 2006, 102) based upon the particular elements of the explanatory hypothesis formulated through theorising. This built upon an initial examination and discussion of 'why' the GI concept was introduced to Ireland. Made possible by this was structuring the presentation format into a number of distinct, yet connected sections as each chapter successively built upon the interpretations discussed in the preceding chapter. As such, a response to each of the project's research questions was conducted sequentially and methodically in an arrangement that made clear the interrelatedness of context-linked causal processes. Effort was made to demonstrate that all assertions were 'grounded in the material and that they are more appropriate than other conclusions' (Flick, 2007a, 82). This primarily involved the use of extracts from documents and interview transcripts. In the case of the latter, an attempt was made to illustrate the 'authenticity' (Lincoln et al.,

2011) of empirical data by maintaining minor grammatical errors¹⁸ so the reader may appreciate the interviewee 'voice', thereby conveying the 'credibility' of the research (Patton, 2002).

The preservation of interviewee anonymity was sought in all extracts through assigning each interviewee an alpha numeric identifier. Nevertheless, it was deemed necessary to identify by name two interviewees regarding a particular series of quotations likely to reveal their professional positions. It was considered that to do otherwise would risk revealing the identity of these interviewees in relation to other extracts from their interviews used elsewhere in the manuscript. Permission for this was sought and obtained from the interviewees concerned. In writing sections discussing the introduction and institutionalisation of the GI concept, it was thought necessary to seek interviewee 'validation' (Bryman, 2008; Flick, 2007b; Rapley, 2007) regarding accuracy in the portrayal of 'why' and 'how' GI emerged, as well as 'what' processes resulted in its integration to statutory planning policy. Here a written account of my understanding of these processes was produced and sent to the local authority officer widely credited¹⁹ for both the (re)introduction of the GI concept to Ireland and its assimilation into statutory policy. A positive response was received which suggested only minor amendments. The suggested amendments were incorporated into the text. This process of interviewee validation strengthened the 'trustworthiness' of the research (Bryman, 2008). A summarised illustration of the research method is presented in Figure 4.7 below.

¹⁸ In a limited number of extracts minor editing was necessary to facilitate coherence and flow. This mainly comprised removing instances of stammering recorded in the transcript.

¹⁹ This identification was substantiated by both documentary evidence and the opinions of other interviewees.

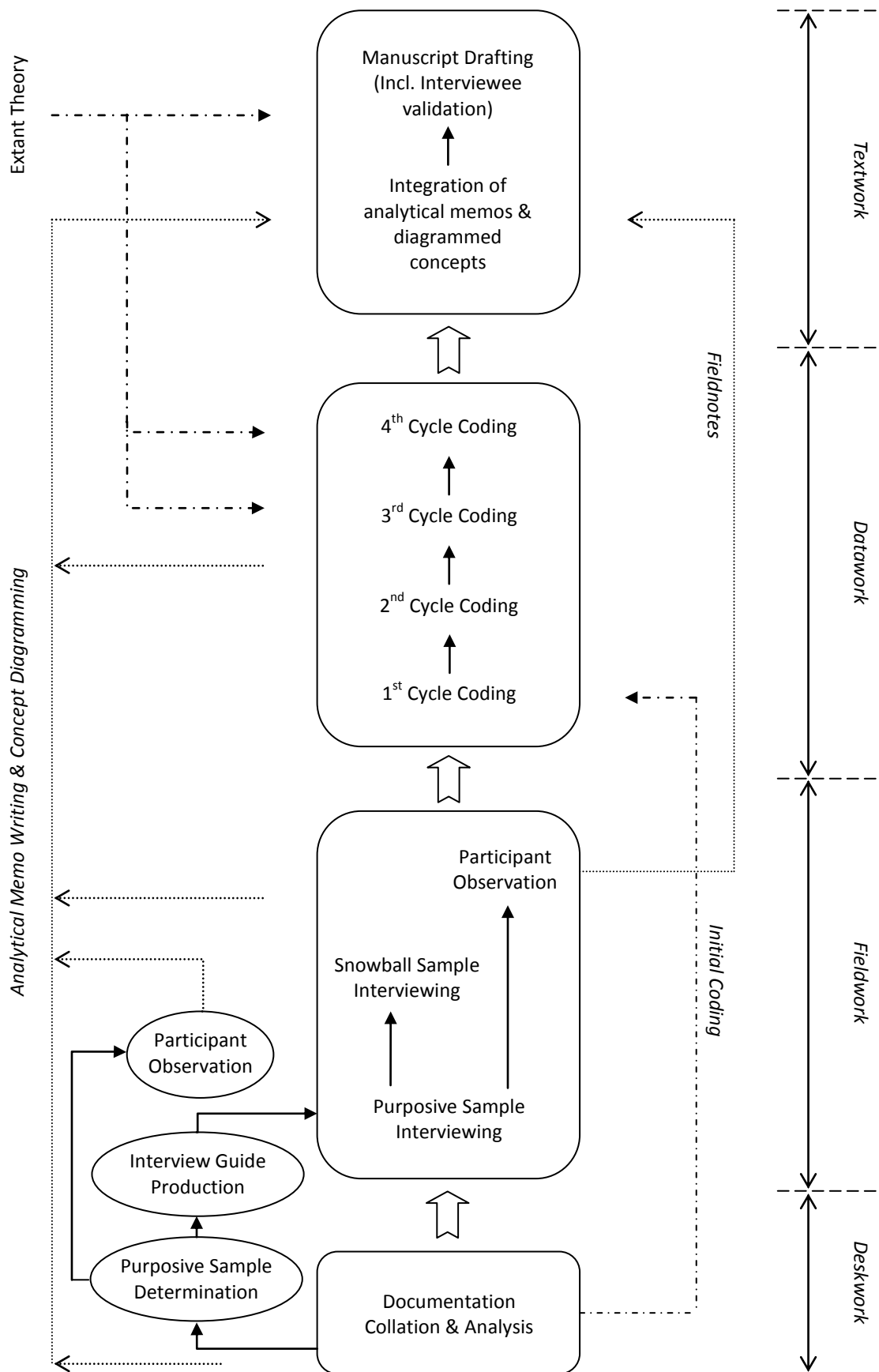


Figure 4.7
Summary of the research methodology

4.5 Research Ethics

Considerable attention has been allocated throughout the research process to ensure adherence to current best practice in research ethics (BSA, 2002; ESRC, 2010; SRA, 2003). Specifically, ethical issues have been vigilantly attended to regarding the *informed consent* of research participants, the right to *confidentiality* regarding those views expressed, and accuracy in the *representation* of interviewee opinions (Israel and Hay, 2006; Oliver, 2010; Silverman, 2004).

Informed Consent

The principle of informed consent means that 'prospective research participants should be given as much information as might be needed to make an informed decision about whether or not they wish to participate in a study' (Bryman, 2008, 121). As outlined in section 4.4.3 above, the process of interviewing initially involved phone or email contact with the potential interviewee in which the project's nature and purpose was outlined. The semi-structured interview format was also described during this initial contact. Once agreement to an interview had been obtained, a tailored interview guide was emailed to the interviewee. This enabled the interviewee to review the nature of the questions to be asked during the interview. The interviewee retained the right to refuse to be interviewed or have their comments withdrawn at any stage in the process.

Confidentiality

'In the analysis of qualitative data, anonymity and confidentiality are central issues from the angle of ethics – in transcription, in analysis itself, and most of all in presenting results and excerpts from data' (Flick, 2007a, 103). Accordingly, interviewee anonymity has been ensured by the use of alpha numeric identifiers for extracts from interview transcripts. Likewise, alpha numeric identifiers were employed in fieldnotes rather than identifying speakers by name, profession or institutional affiliation. As discussed above (see section 4.4.4), where a potential risk to interviewee anonymity exists, permission has been sought and obtained from the interviewee to reference their name to the potentially identifying section of interview transcript. This has ensured that the anonymity of same interviewee is

preserved elsewhere in the thesis by maintaining the integrity of the alpha numeric referencing system.

Accurate Representation

Given the centrality of meaning making activity to interpretive research, attention to the accurate representation of interviewee opinions was a central element of the research process. Thus, as discussed in section 4.4.3 above, all interview transcripts were vigilantly scrutinised while listening to the interview recordings in an attempt to detect and rectify any errors that may have occurred during transcription. Subsequently, the reviewed and corrected transcripts were emailed to all interviewees for proofing. Interviewees were invited to comment on the accuracy of the transcription. Where amendments were suggested, these were incorporated into the transcripts.

Furthermore, as interpretive research focuses on understanding from the perspective of the agent (Yanow, 2006b, 13), ensuring the accuracy of interviewee representation in the reported text of the research is an important element of the interpretive approach. Accordingly, interviewee ‘validation’ (Bryman, 2008; Flick, 2007b; Rapley, 2007) regarding accuracy in the representation of the account given of events and perceptions was sought where potential for unintentional, but incorrect portrayal of such details existed (see section 4.4.5). In such cases, pertinent interviewees were emailed an extract of typed text proposed for inclusion in the thesis and invited to comment on the accuracy of the details portrayed. Where amendments were suggested, these were incorporated into the text of the thesis.

4.6 Conclusion

This chapter has provided an outline and justification for the methodology employed in this study. Discussed and defended is the fashioning of a *research strategy* that synthesises the abductive and retroductive logics of knowledge generation. Also described and explained is the decision to employ a ‘case study’ *research design*. Additionally, this chapter provides detail as to the *research*

methods employed in the investigative process and furnishes reasons for the adoption of same.

Specific consideration is given to the application of a grounded theory method in harmonising with the study's research strategy. This chapter awards significant space to an exposition of the data gathering and analysis methods employed in the research. In doing so, particular attention is afforded to showing how the research strategy, research design and research methods complement each other in answering the study's research questions.

This chapter has explained the attempts made to ensure the trustworthiness and authenticity (Lincoln et al., 2011) of the research. This has been undertaken by attending to issues of dependability and credibility (Bryman, 2008) in the data gathering process, analytical procedure and mode of theoretical inference. Attention has been given to ensure that a clear audit trail has been established. It is intended that this rigorous methodology thereby furnishes a sound foundation upon which to structure in the ensuing chapters an accurate account, critical narrative and plausible explanation of the Irish GI story between November 2008 and November 2011. The follow chapter commences this case study analysis by critically investigating the Irish planning policy context within which GI advocacy emerged.

SECTION 4: CASE STUDY

(Chapters 5-10)

This section presents and analyses the case study from which conclusions are drawn and discussed in Section 5. Thus, it provides the original empirical contribution of the thesis. This section consists of six chapters.

Chapter 5 provides the context for the study by reviewing the emergence and evolution of the GI concept in Ireland between 2002 and 2011.

Chapter 6 identifies and discusses the initial impetus for introducing the term 'green infrastructure' into an Irish planning policy context.

Chapter 7 investigates the role of discourse in constituting ontological and epistemological assumptions of both what GI entails and how it may be implemented in planning activities.

Chapter 8 describes how the processes steering the interpretation of what GI means prompts readings of it that resonate with the prevailing rationalities of Irish planning practice.

Chapter 9 examines how meanings are framed and advanced by different parties seeking to promote GI as a planning policy approach.

Chapter 10 explores the channels through which GI was disseminated and integrated into Irish planning guidance.

CHAPTER 5: CONTEXT

5.1. Introduction

This chapter provides the necessary contextual foundation from which a more detailed study of GI's ascension can proceed. An introduction to relevant attributes of the Irish planning system is first supplied. An account of GI's emergence, evolution and institutionalisation in the Irish planning system is subsequently presented.

5.2. The Planning Hierarchy

5.2.1 Governance Structures

Irish planning policy provision is distributed within a three tier hierarchy of national, regional and local level governance. The Department of Environment, Community and Local Government (DoECLG)²⁰ oversees the operation of the local government system (DoECLG, 2011a). National level planning policy and legislation is produced by the DoECLG. Operating beneath this are eight regional authorities²¹ (see Figure 5.1) which coordinate some of the activities of lower level governance bodies as well as issuing planning guidance. At the local level there are twenty nine county councils, five city councils, five borough councils and seventy five town councils (see Figure 5.2).

²⁰ Formerly the Department of Environment, Heritage and Local Government.

²¹ These were established in 1994 under the 1991 Local Government Act.

Figure 5.1

Map of Regional Authorities in Ireland



Figure 5.2

Map of Local Authorities in Ireland



5.2.2 The Policy Hierarchy

National

The National Spatial Strategy (NSS) is the primary national planning framework for Ireland for the 2002-2020 period (DoEHLG, 2002b). The NSS outlines a polycentric consolidation of Ireland's urban centres (Davoudi and Wishardt, 2005) so as to plot a strategy on 'how Ireland can be spatially structured and developed...in a way that is internationally competitive, socially cohesive and environmentally sustainable' (DoEHLG, 2002, 38).

Regional

Regional Planning Guidelines (RPGs) were introduced into the policy hierarchy in 2004. Produced by regional authorities, these documents function in translating the overall national approach of the NSS into policies at regional and local levels (NIA, 2007). Despite specifying coverage for a twelve year period, the RPGs are 'statutorily valid' for six years (DoECLG, 2011b), with the drafting and public consultation of updated guidance commencing during year four of this period. Whilst there are eight regional authorities, due to geographical proximity and shared development pressures, the Dublin Regional Authority and the Mid-Eastern Regional Authority combined resources in the drafting of the singular Regional Planning Guidelines for the Greater Dublin Area (RPGGDA) for 2004-2016. This process was repeated for the RPGGDA for the 2010-2022 period.

Local

At a local level, 'The development plan has always been and continues to be the basic policy document of the planning authority in which the planning objectives for the area are set out' (Grist, 2004, 228). Such development plans comprise a written document and associated maps. County and city councils are legislatively obliged to produce and formally adopt a new development plan every six years. Local authorities are required to commence production of a new development plan in year four of this six year cycle (Oireachtas, 2000). In addition to the production of their development plan, local authorities may produce local area plans, planning

strategies and supplementary guidance documents to offer more detailed direction on the development of specific geographic areas or theme related issues.

5.2.3 The Heritage Officer Programme

Of pertinence to this thesis is the role of heritage officers within local authorities. Commencing as a small pilot programme in 1999, and subsequently expanding to include twenty seven officers, each located in a different local planning authority²², the heritage officer programme aims to ensure the presence of heritage expertise within the local governance system. The programme is underpinned by government commitments in the National Heritage Plan (DoAHGI, 2002b) and supported via shared funding arrangements between the Heritage Council and participating local authorities. Working on a broad definition of 'heritage', these officers help coordinate and provide input to numerous council activities ranging from natural environmental issues through to landscape and archaeology, as well as built and cultural heritage matters. As such, their activities frequently interact with the local planning policy development process.

5.3. Nascent Discourses (2002-2007)

5.3.1 National Initiatives

The first formal reference to GI in an Irish policy context occurred in 2002, with the production of a study on ecological networks²³ (Tubridy and O Riain, 2002). Commissioned by the Environmental Protection Agency (EPA), the purpose of this study was to inform the then forthcoming National Spatial Strategy (DoEHLG, 2002b). In drawing conclusions on the need to consider ecological networks in strategic planning, the study stated,

²² As of December 2011.

²³ Defined by Tubridy and O Riain, (2002, 1) as, 'a network of sites. Its constituents are: 'core areas' of high biodiversity value and 'corridors' or 'stepping stones', which are linkages between them. In contrast to species or site based conservation, the ecological network approach promotes management of 'linkages' between areas of high biodiversity value, between areas of high and low biodiversity value, between areas used by species for different functions, and between local populations of species. 'Corridors' or linking areas can support species migration, dispersal or daily movements.'

The map of the Ecological Network is a map of Green Infrastructure. In the same way as society maintains and plans for grey infrastructure (roads, sewers, etc.), the future of Green Infrastructure should be debated within government, development sectors and the public, in order to arrive at strategic policy objectives. (Tubridy and O Riain, 2002, 7)

Thus, GI is here equated with ecological networks and metaphorically explained by reference to more familiar forms of 'grey infrastructure'. The study argues that the fragmentation of habitats is the primary issue threatening Ireland's biodiversity. The authors concluded that the map based formulation of a national ecological network (GI) would help ensure the conservation of Ireland's biodiversity by reversing the trend towards habitat fragmentation. Therefore, GI in the context of this study is first and foremost concerned with the conservation of biodiversity via the cartographic assessment and facilitation of habitat connectivity. However, the NSS when finally adopted in November 2002 made no specific reference to the value of the ecological network ('green infrastructure') approach or its relevance to strategic planning.

Similarly, no reference was made to GI in various national plans and strategies subsequently produced by central governmental departments. These included, the National Biodiversity Plan (DoAHGI, 2002a), the Guidelines for the Production of Local Biodiversity Action Plans (DoEHLG, 2002a), the National Heritage Plan (DoAHGI, 2002b), the National Countryside Recreational Strategy (DoCRGA, 2006), the National Rural Development Strategy 2007-2013 (DoAF, 2006) and the National Climate Change Strategy 2007-2012 (DoEHLG, 2007).

5.3.2 Local Initiatives

In September 2004, South Dublin County Council adopted its County Development Plan for the period 2004-2010 (SDCC, 2004). With attentiveness to recreational access provision, the first chapter of the document introduces the plan's 'overall strategy' by stating that,

The Council will seek to prepare a Green Structure Plan for the county to identify green linkages and to allow for the intensification of use of existing and proposed amenity networks.
(SDCC, 2004, 32)

Thus, in the case of this plan, the term 'green structure' is related to the increased use of current and proposed 'green linkages' for amenity purposes rather than for biodiversity conservation.

In January 2005, Galway City Council adopted its development plan for the 2005-2011 period (GCC, 2005). The recreation amenities provision policies of this plan were not included in an individual or 'community' chapter as was the normal format for such documents at the time, but rather were grouped with policies on biodiversity conservation in a chapter entitled 'Natural Heritage, Recreation and Amenity'. The plan sought to facilitate better integration of natural and semi-natural areas for recreational use by building on a framework presented in the previous Galway City Development Plan (1999-2005) for the establishment of a 'green network'. The 2005-2011 City Development Plan proclaimed that such a network offered the means by which to combine and coordinate the protection of natural heritage areas and facilitate the provision of open space for recreational purposes.

Whereas the 'Heritage' chapter of the Dublin City Development Plan 2005-2011 (DCC, 2005) adopted two months after the Galway City Development Plan discussed the protection of conservation designated sites, little attention was given to the protection of biodiversity outside such sites. Rather, as with the Galway City Development Plan, the protection of biodiversity outside such sites was conflated with public open space provision and discussed in Chapter 11 of the plan entitled 'Recreational Amenity and Open Space'. This indicates a changing interpretation of biodiversity as something, which like recreational amenities, can be 'created'.

By 2008, the interpretation of habitat conservation as recreational provision was again represented in Irish planning guidance documentation. In January 2008, Galway City Council published a non-statutory but high profile planning guidance document, entitled Galway City Recreational and Amenity Needs Study (GCC, 2008). This document extended the 'green network' concept advocated in the Galway City Development Plan 2005-2011 by enthusiastically promoting the development of such a network that conflates nature protection, recreation and urban expansion (GCC, 2008, 6). Echoing Dublin City Council's perceptions regarding 'habitat creation and maintenance' (DCC, 2005, 86), this 'discursive turn' (Dryzek, 2005; Fischer, 2003) extended the concept of habitat multifunctionality and landuse compatibility from that asserted by Dublin City Council, to a new rationale whereby using nature for recreational purposes 'is' protecting it.

5.4. The Emergence of Specific 'Green Infrastructure' Discourses (2008)

5.4.1 Expanding Functionalities

The first formal recognition of this discursive turn in a planning context appears in the Dublin City Council Biodiversity Action Plan 2008-2012. This plan echoed the 2002 EPA National Ecological Networks study in noting habitat fragmentation as a major threat to biodiversity and the consequent requirement for 'physical links' between habitats (see section 5.3.1). However, rather than foregrounding the conservation of biodiversity for its intrinsic value as the EPA study had done, this plan argues for the importance of biodiversity, by accentuating the benefits to 'our well-being' delivered by 'ecosystems services', such as food and fuel provision, as well as the regulation of soils, water and climate (DCC, 2008, 9).

Elaborating this 'ecosystems services' perspective was a document produced by the Department of the Environment Heritage and Local Government (DoEHLG, 2008). This document entitled, 'The Economic and Social Aspects of biodiversity: Benefits and Costs of Biodiversity in Ireland', repositions habitat and biodiversity protection from 'for nature' to 'for us' in a cogently articulated argument that asserts,

Loss of biodiversity is our loss. The incentive to protect biodiversity does not simply arise from a benevolence towards the natural world. Rather, a high level of biodiversity also ensures that we are supplied with the 'ecosystem services' that are essential to the sustainability of our standard of living and to our survival.
(DoEHLG, 2008, 5)

These discourses not only implied a concentration on the instrumental values of biodiversity, but also aligned arguments for the protection of biodiversity with continued economic development.

5.4.2 The (Re)Emergence of 'Green Infrastructure'

In 2007 University College Dublin (UCD) and Natura Ecological Consultants Ltd. combined efforts with Dublin City Council (DCC), Dun Laoghaire Rathdown County Council (DLRCC) and Fingal County Council (FCC) to produce the Green City Guidelines (2008). This document implicitly asserts an anthropocentric instrumental and multifunctional perspective on biodiversity, and by association those areas identified with its provision. Such an interpretation is articulated beneath the rubric of 'green infrastructure' when in quoting Girling and Kellett (2005) the guidelines declare that,

Urban green space includes everything in cities that has vegetation. Collectively it is sometimes referred to as "Green infrastructure", encompassing the entire working landscape in cities that serve roles such as improving air quality, flood protection and pollution control (UCD et al., 2008, 10).

This represents the first reference of GI in an Irish planning document since the ecocentric interpretation of GI advanced in the EPA National Ecological Networks study of 2002 (see section 5.3.1). However, these guidelines reflect the post-2002 evolution of 'networked' concepts of 'green space' planning by repositioning biodiversity in planning as something of 'use value' in facilitating urban development in a manner that ensures 'our standard of living' (DoEHLG, 2008, 5) and 'well-being' (DCC, 2008, 9).

In November 2008, Fingal County Council, one of the authors of the Green City Guidelines, in association with the Irish Planning and Irish Landscape Institutes, and the Institute of Ecological and Environmental Management, hosted an international conference on GI in Malahide, County Dublin. Three presentations specifically regarding GI planning in Ireland were provided. Two of these were given by officers of Fingal County Council (FCC), while the third was delivered by the Head of Policy and Research at the Heritage Council²⁴. Both presentations by FCC stressed the utility of GI in assisting management of urban growth pressures within the county. The presentation by the Heritage Council echoed the ‘green network’ approach previously advocated by Galway City Council in promoting the integration of ecology with recreational landuses (see section 5.3.2). The GI approach advocated by the Irish presenters displayed an implicit bias towards the provision of active recreational uses within an otherwise multifunctional perspective on a broadly encompassing conception of ‘green spaces’.

5.5. The Extension of Interpretations (2009-2011)

5.5.1 Valuing Nature

In March 2009, Dr. Gerry Clabby, Heritage Officer in Fingal County Council and a presenter at the GI conference a few months previously, published a guest commentary²⁵ on the Comhar website entitled ‘Green Infrastructure: Critical Infrastructure for a Smart Economy’ (Clabby, 2009). Here Dr. Clabby compared GI to conventional understandings of the term ‘infrastructure’ before outlining numerous international examples of how the networks of green spaces he described as GI are managed.

²⁴ The Heritage Council is a QUANGO established under the Heritage Act of 1995, although it had existed in various guises prior to this. Since 1995, the Heritage Council as a state aid granted body has overseen the production of over 60 publications covering a cross-section of heritage issues, the development of a Heritage Officer network throughout most counties in Ireland, and the allocation of over 18 million Euros in grant aid to hundreds of projects throughout the country.

²⁵ Comhar was the Irish Sustainable Development Council. It was dissolved in the winter of 2011. In January 2012, the sustainable development role formerly performed by Comhar was integrated into the work of the National Economic and Social Council (NESC). Prior to its dissolution, Comhar produced commentaries on a fortnightly or monthly basis. These provided a platform for those who were allied to Comhar to express their views on various aspects of sustainable development outside the formal confines of official documentation. Dr. Clabby was on the steering committee of Comhar’s Green Infrastructure working group.

Summarising the claimed societal benefits of GI, Dr Clabby noted its importance: in the mitigation of urban heat island effects; recreation and mental health amenities provision; flood risk management; compliance with E.U. legislative requirements; increasing land values; attracting tourist and business interests; and in the facilitation of national economic recovery. Dr Clabby's exposition illustrates the significant broadening of the meaning of GI since the term was first proposed in the EPA study of 2002 (see section 5.3.1). Furthermore, GI is presented in this commentary as a means by which to reconcile environmental conservation and economic development, as illustrated when Dr Clabby states,

Land-use planning is one of the key areas where we need to successfully integrate environmental considerations if we are to move towards a 'Smart Economy'. A key to achieving this is finding ways in which we can align environmental and economic goals in the planning system. Green infrastructure planning provides a practical way in which to do this. (Clabby, 2009)

Echoing the 'green network' approach advocated by Galway City Council a year previously (GCC, 2008), GI is here advanced as a planning mechanism enabling 'growth and development' 'in tandem' with the 'protection, provision and management' of green spaces (Clabby, 2009).

In September 2009, the Draft South Dublin Development Plan 2010-2016 (SDCC, 2009) was placed on public consultation display, and subsequently formally adopted in October 2010 (SDCC, 2010). Whereas the previous development plan for the area (2005-2010) promoted a 'Green Structure' that conceived a networked approach as primarily providing recreational amenities (see section 5.3.2), this plan, adopted five years later, equates 'linked' and 'interconnected' open space provision as catering both for 'recreational needs' and the provision of 'valuable wildlife corridors'. Furthermore, such provision is seen as forming 'a significant green infrastructure in the County' (SDCC, 2010, 95). This suggests an interpretation of GI similar to that advocated almost two years previously by Galway City Council in its 'green network' approach (see section 5.3.2). Here, SDCC forwards an understanding of GI as a 'multifunctional resource' articulated in terms of its

anthropocentric instrumental value as something which can be 'planned', 'designed' and 'managed' so that it is 'capable of delivering' 'benefits' to society (SDCC, 2010, 257). Additionally, the composite elements of GI are expanded from those of public open spaces to 'allotments and private gardens'. In this interpretation, virtually all spaces containing vegetative matter, and thereby labelled 'green spaces', are now subsumed beneath the banner of 'green infrastructure'.

Three months later, in December 2009, Dublin City Council placed its Draft Dublin City Development Plan 2011-2017 (DCC, 2009) on public consultation display. This plan was later formally adopted in November 2010 (DCC, 2010a). Whereas the previous Dublin City Development Plan 2005-2010 had promoted a 'networked planning approach' that conflated the provision of recreational amenities with habitat conservation (see section 5.3.2), it had not specified this as 'GI' per se. In contrast, the Dublin City Development Plan 2011-2017 is unambiguous in its promotion of GI (DCC, 2010, 23). Furthermore, the provisions of this plan expand the functions of GI from that expounded by South Dublin Council to include the delivery of additional services to urban residents. Specifically, the plan outlines how sustainable urban drainage systems (SUDS) 'forms an integral part of green infrastructure' (DCC, 2010, 76), while Section 6.4.1 of the plan expands the interpretation of GI to include archaeological and heritage sites, coastal areas, brownfield sites, as well as drainage and flood management landuses.

In early February 2010, Comhar hosted a workshop on GI in which it presented for discussion the draft conclusions and case studies from a GI study commissioned in August 2009 (Comhar, 8th February 2010). Addressing an invited audience of professionals and Comhar identified stakeholders, the consultant team employed by Comhar to produce the study presented a quantitative data-based cartographic methodology for the planning and design of GI. Responses from the floor were requested and received. The workshop was significant in giving representation to a cartographic dynamic in the conception of GI. As an additional element to the debate, this approach furnished a methodological template previously absent from

GI planning and emphasised the centrality of mapping quantitatively sourced data to generate multifunctional GI landuse strategies.

The Draft Galway City Development Plan 2011-2017 (GCC, 2010), published in the same month (February 2010), and later formally adopted in February 2011 (GCC, 2011), outlines an intention to maintain the ‘green network’ planning approach advocated in its previous plan (see section 5.3.2). Equating the advocated ‘green network’ with GI, the plan stresses the many advantages of this approach by declaring,

The development of ‘green infrastructure’ and the availability of recreation opportunities, facilities and natural amenities are important quality-of-life factors for the location of inward investment and for individuals choosing a place to live. (GCC, 2011, 44)

Thus, as pronounced by Dr. Clabby in his Comhar Commentary issued in March 2009 (see section 5.5.1), the plan broadens the discourse on GI by coupling it to economic development.

Maintaining this perspective, the director of Comhar presented an economics focused argument for the introduction of GI planning at the Irish Planning Institute’s Annual Conference in April 2010. This conference, which was organised around the theme of ‘Planning for a smarter Ireland’, facilitated the presentation of numerous talks centred on how to plan for national, regional and local economic regeneration. Comhar’s presentation at the conference framed GI as part of a multifaceted environmentally sensitive approach that can help reverse the costly loss of ‘ecosystems services’. This endorsement of a cost-benefit argument for the adoption of GI planning was sustained by Comhar in its presentation at the Parks Professional Network Seminar Day in June 2010, when it was announced that the estimated worth to Ireland of the ecosystems services delivered by GI was €2.6 billion.

5.5.2 An All-Encompassing Concept

In the same month as the Irish Planning Institute's Annual Conference (April 2010), Fingal County Council issued for public consultation display its Draft County Development Plan 2011-2017 (FCC, 2010). This was formally adopted a year later in April 2011 (FCC, 2011). Chapter 3 of this plan is entitled 'Green Infrastructure'. The insertion of the GI chapter prior and adjacent to the subsequent conventional 'Physical Infrastructure' chapter signals an interpretation of GI as a strategically important concept binding together the various economic, physical, environmental and social objectives of the plan. The plan identifies numerous environmental challenges requiring redress and presents GI as the solution. Such issues include temperature and water regulation, recreational open space provision, economic development and the provision of 'space for nature' (FCC, 2011, 91).

These heralded beneficial qualities of GI are reflected in the Draft Kildare County Development Plan 2011-2017 (KCC, 2010) which was issued for public consultation in April 2010 and formally adopted in May 2011 (KCC, 2011). Emulating South Dublin County's perspectives on the possibilities of 'designing' an anthropocentrically instrumental GI, the Kildare County Development Plan employs the term GI to describe multiple 'green space' typologies, which form a,

...strategically planned and delivered network...designed and managed as a multifunctional resource capable of delivering a wide range of environmental and quality of life benefits for local communities. (KCC, 2011, Chp. 14, 19) [Emphasis added]

This interpretation of GI was reflected in the policy provisions of the Draft Regional Planning Guidelines for the Greater Dublin Area 2010-2022 which were issued for public consultation in spring 2010. However, unlike previous discussions on GI planning in Ireland, the guidelines assert the utility of GI as extending beyond urban and peri-urban locations to include the wider rural environment. The promotion of GI in these guidelines is significant for GI planning in Ireland, as following the coming into effect of the Planning and Development (Amendment) Act 2010 (Oireachtas, 2010) in August that same year, all new plans are required to be

‘consistent, as far as practicable’²⁶ with policy provisions issued in strategies at higher tiers in the planning policy hierarchy. Thus, all policy provisions within the seven local planning authority areas comprising the Greater Dublin Area would from August 2010 have to be consistent with the policy provisions of these Regional Planning Guidelines. Against this legislative background, all local authorities within the Greater Dublin Area would thereby have to include policies harmonising with the particular perspective of GI promoted in these guidelines. As such, the promotion of this interpretation of GI had evolved from a local planning initiative to the status of a regionally stipulated planning policy direction. The adoption of the guidelines in June 2010 also presented the first formal representation of GI in the planning policy hierarchy as all other GI advocating plans were still in ‘draft’ (public consultation) format at this time.

Although by now having evolved to encompass multiple functions, there persisted a discourse of ecosystems valuation underpinning the rationale for the promotion of a GI approach to planning. This was evidenced in August 2010, when Comhar published the finalised version of the GI study (Comhar, 2010b) it had commissioned twelve months previously (see section 5.5.1). In an extension of a document published almost two years earlier on the ‘The Economic and Social Aspects of Biodiversity’ (DoEHLG, 2008) (see section 5.4.1), the study largely represents biodiversity’s ‘value’ in terms of its cost-linked ecosystems services potential. This concentration on an economic calculus of GI’s value may be explained by Comhar’s assessment of the need to represent GI as underpinned by a sound economic rationale in order to render it ‘more attractive than ecological networks because of a clearer focus on benefits to people’ (Comhar, 2010a, 22). Accordingly, in concluding its review of contemporary GI planning practices, the study recommends as a priority the,

²⁶ Previous to the enactment of this legislation, planning policies were only required ‘to have regard to’ policy provisions issued at higher tiers of the planning policy hierarchy. Planning Authorities must now ensure that their development objectives are consistent, as far as practicable, with national and regional strategies (Section 7 of Part 2 of Statutory Instrument No. 30 of 2010: Amendment of Section 10 of the Principal Act)

Identification, quantitatively and qualitatively of the economic and social benefits of ecosystem services delivered by Green Infrastructure in monetary terms and also the social gains to health and quality of life. This information will help Local Development Plans support local responses to major issues related to quality of life, water quality and climate change. (Comhar, 2010a, 23)

Echoing this appraisal was the long awaited review and update of the National Biodiversity Plan (DoEHLG, 2010) published in draft consultation format the following month (September 2010). Although this draft plan appears to support Comhar's position on the monetarisation of ecosystems services as a means to highlight their 'value' to society (DoEHLG, 2010, 20), it adopts a more restricted perspective on the functions of GI. Specifically, the draft plan fosters a wholly urban based interpretation of GI's applicability which diverges with the contention by both Comhar (2010b) and the Regional Planning Guidelines (DRA and MERA, 2010) that a GI approach is equally pertinent to rural environments.

5.5.3 The Proliferation of References

By the summer of 2010, GI planning policy discourses appeared to be in wide circulation among a community of planning practitioners and allied professionals, with its representation evident in both regional and local level planning policy guidance. Indeed, the regional representation of the concept was further consolidated when in July 2010 the Regional Planning Authority for the South-East Region adopted its planning guidelines which make reference, albeit limited, to GI in the context of policy direction on open space provision and biodiversity protection (SERA, 2010). Furthermore, GI was given prominence by Fáilte Ireland, Ireland's National Tourism Development Authority, in a published document on how to maximise the tourist potential of historic towns (FI, 2010). In addition, the inclusion of a limited reference to GI in the Wicklow County Development Plan 2010-2016 (WCC, 2010) and mention in a document produced by the Heritage Council (HC, 2010) regarding the formulation of a National Landscape Strategy for Ireland, demonstrate the term's growing popularity within the planning policy community.

By autumn 2010, both Clare and Waterford County Councils had published proposed amendments to their respective draft county development plans for the period 2011-2017. Whilst the draft public consultation display of these plans had not included reference to GI, these proposed amendments sought to introduce mention of GI planning. In both cases, reference to a GI approach is included in the adopted plans (CECC, 2011; WDCC, 2011). Although such references are limited in specificity, they indicate the movement of the GI discourse beyond urban areas into the policy discourses circulating within more rural planning authorities.

November 2010 witnessed the publication of a document by the Urban Forum²⁷ and the Institute of Ecology and Environmental Management (UF and IEEM, 2010), entitled 'Green Infrastructure: A Quality Of Life Issue'. This document reflects widespread contemporaneous interpretations of GI as facilitating anthropocentrically orientated landuse multifunctionality. In the same month, Kilkenny City and County Councils in association with the Heritage Council produced a habitat survey for Kilkenny City (KKCC, 2010b). This survey included a section on GI. The document focuses primarily on habitat classification and management, thereby departing from prevalent discourses on GI by adopting an eco-centric perspective, with attention largely centred on habitat conservation rather than the social uses of open spaces or the ecosystems services furnished by biodiversity. As such, this document indicates the persistence of an ecology centred understanding of GI that maintains the concept as originally articulated in the EPA study of 2002 (see section 5.3.1). This perspective on GI was subsequently given planning policy representation by the Kilkenny County Council via limited reference in the Local Area Plans for Gowran (KKCC, 2010a), formally adopted in December 2010, and later in the Fidown (KKCC, 2011a) and Piltown (KKCC, 2011b) Local Area Plans, both of which were formally adopted in January 2011.

²⁷ The Urban Forum is a joint initiative by the five Institutes representing the built environment professions in Ireland; the Royal Institute of Architects in Ireland, the Society of Chartered Surveyors, Engineers Ireland, the Irish Planning Institute and the Irish Landscape Institute. The Urban Forum facilitates and promotes debate on issues pertaining to urban planning and urban design within Ireland.

The proliferation of interpretations and references to GI continued into 2011. One of the first among these was a proposed variation to the Dún Laoghaire Rathdown County Development Plan (DLRCC, 2011) issued for public consultation in January and subsequently adopted in September of 2011. This variation presented a recreation and amenity focused interpretation of GI in the context of a high density urban environment. The following month observed the issuing for public consultation of a draft Transport Strategy for the Great Dublin Area over the 2011-2030 period in which GI was represented in terms of facilities for non-motorised travel (NTA, 2011). Subsequent months saw reference made to GI within planning documentation with respect to flood risk management (SCC, 2011), ecological corridors (ATC, 2011), and the protection of landscape character (DoAHG, 2011b).

In April 2011, Dublin City Council advertised its intention to produce a Local Area Plan for the Clongriffin-Belmayne (North Fringe) area (DCC, 2011). This included a section titled 'Green Infrastructure & Sustainability' in the Issues Paper produced by the Council for public consultation. As with prevailing contemporary interpretations regarding GI, this document advances a view of GI as facilitating the functional compatibility of multiple landuses. An identical interpretation was offered in the Issues Paper for the proposed Naas Road Local Area Plan announced by the Council in June 2011, while the Issues Paper for the proposed George's Quay Local Area Plan, released by the Council a month previously, implicitly suggested GI's role in flood risk management and climate change adaptation. The same month (May 2011), witnessed a presentation on GI at the Irish Planning Institute's (IPI) Annual National Conference. This was delivered by one of the authors of the Urban Forum and IEEM document entitled 'Green Infrastructure: A Quality Of Life Issue' (UF and IEEM, 2010)(see section 5.5.3). Included among a schedule of lectures tackling conventional planning practice topics²⁸, this presentation provided a national platform from which to proclaim the approach's asserted benefits to an audience of public and private sector planning practitioners. Its endorsement by the IPI also represents the Institute's positive assessment of GI's legitimacy as a

²⁸ The main topics discussed at the conference were changes to planning legislation; quarries and natural resource planning; and urban design.

planning approach, and signified an official position that it should be widely disseminated. In November 2011, the updated National Biodiversity Plan (DoAHG, 2011a) was published. Although making limited reference to GI, and framed within a broader discussion of habitat conservation, this plan resonates with prevailing interpretations of GI as a 'networked' approach to nature conservation, and emphasises the society servicing functions of ecosystems. Also of note is the document's alignment with general perceptions on the wide selection of landuses and spatial typologies to which GI is applicable.

In addition to its representation within a plethora of statutory and non-statutory planning documentation, the formal adoption of those local, city and county development plans which in their 2010 draft (public consultation) format had advocated GI, gave the approach official planning recognition in several local planning authority areas and two regional council areas by the winter of 2011.

5.6. Conclusion

This review of the GI story in Ireland between 2002 and 2011 reveals a picture of the concept's emergence and evolution from an ecologically centred 'networked' approach to conservation into a perspective increasingly focused on the planning of a broadly encompassing conception of 'green spaces' for anthropocentric utility. This reorientation of GI's meaning increasingly sought to emphasise the services such areas provide in aiding physical, social and economic development. This evolving reconceptualisation of what GI signifies may be divided into three phases, namely: 2002-2007; 2008; and 2009-2011, each of which is summarised below.

5.6.1 First Phase: 2002-2007

The initial period of the concept's manifestation between 2002-2007 is characterised by a three period chronological sequence in the realignment of the networked approaches to such green spaces. This succession commenced with the appearance in 2002 of an 'ecological network' approach that foregrounded the conservation of habitats. The popularity of this approach appears to have persisted until 2005 when it was subsequently overtaken by a 'green network' concept,

which with greater standing in statutory planning guidance, assumed the compatibility of multifunctional landuses in the provision of open space planning and the management of natural heritage. The third period, discernible during the 2005-2007 phase, not only reflects an interpretation of multifunctional compatibilities but further extends this discourse to advocate a 'green network' approach as one in which 'using' nature is seen as a means to protect it.

5.6.2 Second Phase: 2008

By early 2008, discourses surrounding planning for biodiversity had broadened to include a wide remit of uses in addition to the already popular assumption of biodiversity protection and recreational landuse compatibilities. The emergence of an ecosystems services discourse further repositioned perspectives on planning for biodiversity away from concepts focused on the intrinsic value of nature towards those concerned with the anthropocentric instrumental value of 'ecological assets' (DoEHLG, 2008). Whilst such an instrumental perspective appears to have dominated the planning literature during this period, there is evidence to suggest the persistence of interpretations that maintained a bias towards the intrinsic values of nature in planning policy proposals. The publication of the Green City Guidelines in September of the same year (UCD et al., 2008) observed the reintroduction into planning discourses of the term 'green infrastructure'. The Green Infrastructure Conference of November 2008 consolidated the reappearance of GI as a planning discourse and witnessed a number of interpretations of GI, although those with a specific 'planning' focus emphasised the anthropocentric utility value of broadly conceived green spaces.

5.6.3 Third Phase: 2009-2011

The 2009-2011 period witnessed a considerable expansion in the interpretation of GI's spatial and functional applicability. Almost all spatial typographies, including brownfield sites (DCC, 2009) and cultural heritage locations (DRA and MERA, 2010), were interpreted as constituent elements of GI. Simultaneously, the functions of GI where expanded and coupled to discourses on economic development which stretched beyond the planning arena and into contemporary themes in wider

politics and society (Clabby, 2009; Comhar, 2010b; Comhar, 2010f). Reinforcing this association, 2010 witnessed an escalating monetarisation of biodiversity issues by way of reference to ecosystems services. Here, GI became increasingly fashioned as a planning mechanism underpinned by a sound economic rationale (Comhar, 2010f; DoEHLG, 2010). This year also beheld a movement to foster a quantitatively based cartographic foundation for the formulation and implementation of GI planning. Furthermore, evident in late 2010 through to 2011 was the increasing prominence of professional institutes in advocating GI. Throughout this period, varying interpretations of what GI entails continued to flourish. By autumn 2011, conceptions of GI had moved well beyond ‘networked’ spatial arrangements. GI was now increasingly applied as a label indicating the society-servicing functions of all green spaces, be they connected or isolated, naturally occurring or human made.

By the end of 2011, GI had achieved representation in guidance at national, regional and local levels, while also enjoying reference in many non-statutory planning policy documents. However, with the exception of Galway City Council, the most comprehensive representation of GI was in the Greater Dublin Area, and more specifically within the local authorities comprising the Dublin metropolitan region²⁹.

This chapter has traced the emergence and evolution of GI as a planning policy approach in Ireland between 2002 and 2011. It has shown how interpretations of what GI means developed from a ‘networked’ approach for the conservation of habitats to a multifunctional and anthropocentric ‘ecosystems services’ approach to green space planning. The following chapter examines ‘why’ and ‘how’ this transformation occurred. This is undertaken by investigating the reasons for the formulation of a GI narrative centred on the ‘use’ of green spaces to society.

²⁹ Dublin City Council, Dun Laoghaire-Rathdown County Council, South Dublin County Council, and Fingal County Council.

CHAPTER 6: NARRATIVE PRODUCTION

6.1 Introduction

Building upon the contextual foundation provided in Chapter 5, this chapter addresses the first research question of the thesis, namely: *Why has the GI concept emerged and why is it advocated as a planning approach?* In answering this question, this chapter probes the motivations for the introduction of term 'green infrastructure' (GI) and the influence this is perceived to have exerted in planning policy formulation. Specifically discussed is the manner by which GI has been employed to fashion an identifiable narrative centred on the importance of green spaces to society's physical, social and economic development, as well as to environmental sustainability.

6.2 Problematising

6.2.1 A Root Problem Narrative

The problem of habitat fragmentation had been identified as an issue requiring remedy within the first formal reference to GI in an Irish policy context. This study commissioned by the Irish Environmental Protection Agency (EPA) (Tubridy and O Riain, 2002), equated GI with ecological networks noting that,

There is evidence for the effects of fragmentation on habitat and species connectivity in Ireland...A spatial solution to this problem can be elaborated under the broad title of 'ecological network'...(Tubridy and O Riain, 200, 46)

The perception of habitat fragmentation as a problem necessitating redress by the planning system appears to have persisted in the absence of specific GI policy representation between 2003 and 2007. This was illustrated by means of reference to the importance of ecological connectivity in a variety of increasingly multifunctional 'networked' approaches to green space planning, including among others, 'Green Networks' (GCC, 2005), 'Green Chains' (DCC, 2005), and 'Ecological Networks' (FCC, 2005a; 2005b) (see Chapter 5). The 'problem' of habitat fragmentation was once again noted in the second formal reference to GI in an Irish planning policy context in the Green City Guidelines (UCD et al., 2008). This was

published in November 2008, six years after the first reference to GI in the EPA study (Tubridy and O Riain, 2002). Although by this time the ‘networked’ approach to biodiversity planning had substantially departed from that originally advocated in the EPA study, having now morphed into a largely anthropocentric instrumental and multifunctional perspective on green space provision, the 2008 Green City Guidelines note that,

Planning for biodiversity must take the spatial requirements of species into consideration by providing sufficient habitat for them in a connected arrangement. A spatial overview at the landscape-scale is required to overcome existing fragmentation and prevent further depletion of connected features. (UCD et al. 2008, 15)

This focus on tackling habitat fragmentation was subsequently represented in presentations at workshops organised by Comhar SDC (Comhar, 8th February 2010; 24th June, 2010), and the published Comhar SDC study on ‘Creating Green Infrastructure for Ireland’ (Comhar, 2010b). Such a concern with the negative ecological consequences resulting from habitat fragmentation is echoed across a broad range of professional disciplines associated with the emergence and evolution of GI planning policy discourses in Ireland. This is lucidly exemplified by one local planning authority interviewee who observed that,

We have dots, at one point it wasn’t dots, it was a complete you know, a landscape or an interconnected landscape but...we’ve introduced fragmentation and now we have to actually plan connectivity where that didn’t have to be planned before. (Interviewee B1)

The endurance of habitat fragmentation as a problematic discourse formerly grounding, and latterly intrinsic to, appeals for greater attention to green space connectivity in planning policy, suggests a ‘root problem narrative’ which forms a common concern threading through all discussions on ‘networked’ approaches to green space planning. Although biodiversity loss is conceived as directly resultant from such habitat fragmentation (‘root problem narrative’), this discourse is conceived as nested within a wider narrative pivoting on impressions of a prevalent malaise in landuse governance. This is attributed to the perceived low profile of

natural heritage issues in planning policy. Such an encompassing, but more nebulous predicament, has ambiguous foundations and consequently a less definable solution (Barry, 2007; Yearley, 2002). As such, this issue of low profile presents those concerned about it with problematic policy ambiguity. Nevertheless, given its perceived encompassing position, it is to this 'broader problem narrative' that efforts to address habitat fragmentation have been directed.

6.2.2 A Broader Problem Narrative

The perceived low profile of natural heritage issues in landuse governance was succinctly expressed by Comhar when it pronounced that,

Biodiversity continues to decline because its value is not reflected in decision making by business and Government. (Comhar, 2010, 5)

This view was echoed by many of those interviewed, with some noting that this poor status is evidenced in normal professional practice. This opinion was articulated by one senior local authority officer who commented that,

My view, of the last twenty two years...is that a lot of professionals take little heed of the natural environment. They do not see the consequence of what they do to be honest with you. (Interviewee B6)

Several of those interviewed observed how a directed bias in policy formulation practices has marginalised certain planning related issues, as noted by the conclusion that,

I suppose the whole green side of things...that space is always compiled as the left over space, you know, your left over, the stuff you haven't zoned. (Interviewee E4)

Such appraisals regarding the perceived poor status of green spaces in landuse governance stimulated the emergence of countering discourses that seek to advance perspectives on the importance of these areas by emphasising their potential as multifunctional resources for the delivery of both societal and

ecological benefits (see Chapter5). This was conveyed by Dr Clabby in his Comhar Commentary when he contended that,

The importance of developing and maintaining different types of infrastructure for future economic wellbeing is clear. Because of this, we carefully plan our road networks, our power supply networks, our telecoms networks. We invest heavily in these strategic assets and maintain them on an ongoing basis.

In contrast, we think about and manage land and green space in a very different way. We see individual parcels rather than a connected network. We usually don't think about the many benefits being provided to us, often free of charge. And we don't recognise that these networks of land and green space surrounding our towns and cities – and threaded through them – play a key role in sustaining environmental quality. (Clabby, 2009)

In this sense, Dr Clabby, along with almost all of those interviewed for this thesis, stress the need to consider green spaces as essential to the economic, social and environmental sustainability of existing and future development. Most of those interviewed suggested that raising awareness of this crucial servicing function is required so that such areas, and the issues associated with them, are allocated greater weight in policy formulation. Devising a means by which to communicate the fundamental societal importance of green spaces is thus viewed as vital in facilitating the associated protection of ecosystem integrity and the prevention of habitat fragmentation. To many, this communication agenda entails providing clarity and direction to the disparate planning practices associated with such areas. As noted by one senior planning official,

I suppose maybe there is a, a sense that maybe it needs greater prominence, you know, greater priority, greater focus and one of the ways in which you do that is to, you know, carve out a particular identity and conceptual framework for it and promote it on that basis. (Interviewee C10)

It is this concern with attaining 'prominence' while concurrently establishing a 'particular identity and conceptual framework' that lie at the heart of the 'solution

narrative’ presented by those advocating a GI approach to planning policy formulation.

6.3 Solving

6.3.1 Seeing Green

For the majority of those interviewed, terming green spaces as ‘GI’ offers a solution to the problem of communicating the importance of these areas. An example of this labelling function is illustrated by the Regional Planning Guidelines for the Greater Dublin Area 2010-2022 when it states,

Green Infrastructure (GI) is a generic term encompassing the protection, management and enhancement of urban, peri-urban and rural environmental resources (natural and managed) through the identification and provision of multi functional and interconnected green spaces and provides an opportunity to reassess the manner in which we manage and use our green spaces. (DRA and MERA, 2010, 159)

As such, employing the term ‘GI’ is conceived as a means by which to move perceptions regarding green spaces ‘away from this idea...that like land that isn’t being developed is just sitting there doing nothing...it isn’t just sitting there doing nothing, it’s doing something’ (Interviewee B20). This shift in perspectives on green spaces from ‘doing nothing’ to services provision is widely regarded by those interviewed as attributable to the labelling of green spaces as ‘infrastructure’. As stated by one interviewee, but repeated by many others,

I think that’s a fairly, very powerful concept, you know to most people. They think infrastructure is something useful, so you’re kind of making people think mmm, there’s some use in this green stuff you know. It makes you aware of that you know, makes you think about that. (Interviewee A5)

The recognition of ‘use in this green stuff’ consequent on terming it ‘infrastructure’ is perceived by most of those interviewed as raising the profile of green spaces in planning. This was conveyed by an advocate of GI when asserting,

I'm a typical frustrated landscape architect, always feeling that landscape or open space is left behind as an afterthought to the planning system and at strategic level and on projects for that matter and I think green infrastructure as a concept brings it to the centre or to the forefront of planning as I feel it should be.
(Interviewee A2)

Such perceived success in foregrounding green space considerations in planning is credited by many of those interviewed to the placing of green space issues on an equal policy standing with that of other competing issues in the plan making process. Again, this success is widely credited to labelling such areas as 'GI'. This is expressed in the opinion that,

Often in planning terms I suppose...the green space probably gets overlooked a little bit in terms of land use, zoning, and plan making processes...the idea of about where we put residential, where we put our employment, might be more headline issues than, than where we put our green space sometimes. So, I think that the concept can really, it can broaden the integration of these spaces and what they're actually used for and how they relate to the planning system. So I think it's a good mechanism and a good tool to sort of mainstream the whole idea of that whole issue.
(Interviewee B2)

The 'integration' of such a mainstreamed concept entails a transformation in the perception of green spaces from 'the left over space...the stuff you haven't zoned' (Interviewee E4), into areas requiring consideration at early stages in the plan making process. As declared by one planner,

It's taking a more proactive approach to the creation of green spaces and the design of green spaces to make sure that...it's planned in some way and not something that's accidental, that just falls out of a plan when all the hard construction is put in place.
(Interviewee C5)

Seeing green spaces, and the issues associated with them, as items requiring proactive consideration in the plan formulation process is thus largely attributed by those interviewed to the role of the term 'GI' in communicating the value of such areas. Thus, 'GI' is viewed as conferring on green space planning issues an

increased degree of discursive weight in discussions concerning the appropriate use of land.

6.3.2 Discursive Weight

A number of interviewees expressed the view that garnering increased weight of consideration for green space planning, and their associated issues, amid a competing array of issues in landuse policy formulation involves placing greater emphasis on anthropocentric utility in deliberations about such areas. To most of those interviewed, the term 'GI' facilitates this manoeuvre, an opinion lucidly articulated in the Comhar GI report,

There is general dissatisfaction with the mechanisms currently available to input information on biodiversity to spatial plans. Respondents, to whom the concept was introduced directly for the first time, considered that the concept of Green Infrastructure and mechanism of Green Infrastructure planning will be more attractive than ecological networks because of the clearer focus on benefits to people. (Comhar, 2010, 22)

This assessment of the need to accentuate the 'benefits to people' provide by GI planning emerged as a frequently referenced issue during interview analysis. Consequently, interview data suggests a commonly held judgment among planning authority officers that the anthropocentric focus of GI provides a more effective means of gaining attention for green space issues than are efforts centred on the advocacy of ecological networks. Such a belief was conveyed by one such officer when noting,

It's a better descriptive term and it's a more proactive term where you're actually trying to create something or, whereas you know, ecological networks is very, I mean it was the sort of, the buzz phrase of you know, ten years ago. I don't think it ever really worked, certainly not in this country, there doesn't seem to be that much, not in my experience, there didn't seem to be that much done with it. (Interviewee B10)

To most of those interviewed, this perception of proactivity and creativity is effected by the inclusion of the word 'infrastructure' in the term 'GI'. Indeed, for many interviewees the word 'infrastructure' is identified as a means of enabling communication between those engaged in the production of planning policy and those advocating the importance of green space planning. As concluded by one consultant,

The use of the term infrastructure is quite useful, you know, local authority planners and so on get it, and they can sell it a lot better...It certainly is a big improvement on ecological network which doesn't get them, doesn't grasp them as much I think.
(Interviewee A4)

The perceived benefit of employing the word 'infrastructure' as a communicative device was repeatedly cited by those advocating a GI planning approach. Indeed, almost all those interviewed deem it as bequeathing discursive weight to green space issues in policy formulation by virtue of the word's association with other, more conventional interpretations of infrastructure. However, the referential ambiguity of the term 'GI' enables it to signify more than just the importance of ecological issues in green space planning. Rather, it can be employed as a linguistic mechanism to increase the weight of consideration given to numerous issues associated with green spaces. As noted by one planner,

I think planners recognise that it's a brand, it's a concept which pulls together things that I suppose maybe planners have struggled in getting buy-in for, at an individual topic by topic level. Pedestrian networks, you know, really dull, Green Infrastructure, sounds much more interesting...I think it may well be a mechanism by which to advance topics which traditionally individually might be quite difficult to do. (Interviewee C10)

This identification of GI as 'a brand' that addresses the problem of 'buy-in' for a variety of planning policy issues, suggests a degree of 'reflective practice' (Schön, 1991; Schön and Argyris, 1974) wherein new modes of representation are seen as necessary to effect change by both attracting attention to issues and legitimating perspectives regarding them (Gottweis, 2012; Hannigan, 2007; Laws and Rein,

2003). In particular, it is the perceived ability of the term 'GI' to cogently communicate the various advocated benefits associated with green space planning that has enabled the emergence and traction of a distinct GI narrative centred on the 'necessity' of such areas.

6.4 A 'Narrative of Necessity'

Those who advocate conceiving of green spaces in terms of GI stress the utility of the word 'infrastructure' in orientating audiences towards the vital services provided by such areas. Therefore, employing the word 'infrastructure' is seen as a means by which to present discussions on green space planning as a 'narrative of necessity'. It is in this sense that the assertion is made that,

...infrastructure is usually something you have to have and that's what I think is good about the term, is it sounds like something you need, you know, we need green infrastructure in this country sounds much better than saying we need green ways or we need biodiversity network [sic]...it sounds more essential...I mean it is essential but it's a term that sounds a bit more sort of business like and a bit more, you know, it's like your water infrastructure... (Interviewee C3)

This ascription of necessity to green spaces by virtue of labelling them 'infrastructure' is viewed by those advocating GI as achieved by reconceptualising what was formerly perceived as 'the left over space' (Interviewee E4), as areas possessing essential society servicing functions. Thus, green spaces are reconceived as 'environmental resources' (Interviewee A2), which are seen to derive their value from the useful services or products they yield (Rees, 1990). Such a view was expressed by many of those interviewed, with one local planning authority official suggesting,

...we might describe schools and hospitals as social infrastructure and we have then kind of built, hard infrastructure like telecom systems or roads or water or sewers or whatever, so this green land then, you know, with this idea that it's not just sitting there doing nothing, is then another type of infrastructure. (Interviewee B20)

This new narrative of necessity, coupled with the familiar terminology of planning practice from which it arises, is thereby believed to lend green space issues greater weight of consideration within discussions on appropriate landuse planning. Additionally, it is judged to facilitate the diffusion of this reconceptualisation both within and outside the institutions of planning governance. Such an opinion is reflected in the observation that,

...infrastructure is generally something that is required for an area. So by using the term green infrastructure it elevates it to be something that is required for an area. So it probably, I think it has taken off and I think it's, it's being more and more widely understood, within, certainly within planning and probably local government circles, and probably I think also in the community as well. (Interviewee B17)

6.5 Conclusion

This chapter argues that the initial impetus for introducing the term 'GI' into an Irish planning policy context stems from a desire to address perceived issues of ecosystem degradation resulting from habitat fragmentation. Also discussed is the widely held opinion regarding the difficulty in achieving this objective given the perceived low profile in planning policy formulation of ecological issues specifically, and green space issues more generally. Consequently, it is shown that those seeking to promote the consideration of ecological issues in planning policy formulation have sought to establish a means by which to elevate the degree of consideration assigned to green space associated issues in landuse governance.

By virtue of widespread familiarity with the word 'infrastructure', and the connotations of indispensability ascribed to it, this chapter reveals how those advocating the allocation of greater emphasis to green space planning have employed the word 'infrastructure'. Thus, 'GI' is employed as a linguistic device facilitating the reconceptualisation of green spaces from residual areas to locations providing crucial services to society. This has enabled exponents of GI to fashion a 'narrative of necessity' with regard to such areas. Therefore, to those advocating

this approach, employing the term 'GI' is viewed as a means to amass greater discursive weight for green space issues. Additionally, widespread familiarity of the word 'infrastructure' both within landuse governance institutions and as an element of common parlance is viewed as prompting the reconceptualisation of green spaces as areas of 'use' to society.

As such, employing the term 'GI' as a means by which to advance various green space associated issues reflects an appreciation that 'policy making is mostly a matter of persuasion' (Goodin et al., 2006, 5). Particularly, the opined 'discursive weight' garnered for green space issues by employing the GI 'brand' (Interviewee C10), suggests that discourses concerning GI emerged in Ireland so as to cultivate the impression of green space as something socially, economically, environmentally and politically important (Hajer, 2003) as opposed to 'your left over, the stuff you haven't zoned' (Interviewee E4). In this context, the view that GI supplies a problem remedying 'proactive term' (Interviewee B10) may be perceived as recognition that 'The struggle to define [a] situation, and thereby to determine the direction of public policy, is always both intellectual and political' (Schön, 1991, 348). Consequently, understanding the processes by which the meanings of GI are interpreted and advanced is central to an appreciation of how the GI policy approach emerged and evolved as a persuasive effort to address problematic policy ambiguity concerning green space associated planning issues. Therefore, the next chapter continues this interpretive analysis by focusing on the construal of GI's signification, significance and applicability. As such, it investigates how the 'meanings' of GI are constituted.

CHAPTER 7: NAMING ATTRIBUTES & EFFECTS

7.1 Introduction

This chapter builds on the discussion of Chapter 6 regarding the production of a 'narrative of necessity' concerning green space planning. Specifically, it examines and explains how the interpretation of what GI means engenders particular ontological and epistemological perspectives regarding the term's signification, significance and applicability. Thus, this chapter addresses the second main research question of this thesis, namely: *What does 'GI' mean and how is such meaning constituted?*

Focusing upon language as a 'carrier of meaning' (Yanow, 2000, 17) this chapter appraises how the naming process may be conceived as a practice of reality construction (Potter, 1996, 102). This is undertaken by deploying theoretical insights from the philosophy of language (Barthes, 1957 (2009); Beardsley, 1958 (1981); Black, 1962; Boyd, 1993; Richards, 1936 (1965)), linguistics (Lakoff and Johnson, 2003; Semino, 2008), hermeneutics (Burke, 1966; Gadamer, 2004; Ricoeur, 1975 (2002)) and epistemology (Berger and Luckmann, 1966; Schiappa, 2003).

Specifically analysed is how the attributes of the term 'GI' exert influence as to the way it may be interpreted. Subsequently considered is how such influence generates certain signifying effects which stimulate judgment as to GI's pertinence and benefit for landuse governance activities. Accordingly, the role played by such meanings in shaping perspectives of green space planning is investigated.

This chapter thereby provides the foundation for an in-depth interpretive analysis of the evolution and institutionalisation of the GI planning approach in Ireland. As such, it facilitates answering the remaining research questions in succeeding chapters.

7.2 Entitlement

A 'correspondence theory' (Lincoln and Guba, 1985) of truth takes 'scientific concepts to directly correspond to empirical referents of reality' (Fischer, 2003, 103). Here, 'Science is ideally a linguistic system in which true propositions are in one-to-one relation to facts' (Hesse, 1980, vii). However, this epistemological convention has been criticised for negating the 'constitutive' aspects of language, as it depicts 'language as a crucial instrument of knowledge, a very important representational tool, but nothing more' (Medina, 2005, 41). In contrast, a 'coherence theory' of knowledge emphasises the finite and temporally bounded attributes of our comprehension of reality (Fischer, 2003, 103). Here, 'whether a belief is justified depends entirely on how well it fits or coheres with one's other beliefs, of its belonging to a coherent web of mutually supporting beliefs' (Lemos, 2007, 66). Such a perspective foregrounds a contextualised and linguistically rooted comprehension of reality. Indeed, as early as the mid-twentieth century Peter Winch felt confident to proclaim, 'Our idea of what belongs to the realm of reality is given for us in the language that we use' (Winch, 1958, 15). This argument was subsequently advanced by Kenneth Burke when he suggested that the persuasively connotative functions of language usage may be considered as a process of 'entitlement'. Here Burke forwards,

...a somewhat paradoxical proposition that experimentally reverses the commonsense view of the relation between words and things. The commonsense view favours the idea that 'words are the signs of things.' That is, various things in our way of living, are thought to be singled out by words which stand for them; and in this sense the words are said to be the "signs" of those corresponding things. But if only as a tour de force, we here ask what might be discovered if we tried inverting such a view, and upholding instead the proposition that 'things are the signs of words.' (Burke, 1966, 360)

Burke continues his essay by laying emphasis on the selective and abstractive functions of naming by drawing attention to how the process of labelling simultaneously abbreviates the complex while specifying the ontological status of something as, for example, an object, event, substance or vague feeling (Schiappa,

2003). A rhetorical effect of such 'entitlement' is that it creates the impression that what is entitled has always existed independent of its entitlement, and in a sense, was waiting to be discovered as the logical conclusion of investigations (Schiappa, 2003, 115). As noted by Schiappa,

Naming and describing are acts of entitlement. Through such linguistic practices, we give our experiences meaning and make sense of reality. By entitling a given phenomenon, we locate that phenomenon in a set of beliefs about the world that includes beliefs about existence-status (what things are real or not) and essence-status (what qualities we may reliably predicate about the phenomenon). Because the range of possible entitlements is theoretically infinite, any given act of entitlement should be seen as a persuasive act that encourages language users to understand that-which-is-entitled in particular ways rather than others. (Schiappa, 2003, 116)

This 'persuasive act' of entitlement is thus pertinent to an interpretive analysis of how representations of reality facilitate the emergence and evolution of a new policy approach (see Chapter 1). Of specific relevance to the present investigation of the ascension of policy in the absence of dispute is Schiappa's (2003) reasoning that in most cases the act of entitling proceeds unchallenged. Indeed, Schiappa asserts that it is only in hindsight that the persuasive function of a particular naming may become evident. In this instance, those advocating a particular entitlement are linguistically forming and communicating an interpretation of reality by offering a description that strategically functions in defining or redefining something without necessarily acknowledging that a new perspective is being promoted. Hence, such descriptions,

...are not claims supported by reasons and intended to justify adherence by critical listeners. Instead they are simply proclaimed as if they were indisputable facts. (Zarefsky, 1998, 5)

In the circumstances of the current analysis, the term 'GI' may be understood as 'entitling' a form of reality, which as previously discussed in Chapters 5 and 6, facilitates a reconceptualisation of green space, that in turn is perceived to bequeath it a higher profile in planning policy formulation. As is the case with the

suggestion by Weaver (1985) that nouns in particular evoke pre-existence by suggesting a 'self-subsistent reality', this reality recognising designation function (entitlement) of the expression 'GI' was alluded to by several interviewees. For example, one consultant planner engaged in the production of GI documentation noted,

In the same way that the concept of sustainability and sustainable principles and practices existed before someone said sustainability, green infrastructure did as well. (Interviewee A2)

Here, GI is understood to be applied retrospectively as a noun that designates what has always existed. Thus, the term GI is seen as a label that denotes an existing activity of landuse governance rather than representing a new concept or 'something we have created' (Interviewee B24). As such, the naming of 'GI' is understood to reflect an existing reality in harmony with a 'correspondence theory' of knowledge. However, closer scrutiny of how GI is interpreted suggests a 'coherence theory' of knowledge whereby readings of its meaning(s) are significantly influenced by how the semantic characteristics of the expression require its deciphering against a 'web of mutually supporting beliefs' (Lemos, 2007, 66). It is the perceived affinity or 'coherence' of such interpretations with existing ontological and epistemological commitments that induces the persuasive effects regarding the representation and constitution of the reality addressed by GI. Appreciating this phenomenon thereby necessitates an investigation of the role played by 'naming attributes' in the meaning making process.

7.3 Naming Attributes

Fischer (2003) argues that conceptions of reality are context dependent and rooted in the particular perspective of the interpreter. As such, he contends that the 'facts' of policy rather than being objectively given are linguistically constructed and so may be more appropriately conceived as 'made'. In this sense, it is the construction of the reality through the manufacture of the facts to which policy is addressed that must interest the student of policy. Comprehending the construction of such policy facts through a linguistically 'entitled' reality requires

careful consideration of the communicative requirements of the entitlement process.

With regard to the term 'GI', a number of those interviewed felt that although clearly denoting something that currently exists, and connoting an idea of something necessary, it does not immediately refer to an obviously defined entity. Instead, interviewees suggested that what the term signifies may initially seem ambiguous to the interpreter. This attribute of *ambiguous signification* was summarised by one QUANGO official who concluded,

There's different slants on it...you could look at green infrastructure...things like wind veins and wind farms and I suppose facilities that would relate to energy, would relate to biodiversity, would relate to heritage, culture etc, etc, there's a variety of probably spins you could put on it. So that's why I suppose...it's a complex term and it can be, it's a bit ambiguous.
(Interviewee C4)

In the case of GI, this attribute of *ambiguous signification* means that reaching apparent clarity of interpretation necessitates reasoning what the expression represents by exploring its connotations. This interpretive exercise was explained by Roland Barthes (1957 (2009)) in terms of levels of meaning³⁰ whereby that indicated by the sign (e.g. 'infrastructure'), itself becomes the signifier for something else by way of association (e.g. something necessary). Although such *associative interpretation* 'works on the subjective level' (Fiske, 1990, 87), Chandler notes that,

Intersubjective responses are shared to some degree by members of a culture; with any individual example only a limited range of connotations would make any sense. Connotations are not purely personal meanings – they are determined by the codes to which the interpreter has access. (Chandler, 2002, 139)

³⁰ In discussing the signification characteristics embodied in particular narrative forms (myths), Barthes refers to a 'second order semiological system' of connotation, (Barthes, 1957 (2009), 37-38).

Fiske outlines how such intersubjective responses to interpretation mean that ‘it is often easy to read connotative values as denotative facts’ (1990, 87). It was this feature of associative interpretation which led Barthes (1974 (trans. 1974) (1990)) to conclude that connotation may induce the illusion of denotation. In this context, the transition from connotation to apparent denotation is conceived as a process of ‘naturalisation’. Here, the powerful impression of literal denotation masks the connotative readings intrinsic to the sign’s comprehension (Chandler, 2002). Such construal of meaning is facilitated by the ‘contextual determinacy’ of interpretation (Gadamer, 2004; Medina, 2007; Stern, 2008; Wittgenstein, 1953), wherein words uttered in a particular context do not elicit a range of connotations. Rather, such words call forth only the ‘contextual connotations’ of the words used (Beardsley, 1958 (1981), 125).

In the case of GI, the intersubjective connotative reading of green ‘infrastructure’ as something that ‘isn’t just a potential discretionary or stylistic approach’ (Interviewee A7), but rather, as ‘something you have to have’ (Interviewee C3), prompts a sense of necessity in the associative interpretation of an otherwise ambiguous term. Indeed, the potency of such connotations related to the word ‘infrastructure’, and the common familiarity with such connotations, elicits a sense of literal denotation of the expression ‘GI’ that partially conceals the processes of interpretation required by its entitlement. This deduction of meaning from an ambiguous expression via such ‘associative interpretation’ was alluded to in several interviews and lucidly conveyed in the opinion,

I think it's a very practical word and it conveys the idea of the services I think very well because we are able to make that direct link between like our waste water systems and all this as being part of our infrastructure. Even things like our, you know, our hospitals, our schools, all those things, that these are things that we need. We can't live without them. We can't live the life we currently live without these things and they don't just occur by accident, we have to plan them. We have to know what our populations are going to be, we have to know who's going to be living where...you have to organise them, you have to plan for

them. So I think the infrastructure side of it helps to convey that and it helps in the explaining of the term. (Interviewee B1)

This opinion that the word ‘infrastructure’ helps explain the meaning of the term GI presumes the likelihood of shared interpretations of GI’s signification. Such a supposition blurs the boundaries between connotation and denotation. In doing so it echoes concepts theorised by Berger and Luckmann on the intersubjective projection of interpretations in the generation of an objective reality. Here, ‘the fundamental legitimating ‘explanations’ are...built into vocabulary’ (Berger and Luckmann, 1966, 112). However, this social construction of reality (entitlement) is not neutral. Indeed, the interpretive requirements of GI entails mediating meaning through context contingent linguistic conventions (Lemke, 1998). In this sense, the connotations that ‘helps to convey’ the meaning of GI may carry with them associations beyond those of ‘necessity’. This is consequent on comprehending green spaces through the prism of more familiar ‘infrastructure’ wherein planning activities are conducted against a backdrop of particular ontological and epistemological presuppositions regarding reality. In other words, naming has effects.

7.4 Naming Effects

7.4.1 The Role of Metaphor

Metonymy

The word ‘green’ as used in the expression ‘GI’ is identifiable as a specific type of metaphor termed ‘metonymy’³¹. As a non-literal expression, metonymy operates via ‘the evocation of the whole by connection’ (Chandler, 2007, 130). While normal metaphors are literally impossible, ‘the grounding of metonymic concepts is, in general, more obvious than is the case with metaphoric concepts’ (Lakoff and Johnson, 2003, 39), since there is ‘some observable, often physical, connection between metonymy and its meaning, whereas metaphors rely on comparisons of

³¹ As there is some debate regarding the subdivision of ‘metonymy’ into a dyad of ‘metonymy’ and ‘synecdoche’, the term ‘metonymy’ will be employed here as encompassing both terms. Although Chandler defines synecdoche as, ‘a figure of speech involving substitution of part for whole, genus for species or vice versa’ (Chandler, 2007, 262), he notes, ‘Even if synecdoche is given a separate status, general usage would suggest that metonymy would remain an umbrella term for indexical links as well as having a narrower meaning of its own.’ (Chandler, 2007, 132-134)

sorts' (Knowles and Moon, 2006, 9). This difference can lead metonymy to 'seem more natural than metaphors' (Chandler, 2007, 132). Thus, metonymic reasoning insinuates the 'grounding' (Lakoff and Johnson, 2003, 39) of a concept by way of its connection to experience, unlike the 'imaginative leap' (Chandler, 2007, 132) required by normal metaphor. As such, metonymic reasoning may adhere to Barthes' hypothesis on the 'naturalisation' of connotation by enabling the referenced term to appear denotative despite its capacity to accommodate multiple connoted meanings. In the case of the term 'GI', the word 'green' with its popular use as a prefix and suffix for political, economic and social activities perceived as promoting environmental sensitivity (Carter, 2007; Hayward, 1998; Norton, 2003; O'Neill, 2008), not only metonymically connotes activities that specifically address environmental protection, but also the spaces normally labelled 'green'. The former interpretation is illustrated by assertions such as,

I suppose green connotes [sic] living environment, maybe clean to people, maybe sustainability, maybe low energy or those kind of connotations come with green. (Interviewee B5)

Nevertheless, in the context of GI, it was as a reference to green spaces that most of those interviewed interpreted 'green' as signifying. However, as noted by many interviewees, the scope of spaces represented by the use of 'green' in the context of the expression 'GI' is abundant. This was coherently expressed by one planning authority officer, who suggested,

...the word green, it can encompass anything to do with the natural environment...So when you're talking about green you could be talking about golf courses, you could be talking about park lands, you could be talking about the open countryside, you know. It gives you broad scope I suppose to examine the area that you want to. (Interviewee B2)

Thus, whereas most interviewees consider 'green' as signifying a type of 'space', the metonymic qualities of the word act as 'a primary source of polysemy' (Gentner and Bowdle, 2008, 119), wherein the criteria for topographic relevance are unspecified. Accordingly, the forms of space signified by the word 'green' are not defined, but rather are consequent on subjective interpretation. As a result,

latitude for interpretation of the word 'green' provides scope for the application of GI to varied spatial typologies within landuse planning.

External to the expression 'GI', the word 'infrastructure' is a noun seen to designate,

...the building blocks for planning and for designing towns and framing investment and so you have transport infrastructure, water services infrastructure... (Interviewee B16)

Although what the word 'infrastructure' signifies is not circumscribed, there exists broad consensus among those interviewed that it connotes something that directly facilitates society's economic and physical maintenance and growth. Thus, assembling the words 'green' and 'infrastructure',

...bends the understanding a little bit, but I suppose that's where you get the green, the two, the green and the infrastructure coming together. That sort of grabs people alright and you know, it's possible to, to build it into, to the context of sort of grey infrastructure, IT infrastructure and so on. All of which are very sort of concrete, sort of visible things on the ground. (Interviewee A4)

As such, the conjunction of these words generates an interpretive 'bridge that allows passage from one world to another' (Shiff, 1978, 106) in which 'the reference of the metaphorical statement [has] the power to 'redescribe' reality' (Ricoeur, 1975 (2002), 5). Understanding how this metaphor fosters a reconceptualisation of green space necessitates an appreciation of the way the two words of 'green' and 'infrastructure' are asymmetrically positioned relative to each other in terms of how they perform their meaning endowing functions. To achieve this, a consideration of the mechanics of interpretation is required.

Organising Interpretation

Ivor Richards (1936 (1965)) proposed the comprehension of metaphor as the unity of an underlying idea with the means employed in its conveyance. The former he terms the 'tenor', while the latter he refers to as the 'vehicle'. As previously

discussed in Chapter 6 (see section 6.3), the idea which the advocates of GI seek to convey is the importance of green spaces in sustaining and facilitating society-centred development while concurrently enabling environmental conservation. The vehicle used to communicate this tenor (idea) is the expression 'GI'. It is in this sense that several interviewees considered the benefit of utilising the term GI as,

It puts a name, a label on something, a concept that we might be trying to achieve...using the term green infrastructure might actually put some sort of term on it that people who aren't necessarily of that natural way of thinking could actually start to imagine it or visualise it and see possible benefits and services and values to that. (Interviewee C7)

However, as stressed by Paul Ricoeur, 'The metaphor is not the vehicle alone but the whole made of the two halves' (Ricoeur, 1975 (2002), 93). In this context he explicates how,

The simultaneous presence of the tenor and vehicle and their interaction engender the metaphor; consequently, the tenor does not remain unaltered, as if the vehicle were nothing but wrapping and decoration. (Ricoeur, 1975 (2002), 93)

As a form of complex metaphorical entitlement, it follows that use of the term 'GI' (vehicle) to convey the importance of green space (tenor) not only achieves the manifest objective of the communicative act, but also alters perceptions on how the significance of green space is conceived. Black (1962) suggests that this alteration transpires by the work of metaphor in 'organising' our interpretation of what is being conveyed (tenor) through means of emphasis and suppression. This 'interaction view' of metaphor (Hausman, 2006, 229) therefore describes how a metaphorical word or expression 'gains new meaning' (Lyon, 2000, 138). Ricoeur concisely explains such a phenomenon by noting that this is achieved via metaphor 'Organising a principal subject by applying a subsidiary subject to it' (Ricoeur, 1975 (2002), 101). With regards to GI, the principal subject 'organised' is the word 'green', while the subsidiary subject engaged in organising is the word

'infrastructure'³². The effect of this organising of interpretation was coherently outlined by one planner who commented that,

Infrastructure is like an underlying framework for a particular system or feature of a system. So basically what you're looking at is the idea of green in terms of, well green areas, green spaces or whatever you want to encompass in the term green and then putting that in a context so you actually have a framework for developing or understanding a methodology or an approach to developing the idea of, of how you use these spaces or areas and what you use them for. So when you put the two of them together you know, you actually do get quite a useful phrase in terms of creating infrastructure... (Interviewee B2)

Here a 'system of associated implications' (Black, 1962, 39-40) is transferred from the familiar understandings of 'infrastructure' onto interpretations of 'green' as a spatial referent. Hence, an 'emergent meaning' (Beardsley, 1958 (1981), 131) of 'green spaces' is prompted wherein such areas are seen to serve a development-linked purpose that should be planned in accordance with the methods normally associated with conventionally conceived infrastructure. Thus, forging the metaphor 'GI' enables the configuration of specific ontological, epistemological and functional interpretations as to the nature of green spaces ('green'). In this sense, 'GI' becomes a *conceptual metaphor*.

In their seminal study of metaphor's capacity to direct thought, Lakoff and Johnson (2003) identify three categories of conceptual metaphors: ontological, structural and orientational. Whereas orientational metaphors (up, down, left, right etc) do not concern the current study, an awareness of ontological and structural metaphors is crucial to an understanding of GI's role in the reconceptualisation of green spaces. Ontological metaphors enable the conceptualisation of 'things, experiences and processes, however vague and abstract, as if they have definite physical properties' (Knowles and Moon, 2006, 40). Structural metaphors facilitate the structuring of one concept in terms of another. Conceptual metaphor theorists

³² It is acknowledged that scope exists for this process to work in reverse. However, the empirical research conducted for this thesis indicates that the organisation of the word 'green' by the word 'infrastructure' predominates with respect to GI in Ireland.

hypothesise that metaphors form systematic sets of correspondences, or 'mappings' across conceptual domains (Semino, 2008), where the 'source domain' is used to describe the concept area from which the metaphor is drawn, and the 'target domain' is used to identify the concept area to which the metaphor is applied (Knowles and Moon, 2006). Under this model, source domains supply frameworks for target domains, which subsequently determine the manner by which the entities of the target domains are conceived and discussed (Lakoff, 1993; Schön, 1993).

Applied to the term 'GI', such an understanding would suggest the organisation of the principal subject of green spaces ('green') by means of the subsidiary subject ('infrastructure'), via mapping associations from commonly conceived notions of infrastructure (source domain) onto comprehensions of green space ontology and an associated epistemology of green space planning (target domain). Thus, as conveyed by one local authority planner,

What the two words green infrastructure are, taking the second word first, I suppose that suggests that you look upon these areas as areas that are, they're part of the infrastructure so in the same way that roads are infrastructure, community services are infrastructure, then green infrastructure is the amenity and the green in recreational areas where our local communities can use to enjoy, and they contribute to the quality of life of a town or a city.
(Interviewee B17)

Mapping associations of conventionally conceived 'infrastructure' onto 'GI' involves a process of *patterning* in the concept transference from the source to target domains. Several forms of metaphorical patterning have been theorised (Goatly, 1997; Kövecses, 2002; Knowles and Moon, 2006; Lakoff and Johnson, 2003; Semino, 2008). Many of these entail overlap and co-occurrence, and as such, can be reduced to an interrelated co-operative pair. These are namely, *repetition* and *recurrence*.

‘Repetition’ involves little more than the reiteration of particular expressions in discourse. Nevertheless, repetition can be a powerful device in establishing an ‘evaluative accent’ (Maybin, 2001, 65) on that which is metaphorically conceived. This is illustrated for example by the repeated use of the noun ‘benefit’ and the phrase ‘quality of life’ with regards to GI. Both the documentary and interview data indicate frequent instances of this form of repetition, such as expressed by the assertion that,

It’s looking at natural places, like not just for wildlife conservation but for the benefits that it gives people in terms of you know, just a better feeling, quality of life and obviously health benefits and yeah, amenity and recreational benefits as well. (Interviewee B19)
[Emphasis added]

Separate to repetition, but often working in parallel, ‘recurrence’ entails the use of different expressions relating to the same broad source domain when expanding upon a discussion and/or conceptualisation of a target domain. Thus, recurrence is an important aspect of metaphorical analysis as it is indicative of how some meaning components of the source domain are highlighted in constituting the ontologies and epistemological attributes of the target domain. In the case of GI, the particular forms of recurrence are both influenced and facilitated by the pre-existence of several ‘networked’ approaches to planning predating the re-emergence of the GI discourse in 2008 (see Chapter 5, section 5.3). Thus, for example, by employing terms such as ‘network’, ‘link’ and ‘connectivity’, the GI discourse draws upon the lexicon of existing ‘networked’ green space planning discourses and amalgamates these with the diction of familiarly perceived ‘infrastructure’. Cases of such recurrence were regularly expressed in interviews, as illustrated in the opinion that,

It’s [GI] about the connectivity of green spaces and the whole range of green spaces as they are in terms of coastal strips, in terms of river corridors, in terms of networks of parks and spaces and even issues like green roofs and how you link those together. So I think it’s about connectivity and creating that connectivity you know what I mean. (Interviewee E4) [Emphasis added]

Additionally, words such as ‘management’, ‘engineering’ and ‘services’ expand this lexicon by transferring terms from the source domain of traditionally conceived infrastructure into the target domain of reconceptualised green space purposes and planning. This construes green space, and the issues associated with it, as primarily concerned with facilitating the provision of society-centred services. Instances of such recurrence are well represented in GI documentation, for example,

The Green Infrastructure concept involves the planning, management and engineering of green spaces and ecosystems in order to provide specific benefits to society. (UF and IEEM, 2010, 2)
[Emphasis added]

Therefore, by employing the ‘GI’ metaphor to communicate the advocated importance of green spaces, those promoting this discourse provoke the reconceptualisation of these areas in terms of conventionally conceived (networked) infrastructure. Consequently, this altered perception of green space modifies reasoning on its function, and as a corollary transforms opinions on the purposes and appropriateness of planning approaches to those issues associated with such areas.

7.4.2 Functional Expectations

The reconceptualisation of green spaces stimulated by the term ‘GI’ appears to establish expectations regarding the functions such areas are seen as appropriately delivering. Thus, in contrast to perceiving such locations as ‘the left over space...the stuff you haven’t zoned’ (Interviewee E4),

...from a planning perspective if you’re looking at the environment and you have a map which would usually just be a habitat map, instead of just saying what it is, it’s also what it does. So it’s not just, so it’s not just the woodland, a river corridor, it’s about carbon sequestration, it provides fuel, it provides flood amelioration, it provides water, all of these things... (Interviewee C8)

In this sense, both the expression 'GI' and the advocacy discourse in which it is employed (see Chapter 6), prompts a principal concern with green space uses to society, while concurrently reducing the attention accorded to the potential significance of such areas for functions other than those serving human needs. Thus, while some concern is still evident for non-human interests, the perceived value of green spaces becomes primarily anthropocentric and instrumental. This orientation is frequently articulated by both Irish non-statutory planning publications advocating a GI planning approach (Comhar, 2010b; FI, 2010; HC, 2010; UF and IEEM, 2010), and those which statutorily promote GI by way of planning policy provisions (DCC, 2010b; DLRCC, 2011; SDCC, 2010). Illustrating this perspective is the Kildare County Development Plan 2011-2017 which declares,

Green infrastructure refers to the network of linked high quality green spaces and other environmental features within an urban setting. This strategically planned and delivered network should be designed and managed as a multifunctional resource capable of delivering a wide range of environmental and quality of life benefits for local communities. This includes climate change adaptation, waste and water management, food production, recreation and health benefits, biodiversity enhancement linkages and economic benefits. In developing green infrastructure, opportunities should be taken to develop and enhance networks for cycling, walking and other non-motorised transport. Green infrastructure includes parks, open spaces, playing fields, woodlands, allotments and private gardens. (KCC, 2011, Chapter 14, 19)

Here, the metaphorical mapping of concepts from the source domain of 'infrastructure' onto the 'target' domain of a broadly inclusive interpretation of 'green spaces' prompts the perception of such areas as functioning in 'delivering...benefits for local communities'. In a process of 'recurrence', planning for green spaces is equated with planning for conventionally conceived infrastructure wherein such areas are 'designed and managed as a multifunctional resource'. Thus, ontological, epistemological and functional interpretations of such green spaces are orientated with regard to benefiting the maintenance of the built environment and facilitating economic growth. This focus on selective

anthropocentric utility thereby eclipses an ecocentric perspective on the conservation of such areas which provided the initial impetus for introducing the term GI (see Chapter 6, section 6.3).

7.5 Discussion

7.5.1 Connotative Reasoning

The widespread familiarity of the word ‘infrastructure’ and its normative inferences engenders a construal of GI as that which ‘should be viewed as critical infrastructure for Ireland in the same way as our transport and energy networks are as vital to sustainable development’ (Comhar, 2009, 39). Accordingly, those advocating GI envisage it as a ‘strategically planned and delivered network of high quality green spaces and other environmental features...designed and managed as a multifunctional resource’ (SDCC, 2010, 257). In this context, the activity of GI planning is perceived through the prism of conventionally conceived infrastructural planning whereby ‘The Green Infrastructure concept involves the planning, management and engineering of green spaces and ecosystems in order to provide specific benefits to society’ (UF and IEEM, 2010, 2).

Resultant from such connotative reasoning is the presumption that the ‘Green Infrastructure approach to planning is grounded in sound science, spatial landuse planning theory and practice’ (Comhar, 2010, 59). Consequently, GI planning is seen to entail the deployment of ‘the old processes of survey, analysis, plan’ (Interviewee B17) as the methodologies normally associated with the assessment and design of conventional infrastructure. Central to this logic is the role played by mapping in giving denotative potency to the connotatively reasoned act of entitlement. This helps to instigate what Barthes (1974 (trans. 1974) (1990)) labels *naturalisation* (see section 7.4.1 above) in the perception of GI as a concept that ‘kind of ties back into common sense in a way’ (Interviewee B13), so that when introduced ‘it seemed to make sense to planners and landscape architects and spatially minded people’ (Interviewee B20). This led many of those interviewed to remark that GI ‘just makes sense’ (Interviewee B16), and as outlined by one consultant, to conclude,

When I first came across the term...it was far from something alien, it was in fact something very familiar. It was really very, almost totally familiar to me so I took great heart from the, from learning that this was a, more than just a term but actually it represented a school of thought (Interviewee A7).

Such perceptions of familiarity reflect the assertion of Berger and Luckmann that,

What is real 'outside' corresponds to what is real 'within'. Objective reality can readily be 'translated' into subjective reality, and vice versa. Language of course, is the principal vehicle of this ongoing translating process in both directions. (Berger and Luckmann 1966, 153)

In this sense, the *naturalisation* of GI through perceptions of it as 'something very familiar' and of 'common sense' is effected through agent projection of assumptions regarding what constitutes 'proper planning process' (Interviewee A10), and as a corollary, proper professional practice. As discussed in Chapter 3 (see section 3.5), what is perceived to constitute legitimate, and thereby 'proper planning process', is delineated by the modernist rationalities of landuse governance (Fischer, 2003; Flyvbjerg, 1998; Rydin, 2003). Here, legitimate practitioner activity (Freidson, 1986) 'is highly profiled in the sense of representing fully the objective reality within which it is located' (Berger and Luckman, 1966, 184). Thus, 'one rhetorical effect of entitling a new 'thing' is that it creates the impression that the thing [GI] has been 'out there' all along' (Schiappa, 2003, 115). It is in this sense that the particular forms of *connotative reasoning* involved in the entitlement of 'GI' prompt assumptions of it as familiar planning practice that 'just makes sense' (Interviewee B16). Specifically, such *connotative reasoning* induces perceptions of GI as possessing characteristics akin to that of conventionally conceived 'infrastructure'. Consequently, GI planning is constituted as a rationally justified policy approach that emphasises the anthropocentric utility of green spaces, and by association, nature.

7.5.2 Apparent Simplicity

Intrinsically related to the concept of naturalisation resulting from connotative reasoning, are impressions of *apparent simplicity* in understanding what GI means. As noted by one consultant,

I think most people that hear about it, it sort of clicks a light on in their head and they go ah yeah, it's kind of self evident, that seems like a good idea...So I'm guessing that's why it's beginning to take a foothold. People are going, ah yeah, that seems to make sense, let's try and do that. (Interviewee A2)

Likewise, the logic employed in GI planning is perceived to be easily comprehensible given that it is viewed to equate with the methods currently employed in the planning of traditionally conceived 'infrastructure'. Thus, as noted by one planning authority officer,

I think this is just good planning practice, so it's like map what you have, so find out what you have...then think about what you need into the future and then see how you go about managing what you have or providing new stuff to fulfil that need. So that's kind of the ideal scenario is that you would see what you have, look at its functions and benefits it provides, see what functions and benefits you need into the future and then either upgrade what you have or manage better what you have and then provide new stuff. (Interviewee B20)

Therefore, the evocations inherent to connotative reasoning shape epistemological perspectives regarding the *apparent simplicity* of the logic adopted in response to the entitled reality. This phenomenon was discussed by Boyd (1993) regarding what he termed the 'exegetical' and 'theory constitutive' potentials of metaphor. Exegetical metaphors are important in the pedagogical conveyance and dissemination of an idea. Their essential characteristic is that they are dispensable, since the theorists employing them have non-metaphorical means of expressing and referring to the same phenomenon (Semino, 2006). In contrast, 'theory constitutive' metaphors are defined by their function in 'the development and articulation of theories in relatively mature sciences' (Boyd, 1993, 482). Thus, such metaphors provide a vocabulary in which to perceive new concepts within the

existing discursive field of established disciplines (Haack, 1987-1988; Hausman, 2006). Consequently, Boyd's distinction is best viewed not as capturing two dissimilar categories of metaphor, but rather two different functions that metaphors can perform when employed for specific functions at particular points in the historical development of an idea (Semino, 2006, 134). Accordingly, although it is possible for a metaphor to be used exclusively for either exegetical or theory-constitutive purposes, Semino notes,

...it is often the case that the 'same' metaphor may have a primarily theory-constitutive function in one context and a primarily educational function in another, or may perform both at the same time. (Semino, 2006, 134)

Regarding the connotative reasoning necessitated in the interpretation of 'GI', the interplay between 'theory constitutive' and 'exegetical' influences in the entitlement of the concept is represented by views on the *apparent simplicity* of its understanding comparable to that of conventionally conceived 'infrastructure'. This forms a reciprocal arrangement wherein the *apparent simplicity* of the concept is facilitated by its connotatively reasoned constitution, which in turn symbiotically assists its explication. In this way, the boundaries between connotation and denotation become blurred as the GI metaphor concurrently serves as both a model 'of' a situation and a model 'for' it (Yanow, 2000, 43). As concluded by one planner,

There's no difficulty in understanding the concept when you explain to people; well it's the same as the way we plan for development or any kind of development, it's just being a bit more proactive as to how we develop our green areas and how we care for natural pieces of infrastructure, green infrastructure that are there, and how we create new ones as well. (Interviewee C5)

Such impressions of *apparent simplicity* serve in supplying apparent clarity of meaning and direction for problematic policy ambiguity. This is resultant from how 'the use of theory-constitutive metaphors represents a nondefinitional reference-fixing strategy' (Boyd, 1993, 496). In doing so, the *apparent simplicity* engendered by the GI metaphor presents a heuristic tool (Black, 1962, 84) that invites the

interpreter ‘to explore similarities and analogies between features’ (Boyd, 1993, 489) while simultaneously not delineating that which is discussed. Consequently, latitude for subjective interpretation is facilitated through the ‘emergent meaning’ (Beardsley, 1958 (1981), 131) of GI wherein an ‘inductive open-endedness’ is permitted (Boyd, 1993, 488). Thus, the impression that ‘There’s no difficulty in understanding the concept when you explain [it] to people’ is encouraged by the capacity of interpreters to maintain unchallenged perceptions of accuracy regarding their (potentially divergent) ideas concerning what GI may signify. Consequently, the processes of connotative reasoning that evokes perceptions of *apparent simplicity* in GI’s signification as a form of ‘infrastructure’ may paradoxically function as a ‘semantic mechanism for creating and extending polysemy’ (Medina, 2005, 127), wherein the format and beneficiary of such ‘infrastructure’ is left unspecified. In this way, the *apparent simplicity* in comprehending GI exists in a mutually dependant relationship with the term’s *flexible signification*.

7.5.3 Flexible Signification

The attribute of ambiguous signification inherent to the *entitlement* of GI also provokes the phenomenon of *flexible signification* in the term’s application. Specifically, consequent on the requirement to interpret the expression via connotations with commonly conceived ‘infrastructure’, there exists a degree of polysemantic latitude in the meanings attributed to ‘GI’. Thus, although GI may induce perceptions of *naturalisation* in denoting an idea conceptually tethered to traditionally understood ‘infrastructure’, the interpretive requirements of connotative reasoning necessitate the investment of subjective appreciations of what such commonly conceived infrastructure entails. In this sense, GI can simultaneously encompass a multiplicity of signified ideas and objects normally distinguished as distinct entities. As noted by Schaffer,

The various uses or meanings of a word do not interlock precisely like pieces of a jigsaw. Consequently, to say that we can identify shared meanings implicit in a word is not to claim that those meaning can be arranged tidily. A word can be used in a variety of

different, and sometimes contradictory, ways (even by one person, in one conversation). (Schaffer, 2006, 153)

This potential to concurrently encompass a variety of infrastructure-associated ideas and objects was frequently expressed in interviews, leading one planner to conclude that 'it's a bit like the big bang you know, the longer it goes on the more diverse it gets in its meaning and application' (Interviewee C5). Similarly, another planner involved in the production of GI planning guidance observed that,

It [GI] includes all these kind of things, biodiversity management and enhancement, water management, drainage, flood attenuation, filtration, pollution control, recreation, tourism, visual amenities, sense of place, sustainable mobility, food, timber, other primary products, regulation of microclimates. (Interviewee B12)

Likewise, a different interviewee surmised,

I probably would take the view that green infrastructure is nearly everywhere in a way. As I say you can take particular things be it a disused railway track we are now converting to a walkway or whatever or a cycleway or a river bank, canal tow path, harbour, a beach, lake. Even the motorway, I kind of tend to be all encompassing because infrastructure is everywhere. (Interviewee C9)

Such flexibility of signification requires the imposition of 'judgement' (Ricoeur, 1975 (2002), 66) in the interpretation of GI's connotative potential. Thus, this mediation of meaning by connotative reasoning cannot be objective, as it obliges the interpreter to subjectively invest that which is being interpreted with a signification it does not already possess by way of existing formal denotation. In this context, 'policy analysts are situated knowers thinking and writing from particular points of view' (Yanow, 1996, 27). This capacity for the term to be 'positioned' (Hajer, 2003) relative to the perspective of the interpreter led several of those interviewed to deduce 'GI',

...as a generic catch all. Sometimes it's trying to address water supply issues. Sometimes it's trying to address energy issues, sometimes transport issues, so it depends on the context, depends on the person. It depends on the function. (Interviewee E5)

Such *flexible signification* facilitates appropriation of GI's entitlement for the particular needs of the end user. As noted by one local authority planner,

I think the key thing for anybody to realise is there's no definition of green infrastructure and I think that's so important...it's whatever the hell you need in your area. (Interviewee B24)

Thus, the expression 'GI' defines not an entity or idea tightly delineated in possible application, but rather something loosely circumscribed by connotations with traditionally conceived infrastructure, whose quality of *flexible signification* enables latitude in its use. The purposes to which it is put are therefore as much dependent on the objectives of those using it as they are on the meanings it is seen to imply. Therefore, such *flexible signification* operates in a relationship of reciprocity with *connotative reasoning* and *apparent simplicity* as a triad of 'naming effects' prompted by the entitlement of GI and giving meaning to its expression. This relationship is illustrated in Figure 7.1 below.

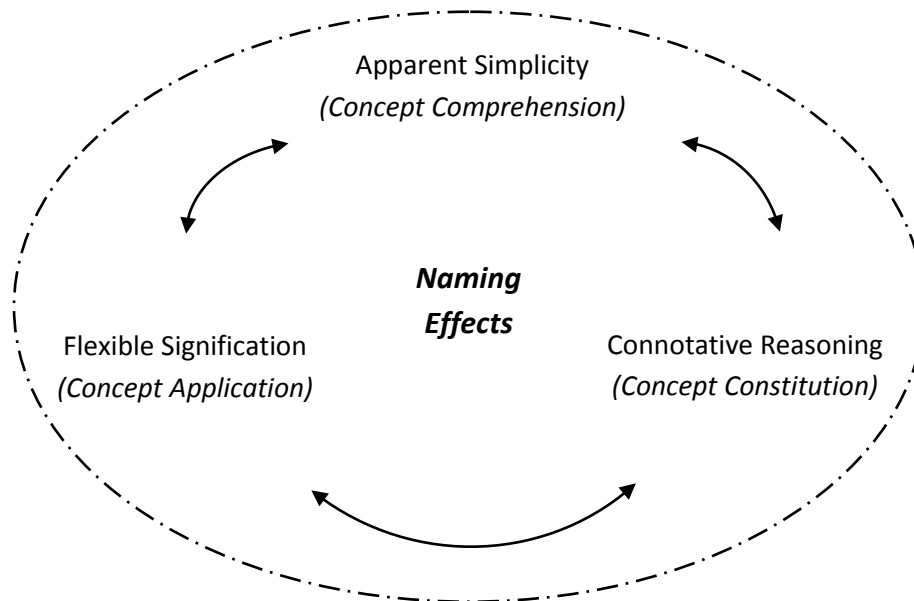


Figure 7.1
Diagrammatic representation of the relationships between
the 'naming effects' of GI's *entitlement*

7.6 Conclusion

This chapter builds upon the analysis of the previous chapter which examined the reasons why the term GI was introduced and how this was employed to produce a 'narrative of necessity'. The present chapter extends this investigation by studying how such a narrative was generated through interpretations of the term 'GI'. This is achieved by addressing the second main research question of the thesis, namely: *What does 'GI' mean and how is such meaning constituted?* In responding to this research question, an examination is undertaken of how the entitlement of GI stimulates particular ontological and epistemological assumptions. This interpretation is prompted by the ambiguous signification of the term and a requirement to metaphorically interpret its meaning by way of association with familiar ideas and objects. Such requirements prompt a number of 'naming effects' in the constitution of the concept, its explication, and its application. Rather than operating in isolation, these effects form a triad of mutually dependent and reinforcing processes that give meaning to the expression 'GI'.

Demonstrated is that these meaning making processes serve more than simply constituting 'GI' as a reflection of an objective reality. Rather, such interpretive processes have an 'ontological function' (Medina, 2005, 128) in which 'the reference of the metaphorical statement [has] the power to 'redescribe' reality' (Ricoeur, 1975 (2002), 5). Hence, the seemingly objective world related by GI is actually subjectively and intersubjectively constituted 'through' readings of GI's meaning (Berger and Luckmann, 1966; Gadamer, 2004). In this sense, the 'emergent meaning' (Beardsley, 1958 (1981), 131) prompted by GI's interpretation may be conceived as producing a new ontology of green spaces, and as a corollary, nature (Coates, 1998; Crampton and Elden, 2007; Eder, 1996; Simmons, 1993).

However, it is shown that the 'emerging ontology' (Hacking, 2002) of such spaces is not neutral. As noted by Yee (1996, 97), 'meanings quasi-causally affect certain actions not by directly or inevitably determining them but rather by rendering these actions plausible or implausible...respectable or disrespectable.' Thus, understandings of both the possibility and appropriateness of planning activities regarding green spaces, and by association 'nature', becomes established relative to how this world is conceived in the formulation of landuse policy. In terms of GI's ascension as a policy approach in Ireland, the emerging ontology of green space is manifested in the equation of such areas, and nature more generally, with conventionally conceived 'infrastructure'. As a result of this reconception, the objectives and activities of landuse governance are directed away from the view that the environment 'must be protected or conserved at all cost' (Interviewee A2). In its place emerges a belief that proper green space planning entails the design and delivery of environmental services to facilitate society's growth requirements. Consequently, the perceptions of 'use in this green stuff' (Interviewee A5) provoked by GI are for the most part, anthropocentric and concern instrumental value. Appreciating how such understandings achieve purchase among the Irish landuse planning fraternity necessitates an investigation of how interpretations of GI's meaning resonate with the rationalities of planning practice. Thus, the subsequent chapter examines the role of 'rationality resonance' in the emergence and evolution of the GI planning policy approach in Ireland.

CHAPTER 8: RATIONALITY RESONANCE

8.1 Introduction

This chapter seeks to answer thesis Research Question Two, namely; *What does 'GI' mean and how is such meaning constituted?* Specifically, this chapter extends the analysis presented in the previous chapter by investigating how the naming effects prompted by GI's *entitlement* facilitated its resonance with the rationalities prevalent in the practices of planning and allied disciplines. This is undertaken by critically examining the way such *rationality resonance* both influences, and is influenced by, assumptions in the arena of planning policy formulation. The supposed 'practice accord' of the GI approach with existing linguistic and procedural characteristics of Irish planning activities is first considered. Subsequently, an exploration of the perceived 'enunciative advantage' of GI is provided. Following this, an inquiry is undertaken on the promulgated 'functional advantage' of GI. The chapter concludes with a summary of this analysis and is supported by a presentation of same in diagrammatic format. By examining the perceived resonance of GI with the prevailing rationality of Irish planning practice, this chapter expands the foundation upon which subsequent chapters in this thesis investigate and clarify the role of meaning making in the emergence, evolution and institutionalisation of a GI planning approach in Ireland.

8.2 Practice Accord

The capacity of GI to resonate with the forms of rationality prevalent in planning practice appears rooted in its ability to discursively appeal to existing perspectives regarding the function of the planning profession and those allied to it. In addition, the expression's currency among such practitioners seems derived from its alignment with the epistemological assumptions manifested by common forms of disciplinary discussions, and the opinion that GI can be delivered via the conventional apparatus employed in policy formulation and direction. These practice-harmonising phenomena are respectively identified and discussed below as *good planning*, *language familiarity* and *existing planning vehicles*.

8.2.1 Good Planning

The connotative reasoning resultant from the interpretive requirements of GI's entitlement appears to engender the widespread opinion among those interviewed that 'the model for good green infrastructure is the model for good planning' (Interviewee A7). Indeed, many of those interviewed for this thesis expressed the opinion that GI, as a form of infrastructure planning, should be integrated into planning practice. In this context, several interviewees insinuated that a GI focused policy approach represented good planning practice. As commented by one local authority officer,

...is good planning not about, you know, figuring out what you have and documenting it, figuring out what you want and then figuring out a way to get from A to B, is that not good planning, is that evidence based planning, that's kind of what it's about, isn't it, good planning has always been about that I think. So I don't really think green infrastructure is this new radical idea, I think it's just good planning in many ways, you know. (Interviewee B20)

Here GI is equated with 'good planning' through an assumption that it constitutes 'evidenced based planning' in presenting a useful means to 'figuring out' both what needs to be planned and the methods by which this can be achieved. Consequently, GI is not perceived as a 'new radical idea' but rather what planning practice 'has always been about'. Such assumptions imply a 'technical-rational model' (Owens et al., 2004, 1945) of planning practice wherein landuse governance decisions are made upon the impartial appraisal of 'scientific' (Interviewee A2) information rather than being influenced by non-quantifiable abstractions such as values or emotions. By virtue of connotatively reasoned interpretations of GI as infrastructure, it is perceived to resonate with such a technical-rational model. Consequently, several other interviewees interpreted GI as harmonising with the objectives of planning practice. As noted by one senior planning official,

I think insofar as you know, amenities and the natural world, whatever it is, is a very important part of...what we are, what places are, their character...what they offer back to people which is fundamentally what planning is about. I think Green

Infrastructure...does encompass all of those elements and is a very, very important part of what planning is about...(Interviewee C10)

This opinion that GI is ‘fundamentally what planning is about’ is reciprocally reinforced by, and gives discursive weight to, the aspects of professional discussions concerning GI. A discernible characteristic of this disciplinary dialect is its harmonisation with the established lexicon of professional practice; its language familiarity.

8.2.2 Language Familiarity

As previously discussed in Chapter 5 (see section 5.3), the history of equating networked approaches to planning for biodiversity with infrastructure, and GI in particular, extends back to the 2002 EPA study on ecological networks. Although following the production of this EPA study, the term GI did not re-emerge until 2008, the evolving language of green space planning during the interim period was increasingly characterised by the ever more frequent recurrence of vocabulary centred on the concept of networks. An illustration of this trend was the ‘green network’ approach advocated in the Galway City Development Plan 2005-2011 adopted in January 2005. Building on a framework first presented in the previous Galway City Development Plan (1999-2005), this document proclaimed that such a ‘green network’ offers the means by which to combine and coordinate the protection of natural heritage areas and facilitate the provision of open space for recreational purposes. One of the primary methods promoted for the realisation of this network was the creation of greenways. This equation of the Council’s ‘green network’ with a ‘greenways approach’ that ‘form[s] connections between urban areas and the natural hinterland and link habitats’ (GCC, 2005, Section 4.3)[emphasis added], employed and merged terminology circulating in tangential discourses regarding the provision of transport facilities, recreational amenity and the conservation of biodiversity.

As with the case of Galway City Council, the Dublin City Council Development Plan 2005-2011 adopted in March 2005 similarly fused network-associated expressions and concepts from discourses on mobility and nature preservation when discussing the provision of open space. Here it was expected that such open space would,

...contribute to the development of green chains or networks, which allow for walking and cycling and facilitate biodiversity.
(DCC, 2005, 84) [Emphasis added]

This networked focused approach, and the language engendered by it, was echoed and extended in many subsequent documents issued by local, regional and national planning governance bodies and QUANGOs in the period prior to the emergence of a specific GI discourse in November 2008 (see Chapter 5, Section 5.3). The specific GI discourse that emerged in November 2008 during the Malahide Green Infrastructure Conference (see Chapter 5, Section 5.4), subsumed these networked focused discourses on biodiversity conservation, recreation provision and mobility planning, while concurrently equating green space with infrastructure in much the same manner as had been advocated six years previously by the EPA study on ecological networks (Tubridy and O Riain, 2002). In this sense, the GI discourse that materialised in 2008 combined the familiar language of networked green space planning with the linguistic and conceptual associations of traditionally perceived infrastructure. Since 2008, the emerging GI discourse has increasingly subsumed and amalgamated an array of formerly separate narratives ranging from those centred on anthropocentric utility to those with an ecocentric focus on biodiversity conservation. This is illustrated by the position of one local authority planner, who in representing views frequently encountered during interviewing, stated,

In my opinion it's the collective term that's used for connecting up areas of open space, maybe both informally and formally that are maybe home to various biodiversity forms and ecosystems but connecting up those spaces through maybe sustainable modes of transport like cycle routes and walkways so the green is probably more the areas of land, the woodlands, the biodiversity areas and then the infrastructure is the connections between those areas by say cycle routes and walking routes and preserving those

ecosystems and joining them maybe together as well. (Interviewee B15) [Emphasis added]

Representative of perceptions common among interviewees, GI is here inferred to constitute the 'collective term' describing both open space (green) and the connections (infrastructure) between them. Additionally, the provision of 'cycle routes and walking routes' are seen as commensurate with 'preserving...ecosystems and joining them together'. As such, the delivery of physical infrastructure for 'sustainable modes of transport' is conceived as a means by which to preserve ecosystems. Thus, the traditional partition of planning objectives directed at anthropocentric utility and ecocentric biodiversity conservation is removed. In its place is the fusing of these previously separated objectives so that the provision of facilitates to meet society's needs, such as those for 'sustainable modes of transport', is equated with 'preserving' ecosystems. The ease with which this process of reconceptualisation was advanced following the GI Conference of 2008 seems to have been facilitated by presumptions that 'infrastructure' inherently entails 'networks'. As noted by one planning authority interviewee,

...you've got the word infrastructure in there and again it's a word that planners are familiar with, like road infrastructure, green infrastructure, a network, all the other types of infrastructure, so it's a word that they're familiar with. (Interviewee B3)

This *language familiarity* was remarked on by many of those questioned, with one local authority official commenting,

The thing that attracted me about it was that it made sense, it was a language that seemed to me to make sense to the likes of engineers and planners. (Interviewee B20)

Therefore, the apparent simplicity in comprehending GI is enabled, assisted and manifested by language familiarity.

8.2.3 Existing Planning Vehicles

Coupled with the phenomenon of *connotative reasoning*, *language familiarity* influences the means proposed for the delivery of GI. Particularly, the linguistically induced sense of acquaintance with GI's epistemology and solution propositions suggests to practitioners that the *existing planning vehicles* frequently deployed in formulating and presenting policy direction are the most appropriate for GI planning. In this context, it is asserted,

To be effective, green infrastructure thinking and strategies need to be integrated into local area plans, city and county development plans, and regional planning guidelines so that the full benefits of this approach can be realised. (Clabby, 2009)

Consolidating this opinion is the connotatively reasoned perception of GI planning as 'scientific in its nature' (Interviewee A2). Thus, GI planning is seen to entail a rational process centred on the use of quantitative survey and mapping methods in the collation and analysis of data. This was conveyed by one NGO planner when stating,

It's a matter of using what you need to do, matching it with what your evidence is on the ground and kind of developing your methodology business. It's like evidence based planning. Then linking that through to your zoning of land, through your policies and your development plan, to actually develop a coherent strategy for it. (Interviewee E4)

In this sense, GI is viewed as 'evidence based planning' that links through development plan policies in a manner commensurate with an objective to develop a 'coherent strategy'. Consequently, it is conceived that GI planning activities facilitate a transition from data through to policies and zoning designations in the same format as that conceived to operate within the 'technical-rational model' (Owens et al., 2004, 1945) of landuse planning. This assumption that GI planning can and should be delivered via the existing vehicles of planning practice was conveyed by a local authority planner when addressing the issue of planning application assessment,

...development would have to adhere to the objectives of the plan where green infrastructure would filter right through the plan policies and objectives in terms of, you know, transport and natural heritage proposals and maps particularly, and the more information that's on a zoning map and the more layers that are visible and that you have to comply with, the easier it would be to enforce... (Interviewee B15)

This assumption that GI should be delivered through the existing vehicles of 'evidenced based planning' (Interviewee E4) in policy development and planning application assessment was prevalent in both interview and documentary data. Such existing planning vehicles, and the rationale on which they are based, reflects connotatively reasoned assumptions on GI's scientific foundation manifested and reinforced by familiarity with the language of 'design', 'networks' and 'services' frequently deployed in GI discourses. Furthermore, such presumptions of objectively underpinned logic resonate with convictions of planning as an 'evidence based' discipline grounded in the detached systematicity of expert practitioners. Thus, among planning and allied practitioners, the assumed scientific foundations of GI bequeaths to it a perceived knowledge legitimacy, and consequently enunciative advantage (Torgerson, 2005).

8.3 Enunciative Advantage

Consequent to perceptions of GI as something 'scientific' (Interviewee A2), and given convictions regarding planning as an 'evidence based' discipline, the ability to authoritatively pronounce on GI necessitates a capacity to discuss versions of the world perceived as objective, factual and impersonal. Therefore, the perceived veracity of GI knowledge claims requires the apparent effacing of apparent interest-motivation from the production and dissemination of information ascertained in analysing this independent reality. As outlined in Chapter 3 (see section 3.5.3), such a concern surrounding the appearance of neutrality in the structuring and communication of knowledge claims has been termed 'stake inoculation' (Potter, 1996). Documentary and interview data collected for this thesis suggests the centrality of cartography in this process. Research similarly indicates that those advocating GI endeavour to bolster the legitimacy of their proclamations by

comparison with what they identify as GI planning activities occurring in other countries. Also evident is the role played by quantification in facilitating the appearance of neutrality.

8.3.1 Inoculation by Mapping

As discussed above (see section 8.2.3), the connotative reasoning inherent to GI's entitlement evokes a scientific semblance that prioritises the perceived rational planning processes associated with conventionally conceived infrastructure. Resultant from such inferences is the pervasive assumption that a significant element of 'evidence based' GI planning rests in conducting analyses and presenting conclusions through the medium of cartography. As noted by Comhar, the Irish Sustainable Development Council,

The collection, mapping and analysis of data to arrive at a plan for development and management of natural areas, open space and related resources - is commonly recognised as the crux of Green Infrastructure planning. (Comhar, 2010, 63)

This foregrounding of cartography in GI discourses may be traced to what MacEachren (1995) distinguishes as connotations of 'veracity' and 'integrity'. These are specified as the implications of temporal and attributive precision commonly associated with impressions of accuracy in mapping, and the presumption of impartiality in the activities of scientifically schooled cartographers. As an activity intrinsically associated with planning's existing vehicles, both interview and documentary data indicate that it is such assumptions of cartographic fidelity with an objective reality that give weight to mapping as the means by which to furnish the 'evidence base' in GI policy formulation. As asserted by the Irish Heritage Council,

Green Infrastructure planning involves mapping existing Green Infrastructure resources, assessing future needs, and charting where improvements or enhancements can be made, and where new Green Infrastructure can be provided in the future. Strategies are evidence-based and generally use Geographical Information

Systems (GIS) to collate, map and analyse information. (HC, 2010, 24)

Here the use of Geographical Information Systems (GIS) 'to collate, map and analyse information' is referenced as a means by which to enable the mapping of GI 'resources' so as to 'assess future needs', chart where 'improvements or enhancements can be made' and 'where new Green Infrastructure can be provided'. As such, cartography is viewed as a means by which to 'control' (Pickles, 2004) the organisation and provision of GI, and thereby the configuration of future spaces (Harley, 2001; MacEachren, 1995; Monmonier, 1991). Thus, rather than a neutral communicator of information, the map as a central existing vehicle of GI planning policy formulation possesses its own affordances and constraints which 'selectively brings into being a world that is socially constructed' (Wood, 1992, 20).

The perceived scientific legitimacy embodied in mapping was alluded to in several interviews when referenced as the primary mechanism to accurately analyse quantitative data and present it in a means conducive to facilitating a rational process of policy formulation. As noted by one consultant planner involved in the production of GI documentation,

Well evidence in this case is obviously proper mapping, proper survey, proper mapping of the various elements which go into, into the resource, which is as we say, the natural biodiversity, the amenity, the cultural aspects, all of those things, that's very important as the evidence base, surveying it, mapping it and capturing it and then on that basis, then you proceed forward and make decisions on that. So it shouldn't be basically policy or ideas that come basically shooting from the hip, it needs to be chased back into proper, you know, proper planning process. (Interviewee A10)

Therefore, in its presentation as the scientific 'evidence base' for legitimate planning activities, 'the medium of communication is intimately connected with the message it communicates' (Yanow, 2000, 17). Here the grounding of GI planning in cartography has 'a dimension of symbolic realism' (Harley, 1992, 241) in which the perceived impartiality of scientific assessment is implied. As such, cartography

enables map authors to legitimately proclaim the ‘facts’ of a situation from an advantageous enunciative position via appeal to the seeming objectivity engendered by stake inoculation in a ‘will to truth’ (Foucault, 1976, 55) of a desired reality. Put simply, maps legitimate that which is enunciated.

8.3.2 Legitimate Enunciation via Cartographic Presentation

As discussed above (see section 8.2.2), the phenomenon of language familiarity brought into play by GI’s *entitlement* stimulates connotatively reasoned assumptions of GI planning as the mapping and provision of green spaces to facilitate the maintenance of infrastructure servicing the development requirements of society while simultaneously assisting the conservation of biodiversity. In this sense,

Green infrastructure provides a wide range of invaluable ecosystem services and human quality of life benefits including:

- *biodiversity management and enhancement*
- *water management including drainage and flood attenuation, filtration and pollution control*
- *recreation and tourism*
- *visual amenity and sense of place*
- *sustainable mobility*
- *food, timber and other primary production*
- *regulation of micro-climates (green lung) and, potentially, climate change adaptation* (UF and IEEM, 2010, 2)

By mapping areas to facilitate the planning and provision of this array of perceived GI functions, the scientific legitimacy afforded to cartographic activities engenders the apparent rational interpretation of anthropocentrically orientated green space development as concurrently facilitating environmental conservation. In this sense, maps are employed as powerful tools in the generation of desired landuse functions wherein they ‘effect actualization’ (Corner, 1999, 225) of the objective

facts constituting legitimate spatial realities. Consequent to this wide range of functions attributed to GI, those who advocate it as a planning approach frequently employ cartography as a tool to construct a reality of functional coexistence within spaces by encompassing multiple landuses beneath the rubric of GI. This is reflected in the work of the Comhar GI Consultant Team in formulating the Comhar document titled, 'Creating Green Infrastructure for Ireland: enhancing natural capital for human well being', published in August 2010.

As part of the document production process, Comhar and its GI Consultant Team organised a GI workshop, which was attended by an invited selection of identified stakeholders drawn from central state institutions, local and regional planning authorities, QUANGOs and NGOs (Comhar, 8th February 2010). At this event a number of GI maps were presented by the Comhar GI Consultant Team to the invited multi-disciplinary audience and feedback was requested. The function of these maps was to demonstrate the workings and benefits of a potential methodology for the collation of data, its cartographic expression, analysis and use for GI planning. Whereas the 'rational methodology' was favourably received by the audience, the content of the maps were questioned by a number of ecologists working for Dublin City Council. This was due to the signification on the GI maps as 'recreational & quality of life', lands³³ popularly used for recreational purposes but designated for nature conservation as both a Special Protection Area and a Special Area of Conservation. Whereas 'recreational & quality of life' appeared an appropriate categorisation for the Consultant Team (Interviewee A4), it was feared by Council ecologists that categorising these lands as 'recreational & quality of life' on these GI maps would sanction intensification of their use for recreation and thereby threaten their ecological integrity (Interviewee B5). This instance of rupture in the conceptual fixing of landuses by way of cartographic labels indicates the perceived power of maps, and map categories in particular, in constructing the meanings that are believed to embody the authority to shape reality. Resolving this issue in a manner that maintained the perceived integrity of the GI concept entailed

³³ Bull Island, Dublin City.

a phenomenon universally characteristic to Irish GI discourses, namely the dissolution of unifunctional landuse categories. Here the specification of landuse categories for single landuse purposes is revised to facilitate multiple landuses on the same site. This is effected through the inclusion of landuses within multiple landuse categories.

Thus, following this workshop, the maps produced and tabled for comment by the Comhar GI Consultant Team were reviewed, and where deemed necessary, they were updated. It was agreed that rather than presenting one map indicating the area as 'recreational & quality of life', numerous 'layers' graphically portraying the variety of perceived GI purposes would have to be provided as separate maps for the same area so as to avoid the potential misinterpretation of GI as either unifunctional or of prioritising any one landuse above others. These maps were then assembled into a final multifunctional GI map representing the many uses of GI deemed commensurate for the area. In this way, the perceived priority given to 'recreational & quality of life' landuses was reduced, yet such landuses were not removed. Thus, both 'recreational & quality of life' and nature conservation landuses were accommodated on the site. Subsequent to this, the previous disagreement regarding spatial functions did not materialise.

As such, in responding to contentions provoked by the perceived authority of map categories, new spatial typologies were engendered. Within these new typologies multiple landuses previously deemed incompatible were reconstituted as concordant via the presentational techniques and perceived scientific legitimacy of modern cartography. In this way, mapping methods effected the actualisation of new spatial realities so as to facilitate consensus and dispel potential disagreement surrounding GI's flexible signification and consequent latitude for application. Thus, cartography served as the means by which to legitimately enunciate on, and thereby constitute, the apparent objective reality of spaces reorientated towards anthropocentric utility.

8.3.3 Inoculation by Comparison

Another prominent stake inoculating mechanism employed by GI advocates is comparison. Central to this is the relationship between the identity of those referencing a knowledge claim, those identified as producing such a claim, and that upon which the claim is made. The stake inoculating potentials and properties of such relationships were explored by Erving Goffman and elucidated in his theory of *footing* (1981), wherein a threefold typology of reference is theorised (see Chapter 3, section 3.5.3). These are namely the *principal*, whose position the piece of speech is supposed to represent; the *author*, who does the scripting; and the *animator*, who says the words. These distinctions may be employed to exert influence on the appearance of neutrality as they can position the animator as ‘just passing something on’ (Potter, 1996, 143), – in this case, that which the author has produced regarding the principal. Indeed, ‘it is through the paraphernalia of footing that speakers managed their personal or institutional accountability’ (Potter, 1996, 122).

The role played by footing can be observed in the prevalence of comparison in discourses on GI planning in Ireland. Here a salient feature of such discourses is evaluation of the perceived condition of Irish GI planning relative to that of other jurisdictions. Such comparisons are employed as a means to provoke action on the *principal* of innovative green space planning by the seemingly objective identification of progressive planning practices identified as widespread in other jurisdictions yet still absent in Ireland. These practices are subsequently referenced as models for how GI planning should be conducted in Ireland. In this sense, comparison is utilised to facilitate stake inoculation via footing in articulations by GI advocates (*animators*) who reference external cases deemed non-partisan to Irish planning debates. Thus, comparison is exercised as a way of generating an apparent distance between the potentially conceived partisan agendas of GI advocates and the ‘facts’ of a situation as stated by unprejudiced independent *authors*.

8.3.4 Legitimate Enunciation via Comparison

The importance of footing in facilitating the stake inoculation that facilitates the apparent impartiality required for *enunciation advantage*, was postulated by a number of interviewees and expressed by one local authority officer who concluded,

One advantage I found in trying to do something new or different is if you can show that another county has done it and what they've used the information for, then it can be very valuable.
(Interviewee B3)

Thus, many advocates of GI (*animators*) stress the long history and widespread adoption of approaches to green space planning (*principal*) in countries thought to possess advanced landuse planning systems (*authors*). As publically proclaimed by one advocate,

Since the 1990s, green infrastructure approaches to planning and managing green space have been developing in the USA and, more recently, in the UK where Natural England – the Government's advisor on the natural environment – has been promoting the concept. In continental Europe, 'green structure' planning has long been a feature of city planning, for example in Copenhagen, and – in recent decades – ecological networks have been planned and developed in several countries. (Clabby, 2009)

Hence, there is an implication that Irish practitioners may consult the efforts of foreign planning practice in devising indigenous green infrastructure planning approaches. Additionally, in reflecting the assertions of the MSF regarding the role of comparison in problem posing (see Chapter 3, section 3.3.2), listing the progress made by other planning systems with regards to GI planning implies that Irish planning practice is falling behind that of other progressive systems.

Furthermore, it is noted that included beneath the rubric of GI in this statement are 'approaches to planning and managing green space' in the USA and the UK, 'green structure' planning in continental European countries, and 'ecological networks' in several unspecified nations. Indeed, resultant from the connotative reasoning and

the flexible signification inherent to the interpretation of GI (see Chapter 7, section 7.5), a recurring feature of Irish planning policy discourses is that they reference a variety of readings as to both what landuse functions GI refers to, and the spatial applicability of the approach. This polysemy is consequently reflected in the diversity of identified and referenced GI activities promoted as offering models for green space planning (*principal*) in Ireland. In seeking the *enunciative advantage* bequeathed by perceptions of objectivity, those advocating (*animators*) the application of such exemplars portray the assumed necessity of *stake inoculation* by furnishing the citation of particular examples (*authors*) detailing where such planning approaches have been applied. As stressed by one QUANGO ecologist,

...if you have to justify different measures you're taking, then you can say well, you know this is in line with the green infrastructure developments, and you know, as reflected in Holland, wherever the hell it is, the States, and you know, people go oh that's interesting.
(Interviewee C7)

Accordingly, both interview and documentary data indicate that those advocating (*animators*) different interpretations of green space planning (*principal*), reference different examples (*authors*) of GI activities dependant on the specific comprehension of GI that they are forwarding. For example, a central government planner focused on GI as means of facilitating non-motorised mobility asserted,

The Bristol to Bath route is worth a visit actually, just to see the numbers [of] people using it. I mean obviously it's a densely populated area; probably the definition of green infrastructure. It's a disused rail line that, it's, I don't know, there's literally I'd say ten, twenty thousand people a day using it. (Interviewee C1)

Therefore, a feature of Irish GI advocacy is the use of footing to achieve stake inoculation in the promotion of specific perspectives on green space planning by bestowing on such perspectives the legitimacy of apparent impartiality demanded by practitioner self-assessment of planning as an 'evidence based' discipline. This phenomenon enables the presumed legitimate and simultaneous advocacy by multiple parties of different understandings of what GI entails. Such assorted interpretations facilitate, and are facilitated by, reference to a variety of diverse

examples of activities seen to constitute progressive GI practices. In referencing these identifiable cases (*authors*), the promoters (*animators*) of GI offer an interpretation of what they deem to be its relevance for green space planning (*principal*). These approaches by and large resonate with their personal and/or professional biases, be that for health, transport, conservation or a range of other possible functions.

8.3.5 Inoculation by Quantification

Although less prevalent than the prominent roles occupied by mapping and comparison as means by which to analyse, represent and advocate GI, also evident in many policy documents and interviews are references to numerical data and the processes of quantification. Underpinning such references is the connotatively reasoned comparability of GI with conventionally conceived infrastructure wherein quantitative methodologies are thought inherent to its delivery. As noted by one planner involved in the production of GI documentation,

It's [GI] looking at open space resources as we would grey infrastructure. We have a piece of land, a resource, what do we want it to do. How much of that do we want it to do. So you plan and design for that and then you can measure its performance.
(Interviewee A2)

Aronowitz (1988) outlines how the authority endowed by the scientific semblance of such quantification is predicated on the conflation of 'knowledge' with 'truth'. This influence on the production of 'truth effects' (Foucault, (1969) 1972) is characterised by deference to the assumed integrity of quantification as a means by which to accurately represent reality. Indeed, as noted by Kingdon (1984, 98), quantified information 'acquires a power of its own that is unmatched by issues that are less countable'. Thus, statistics may be employed as a way to legitimise knowledge claims that convey a meaning seemingly independent of those who employ them, and thereby facilitate enunciative advantage.

8.3.6 Legitimate Enunciation via Quantification

The enunciative advantage endowed by stake inoculation via quantification may help conceal the normative impetus of counting activities by force of appeal to the perceived objective methodologies of scientific measurement. Hence, the deed of measuring may imply ‘a need for action, because we do not measure things except when we want to change our behaviour in response to them’ (Stone, 1997, 167). Thus, the process of quantification itself may serve as a tacit message signifying that something is of a sufficient magnitude to warrant numerical investigation, and therefore should be taken seriously. It is in this sense that some of those interviewed suggested that a cost-benefit analysis of GI’s merits may carry greater weight than reference to normative arguments. As noted by one local authority official,

I would like to see the debate started on the basis of cost benefit as opposed to on the basis of some sort of feel good kind of approach, I think it would be good to see, you know a fairly rigorous approach adapted in terms of cost benefit. (Interviewee B21)

Accordingly, as discussed above with reference to cartography, acts of quantification can assume a metaphorical character that support both the perceived importance of something and the objectivity of its assessment (Throgmorton, 1993). In this context, and with reference to GI, one interviewee stressed that,

Until you can come up with a method of actually quantifying it, and mapping and quantifying it and making it real, then they’re just concepts, you know, they’re not that meaningful for people. (Interviewee C8)

The legitimating and issue highlighting functions of counting are ardently forwarded by certain parties to the GI advocacy discourse and can be observed in the endeavours of Comhar to present GI as an objectively assessed economic benefit. Playing a central role in the advocacy of a GI planning approach in Ireland, arguments for GI advanced by Comhar are closely aligned with a discourse focused on the ‘monetisation’ of ‘natural assets’. This was illustrated by the director of

Comhar in his presentation of an economics centred argument for the introduction of multifunctional GI planning at the Irish Planning Institute's Annual Conference in April 2010 (Comhar, 2010d). Such an endorsement of a cost-benefit argument for the adoption of GI planning was sustained by Comhar in its presentation at the Parks Professional Network Seminar Day in June 2010 (Comhar, 2010e), when it was announced that the estimated worth to Ireland of the ecosystems services delivered by GI was €2.6 billion. In the same month, Comhar hosted a workshop on The Economics of Ecosystems and Biodiversity (Comhar, 2010a). This workshop involved a plenary session wherein a series of presentations were provided outlining the economic worth of biodiversity and the methodologies that can be employed in its valuation. With a focus on an economic assessment of GI's value, the published report recommends as a priority the,

Identification, quantitatively and qualitatively of the economic and social benefits of ecosystem services delivered by Green Infrastructure in monetary terms and also the social gains to health and quality of life. (Comhar, 2010b, 23)

In such instances, counting the value of GI may be seen as a means by which to remove it from possible associations with ex-ante value rationalities (Kornov and Thissen, 2000; Owens et al., 2004) and foreground a mathematically determined instrumental rationality for its introduction. Here, a positivist repertoire grounded in numeracy is employed to present arguments as founded on externalised facts by 'divesting agency from fact constructors and investing it in facts' (Potter, 1997, 158). In doing so, an apparent stake inoculation of those 'facts' is achieved simultaneous to conveying the important story about which 'the facts speak for themselves'. The particular 'facts' of a GI approach advanced by those who advocate its adoption, is that GI planning policy is a scientifically identified cost effective means to solve a multitude of problematic issues and deliver numerous benefits to society. It is under such circumstances that normatively founded proclamations on what is believed to be requisite action obtain the *enunciative advantage* of scientific legitimacy by the seemingly objective 'evidence base' upon which planning is viewed to operate. As previously discussed in Chapter 6 (see

section 6.3), with regard to GI in Ireland, such legitimately enunciated normative imperatives centre on the perceived need to give greater weight to green space issues in planning policy formulation.

8.4 Functional Advantage

As previously discussed in Chapter 7 (see section 7.4), resultant from the connotative reasoning of GI as analogous to that of conventionally conceived infrastructure, those advocating this approach both assume and assert its servicing functions. However, the latitude for interpretation bestowed by the term's flexible signification elicits numerous possibilities for the expression's application (see Chapter 7, section 7.5.3). Thus, rather than representing a clearly defined and unifunctional application, the GI approach is seen as validly and concurrently pertaining to a broad assortment of planning issues. In this way, most of its advocates stress multifunctionality as a key advantage of the approach. Promoters of GI often foreground this inferred benefit in literature seeking to advance the approach's practical merits. This is illustrated, for example, by one such document when declaring,

GI is multi functional at every scale, for example in considering water basin management, the opportunity for habitat creation and enhancement should also be exploited. Green solutions to hard issues such as flooding, coastal erosion and carbon sequestration should be considered first as an alternative to expensive grey infrastructure. All environments have potential to restore biodiversity and this can be enhanced with GI planning. GI projects generate tourism and employment dividends by improving access to existing natural assets and opening up new recreational and leisure opportunities. (UF & IEEM, 2010, 4)

A feature of such documents is that the interpretation of the 'multifunctional' potential of GI that they forward is focused on anthropocentric utility. Although the UF & IEEM document advances 'habitat creation and enhancement', this is advocated in the context of GI as 'an alternative to expensive grey infrastructure'. Additionally, this document forwards a presumption of commensurability between ecosystems conservation and 'employment dividends by improving access to

existing natural assets and opening up new recreational and leisure opportunities'. In this sense, habitat creation and enhancement is equated with anthropocentric utility as a cost-saving substitute for conventional infrastructure in providing recreational and leisure amenities and tackling 'hard issues such as flooding, coastal erosion and carbon sequestration'.

Illustrated in this document and prevalent throughout interview and documentary data, is that through presumptions rooted in ontologies derived via connotative reasoning, GI is viewed by most of its advocates as an inherently 'networked' planning approach that may be 'planned', 'designed', 'delivered' and 'managed' (KCC, 2011, Chp. 14, 19) 'at every scale' (UF & IEEM, 2010, 4). This perception is reinforced by extrapolations induced by language familiarity and the extension of antecedent tangential discourses (see section 8.8.2). Consequently, those promoting GI marry this conceptual assumption with the perceived advantage of multifunctional potential in pronouncing the approach's capacity for the effective spatial integration of geographically isolated and functionally disparate areas. This popular opinion was advanced by one QUANGO official when claiming,

*...it [GI] has a number of functions: it can function as a sort of recreation sort of transport link, it can function as [sic] biodiversity network allowing species and things, plants and animals, species and things to move, including ourselves actually. (Interviewee C3)
[Emphasis added]*

Several of those interviewed postulated that such a networked approach to the provision of various services necessitates amendments to policy guidance hierarchies in catering for the multifunctional potential promoted by GI. In this, many conjectured that the functional advantage of the GI approach stimulates innovative landuse planning protocols that require an ability to straddle the traditionally discrete administration of services provision. As proposed by one consultant planner involved in the production of GI documentation,

It's [GI] multifaceted and that...it's seeking to group a number of objectives under the one title, that's probably the key element of it. I don't see anything very new about any of the aspects of it...they're all addressed in more detail in their various subsets; SUDS, water management, recreation, landscape, they're all very well addressed within their own disciplines...the innovation if you like or the uniqueness of it may be that it's being grouped, you know, as a number of objectives within an overall strategy or something like that. (Interviewee A10)

Emanating from this assessment is the conclusion that in compelling innovative and 'evidence based' policy approaches to cater for the multifunctional potential of green spaces, GI planning represents an aggregation of normally disparately planned issues in a fashion that renders their respective merits easier to convey. Those advocating this approach subsequently argue that the matters encompassed by GI thereby enjoy greater weight of appeal in planning policy formulation. In this context, one local authority officer noted,

That to me is a good thing about the green infrastructure thing, that you're not talking to people about ten agendas, you're talking to them about one, even though it might encompass six things underneath it, but at least it's one thing, so you're not asking them to do biodiversity, archaeology, architecture, landscape, water; you have it kind of packaged and its maybe easier then for people to kind of get a grip, you know, on that, in their thinking. (Interviewee B20)

Indeed, several of those promoting the GI approach emphasise the role it plays in facilitating greater weight of consideration to numerous issues commonly perceived as neglected in policy formulation. This they claim is achieved by both assembling such issues for presentation in an easy to understand format and bestowing on them a sense of import often lacking in their assessment. Therefore, GI may be conceived as a strategy by which to place various policy issues on the policy decision agenda so that they receive 'more of a hearing' (Interviewee A10). This is achieved by providing clarity regarding the problematic ambiguity surrounding numerous policy issues, such as how to ensure effective flood management, biodiversity protection, landscape conservation, as well as sustainable transport

and recreational amenity provision. This capacity ‘to give a simple message’ (Interviewee B16) is enabled by the connotative reasoning of GI as a form of infrastructure which can be planned, designed, delivered and managed using the same methods as conventionally conceived ‘grey’ infrastructure. This reasoning prompts assumptions of apparent simplicity with regards to GI’s comprehension, which consequently induce perceptions of clarity on issues of ambiguity. Nevertheless, the degree of flexible signification facilitates latitude for the interpretation and subsequent application of GI for a variety of purposes and to an array of spatial typologies. This permits those advocating a GI approach to the planning of green spaces to advance the concept as one which facilitates multifunctionality. In doing so, GI presents ‘a badge to join up a whole range of ideas’ (Interviewee B16) in which a variety of varying policy issues are ‘kind of packaged’ (Interviewee B20) ‘as a way of selling [the] concept’ (Interviewee B16). In this way, the ‘strength in numbers’ (Interviewee A10) presented by the construal of GI as a planning approach performs policy work by: (a) communicating the importance of certain issues; (b) outlining the benefits of their consideration; (c) providing direction for landuse governance; and (d) placing normally neglected issues on the decision agenda.

8.5 Conclusion

The discussion provided in this chapter continues that offered in Chapter 7 by outlining how the meanings induced by the interpretive features of *connotative reasoning*, *apparent simplicity* and *flexible signification* prompt comprehensions of GI that resonate with the prevailing rationality of Irish planning practice. Specifically, perceptions of GI as analogous to conventionally conceived infrastructure prompts assumptions on the approach as congruent with *good planning* in the ‘planning, management and engineering of green spaces and ecosystems in order to provide specific benefits to society’ (UF & IEEM, 2010, 2). This view is fortified by the evolving discourse’s *language familiarity* and its consequent subsuming of antecedent narratives concerning planning, engineering and conservation. Buttressing this are connotatively reasoned assumptions that

the *existing planning vehicles* employed in normal landuse policy formulation are appropriate to the constitution and implementation of GI guidance.

Rooted in a disciplinary self-assessment of planning as an ‘evidence based’ activity merged with convictions of ‘infrastructure’ as that which is designed, delivered and managed via scientific methods, those who advocate GI stress its legitimacy as an objective and systematic approach to green space planning. Consequently, GI is seen to offer *enunciative advantage* by way of the impartial assessment and conclusion specification permitted by *cartographical presentation* and *quantification*. Such enunciative advantage is braced by the *comparison* of Irish endeavours with the application of GI in other jurisdictions by parties unconnected to planning debates in Ireland. Hence, GI resonates with practitioner presuppositions regarding the objectives and technical-rational methods of planning practice by virtue of its interpretation through the prism of the prevailing rationality operative within the arena of landuse governance. In this respect, GI may be understood as reflecting this rationality. Conceived within the context of the Multiple Streams Framework, this rationality may be envisaged as constituting the politics stream wherein the success of a policy proposal may be determined by its resonance with the prevailing ideological or partisan interests of decision makers (Kingdon, 1984, 152). Consequently, GI may be comprehended as a means by which agents seek to ‘couple’ the ‘problem’, ‘policy’ and ‘politics’ streams in the process of agenda setting.

Furthermore, resultant from the *apparent simplicity* and *flexible signification* engendered by the conceptual constitution of GI via *connotative reasoning*, those who advocate this planning approach stress the benefits it presents by way of its *multifunctional potential*. Here promoters of GI emphasise the role it can play in facilitating the integration of areas commonly lamented as functionally divergent or geographically isolated. The approach’s supporters espouse its capacity to advance multiple issues, including those heretofore largely disregarded. In so doing, GI is seen to endow issues perceived as normally neglected with greater weight of consideration in policy formulation by virtue of associating them with issues

enjoying greater attention. Thus, it is through perceptions of *practice accord*, *enunciative advantage* and *functional advantage* that GI acquires *rationality resonance* among planning practitioners and allied professionals. This relationship is diagrammatically presented in Figure 8.1.

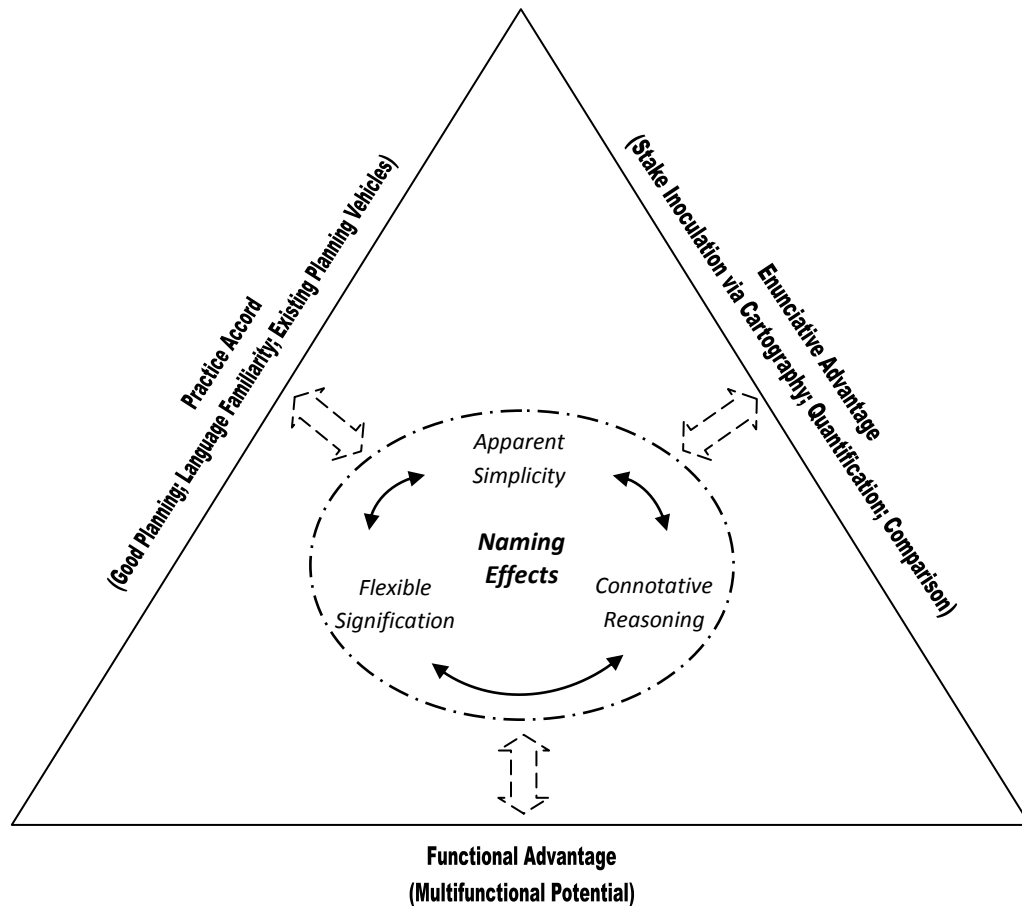


Figure 8.1
Diagrammatic representation of the relationships between
the *naming effects* of GI's *entitlement* and the facilitation of *rationality resonance*

Illustrated here is the reciprocal relationship between the 'naming effects' of GI's entitlement (see Chapter 7, section 7.5) and the elements of *rationality resonance* discussed throughout this chapter. Graphically portrayed is how the relationship between the particular characteristics associated with the interpretation of GI's meaning facilitate its resonance with the prevailing rationality of Irish planning

practice. This in turn influences how the GI concept is interpreted and represented by those advocating its use in planning policy formulation.

By examining the perceived resonance of GI with the prevailing rationality of Irish planning practice, this chapter furnishes a base upon which to investigate how different meanings are framed and advanced by different parties seeking to promote a GI planning approach. Thus, it is to this issue which the thesis now turns.

CHAPTER 9: NARRATIVE MODALITY

9.1 Introduction

This chapter builds upon the analysis presented in Chapter 8 on how GI's *rationality resonance* with the prevailing logic of planning and allied professional practices endows it legitimacy among a community of landuse planning practitioners. By extending the investigation from perceptions of *practice accord*, *enunciative advantage* and *functional advantage* examined in Chapter 8, the discussion below seeks to initiate a move beyond the GI discourse and investigate the uses to which this narrative is put. Specifically, this chapter endeavours to address Research Question 3, namely: *How are meanings framed and advanced by different parties seeking to promote GI as a planning policy approach?*

In venturing to answer this research question, the chapter begins by elucidating the processes facilitating the emergence and evolution of a coalition of GI advocates. Building upon the analysis presented in Chapters 7 and 8, this chapter discusses how the particularities of GI's interpretation prompts a narrative form that enables those with varying and often diverging interests to unite in advocating the GI concept. Subsequently, a hypothesis of *narrative modality* is offered. The term *narrative modality* is used here to describe the proliferation of the GI narrative in both the frequency of its use by a multitude of different agents and the scope of issues it is deemed to address.

Although the chapter retains a concern with the idiosyncrasies of the GI discourse, its discussion of agents' motivations for advancing the GI planning approach provides a bridge between the previous discourse centred chapters and the ensuing chapters on agent activities in the dissemination of GI.

9.2 The GI Discourse Coalition

9.2.1 Discursive Affinities and Contamination

Academics who advance a discourse analysis approach to the study of environmental issues suggest that what gives traction to specific ideas in the policy process is ascription to a particular series of narratives that clarify meaning in situations of policy ambiguity (Epstein, 2008; Hannigan, 2007; Roe, 1994; Stone, 2002). The discourse coalitions that emerge from the endorsement by various agents of these particular narratives facilitate the perception of shared allegiance to a specific policy solution while concurrently enabling a multitude of interpretations of the meaning of that policy solution. As noted by Hajer,

What unifies these coalitions and what gives them their political power is the fact that its actors group around specific story-lines that they employ whilst engaging in environmental politics. It can be shown that although these actors might share a specific set of story-lines, they might nevertheless interpret the meaning of these story-lines rather differently and might each have their own particular interests. (Hajer, 1995, 13)

Nevertheless, unrestricted individual license of interpretation is implicitly constrained by the discursive format and content of the narratives. Consequently, narratives cluster possible interpretations of meaning and position the actors who ascribe to them into coalitions of broadly similar, albeit not necessarily identical, interpretations. As previously discussed in Chapter 6 (see section 6.2.2), the broad problem narrative giving rise to GI advocacy is the perception that the multitude of issues related to green spaces are often assigned low priority in the planning system. This broad problem narrative begets perceptions of a shared predicament among a wide spectrum of dissatisfied parties whose concerns are perceived to be fundamentally related to green space planning. As previously discussed in Chapter 7 with regard to *flexible signification* and the *functional expectations* of green spaces, and in Chapter 8 with respect to *language familiarity* and *multifunctional potential*, such interests in green space planning may be diverse. As noted by one consultant planner involved in GI advocacy,

The issues it [GI] addresses are...All of the issues that open space resources can contribute to, it's almost endless. (Interviewee A2)

In this sense, the power of GI to assist the emergence of a discourse coalition may be conceived as deriving from its ability to facilitate 'discourse affinities' (Hajer, 1995, 66) among the varying issue-specific narratives of those parties advocating the importance of green space planning. Hajer proposes that such affinities may not refer to actors and their intentions but rather 'operationalizes the influence of discursive formats on the construction of problems' (Hajer, 1995, 67). Such problem construction was discussed in Chapter 6 (see section 6.4) when examining the promotion of GI as a solution narrative to address the perceived low profile allocated to green space planning by endowing such areas, and the issues seen as associated with them, greater weight of consideration in the policy formulation process. As noted by one local authority planner,

It's [GI] elevating the importance of green space and, or open areas, natural areas to be, being seen as infrastructure rather than as just land to be developed. (Interviewee B17)

Consequently, in perceiving GI as offering a means to raise the profile of green space issues in planning activities, those with varying motives for promoting green space consideration in policy development form a discourse coalition centred on a 'narrative of necessity' in the advocacy of GI (see Chapter 6, section 6.4). Hajer (1995) theorises that in the case of a particularly strong affinity, discursive elements not only resemble one another, but an exchange of terms or concepts may exist. He terms such an occurrence 'discursive contamination' (Hajer, 1995, 67). Indeed, discourses on GI are replete with instances of discourse contamination and may be illustrated in the conclusion of one local authority officer when postulating the benefit of the term GI,

I suppose green in people's minds is now synonymous with ecological or like nature and then infrastructure, I suppose...if you're dealing with engineers, they very much think of the roads and the rail and that kind of infrastructure so I suppose if you're presenting nature in that context then maybe it helps that understanding so yeah, I think it's a good description. (Interviewee B19)

As previously discussed in Chapter 6 (see section 6.4) and Chapter 7 (see section 7.5.1), the discursive weight alluded to here is prompted by connotations of 'necessity' with the word 'infrastructure'. This facilitates the perceived compatibility of GI with numerous discourses centred on the provision of services to society. Additionally, Chapter 8 (see section 8.2.3), discussed how associations stimulated by the word 'infrastructure' simultaneously suggest that the provision of GI is a rational planning activity that can be undertaken by employing the familiar policy formulation and implementation tools currently deployed in planning practice. This interviewee also suggested that the word 'green' is perceived to relate to an environmentally sensitive approach to human activities. Furthermore, as discussed in Chapter 6 (see section 6.3.1) and Chapter 7 (see section 7.5.3), the word 'green' is concurrently seen to relate to a wide range of both 'formal and informal spaces' (Interviewee B15). The conjunction of the words 'green' and 'infrastructure' in the expression 'green infrastructure' thereby stimulates connotations of GI planning as a rationally conceived, necessary and environmentally sensitive approach to green space planning that can be delivered through the existing scientifically grounded policy vehicles employed in planning practice, such as cartography and quantitative assessment (see Chapter 8, section 8.2). Consequently, perceptions on the utility and inclusivity of the GI narrative fosters the formation of a broadly encompassing discourse coalition wherein the manifold and potentially incompatible interests of various parties may co-exist by virtue of their 'discursive affinity' (Hajer, 1993; 1995; 2005), to the perceived importance of green space planning. This phenomenon was recognised by one QUANGO interviewee,

So depending on where your interest originally starts, you know people will take a primary interest in one aspect but appreciate and almost latch on to the other aspects as a way of selling the idea. So in that way it's [GI] a sort of useful term...it allows a lot of people who have overlapping interests to come together and sort of share the space. (Interviewee C3)

This supposed capacity to suspend potential differences in forwarding a narrative from which all parties to the discourse coalition are perceived to benefit accords with the theoretical application of 'myth' by Yanow (1996) in the context of policy and organisational analysis.

9.2.2 Suspension

In her interpretive analysis of the evolution of Israeli community centres, Yanow employs the term myth to indicate a 'narrative created and believed by a group of people which diverts attention from a puzzling part of their reality' (Yanow, 1996, 191). Drawing from anthropological studies, the concept of myth advanced here is not conceived as an assessment of a narrative's veracity as myths are neither true nor false in the empiricist sense. Rather, perception of their truthfulness is dependent on ascribing to them (James, 2000; Schiappa, 2003). As such, myth in the context of policy analysis refers to a particular narrative format that facilitates ascription by a broad spectrum of issue-specific interests through providing apparent commensurability in situations where plausible discrepancies may coincide. Myths achieve this through suspending conflict by 'masking the tensions between or among incommensurable values' (Yanow, 2000, 80) and deflecting attention away from potential logical inconsistencies or possible incompatibilities in that which is enunciated (see Chapter 3, section 3.5.5). In this way, myths facilitate *narrative modality* by enabling multiple parties with various interests to espouse a particular narrative consequent to its perceived benefit for the specific concerns they seek to advance. As noted by one local authority officer, 'I suppose there's scope for us all, we can all have a chunk of it [GI] and there's a benefit to us all' (Interviewee B23). This mythic quality is particularly germane to the GI narrative in light of how the term's latitude for interpretation results in GI's application to a

variety of issues normally considered discrete (see Chapter 7, section 7.5). Despite this wide array of issues, those who advocate a GI planning approach demonstrate the narrative's mythic property through the suspension of potential conflict in presuming general consensus regarding the term's meaning. Thus, as surmised by one QUANGO interviewee who advocates a GI approach to planning,

I think at the moment it's probably generally a simple enough concept...I'd imagine there would be a certain amount of consensus on what it's about. (Interviewee C5)

Such assumed general consensus of interpretation facilitates the suspension of potential conflict through the assumed co-existence of multiple interests within the GI discourse coalition. This is achieved via common ascription to the concept of landuse multifunctionality which is deemed a central advantage of the approach (see Chapter 8, section 8.4). Consequently, most of those interviewed considered that a GI approach to planning enables the commensurable and simultaneous utility of lands for a variety of purposes. As suggested by one interviewee involved in the production of GI advocacy documentation,

The fact that it [GI] can be multifunction means that you can provide kind of space for biodiversity and recreation. (Interviewee C2)

Such conjectures on the commensurable and multifunctional potential of green spaces areas bequeathed by the GI planning approach is not solely confined to assumed compatibilities in recreational space provision and biodiversity protection. Rather, these suppositions extend to a broader array of issues perceived as encompassed by the expression 'GI'. Indeed, interview data collated for this thesis suggests that the endorsement of GI as simultaneously providing numerous and contiguous functions is a pervasive view promulgated by those ascribing to the precepts of the approach. Thus, the attested multifunctional potential of landuses avowed by this planning approach signifies to those who propound it that,

...[GI] has a number of functions; it can function as a sort of recreation sort of transport link, it can function as biodiversity network allowing species and things, plants and animals, species and things to move, including ourselves actually. And also that from a heritage point, a cultural heritage point of view, it's also a way you can look after perhaps heritage infrastructure such as disused railway lines or even things like stone walls or old roads. (Interviewee C3)

Possible tensions in the GI discourse coalition consequent on varying potential landuse incompatibilities are held in suspension by the proposition of GI's capacity to effect functional reciprocity. This phenomenon was illustrated by the opinion of one local authority planner in outlining the perceived advantages of a multifunctional-focused GI approach to urban drainage,

...one of the things we're exploring, because it's quite an obvious one, is if you can get something like the SUDS³⁴, a large attenuation pond area into open space, just it's a good example of the benefits that can be achieved throughout green infrastructure in terms of its open space, it helps the open space, it helps SUDS so it helps water and then you can get wildlife within it, so it helps the whole wildlife, so there's three or four different areas which has a positive impact. You know so that's a good example where green infrastructure can be a success...(Interviewee B24)

In addition to promoting GI planning for the concurrent realisation of several benefits to society and nature conservation, the view asserted here also presents the GI approach as furnishing the physical conditions whereby the provision of such gains is mutually reinforcing. Such inferences alleviate prospective discord within the GI narrative by suspending potential views on landuse incompatibilities and thereby assisting consolidation of the GI discourse coalition. The force of this logic in suspending potential incompatibilities led many of those interviewed to conclude that there are no clearly identifiable disadvantages to the GI planning approach. This view was expressed from many quarters, with one NGO planner stating,

³⁴ SUDS is the acronym used for Sustainable Urban Drainage Systems. This is the context in which it is used by this interviewee. However, it can be written as SuDS where it is intended to refer to the less urban focused engineering concept of Sustainable Drainage Systems.

Disadvantages to the actual approach. Let me think. It's hard to see, it's hard to see any specific disadvantage of it. (Interviewee E4)

Thus, the GI narrative neutralises possibly perceived differences of opinion through the suspension of potential logical inconsistencies and landuse incompatibilities via appeals to the shared advocacy benefits of a multifunctional and synergistic approach to green space planning. Consequently, negative evaluation of the approach's possible disadvantages are deflated and the consolidation of the GI discourse coalition effected. Nevertheless, although research conducted for this thesis suggests that the process of *suspension* is a pervading phenomenon in the GI narrative, not all feasible disagreement is suspended by reference to synergistic multifunctionality and the advantages of shared advocacy. Where anticipated dissonance remains, the process of 'deflection' is manifested.

9.2.3 Deflection

Deflection differs from *suspension* in that it is specifically directed at averting identified potential criticisms of a narrative's logical consistency. Thus, rather than avoiding general discussion of possible incompatibilities, as is the case with suspension, the process of *deflection* engages discernible prospective discord. While comparatively less evident than suspension in the context of GI advocacy in Ireland, instances of deflection may be observed in attempts to pre-empt concerns regarding the compatibility of recreational provision and biodiversity protection. Here an appeal to 'balance' in issue assessment and planning is employed to deflect potential criticisms of the GI approach. As surmised by one local authority planner, and echoed in the assertions of many other interviewees,

We need to find a fine balance between development on the one hand and preservation of amenities and heritage assets on the other, so it's a balance between the two. (Interviewee B15)[Emphasis added]

Supporting this requirement for balance, some GI advocates who address the issue conjecture that the GI approach may be the best at facilitating evaluation, representation and arbitration of potentially competing interests in planning activities. This view was conveyed by a consultant involved in the production of GI advocacy documentation when surmising,

Bull Island³⁵ is a good example of an area where, there's maybe competing interests, and some people are going to say, well listen, maybe I might shut the whole place off, put up the fences and keep it for biodiversity only...But at the same time, without something like green infrastructure, well then the sort of biodiversity elements of open spaces and parks, some of the institutional lands and so forth, I mean that just doesn't get a look in. So on balance it's, I think it's very much to the benefit of biodiversity. (Interviewee A4)
[Emphasis added]

Here potential concern regarding landuse compatibility is deflected. This is achieved while concurrently advocating the deployment of GI as a means by which to facilitate landuse multifunctionality in the conservation of biodiversity. In this sense, the appeal to 'balance' forwarded by some of those seeking to deflect criticism of GI planning entails the repositioning of biodiversity protection from ecocentric approaches focused on the exclusion of human activities to perceptions that the human use of habitats can be an important means for their conservation. As previously discussed in Chapter 6 (see section 6.3), this representation of such areas in terms of anthropocentric utility is perceived as a requirement in fomenting the 'narrative of necessity' thought important in addressing the opined low profile of green spaces in planning policy formulation.

As such, the processes of *discursive affinities* and *contamination*, in conjunction with *suspension* and *deflection*, may be identified as enabling the cohesion of a GI discourse coalition. However, given the polysemy of the term 'GI', and the varying interests which it is seen to address, appreciation of how GI sustains such a broad constellation of concerns necessitates an exploration of the means by which the GI

³⁵ Located in Dublin City and previously discussed in Chapter 8, section 8.3.2, with respect to the role of cartography in producing new spatial realities.

narrative offers a unifying solution to the policy predicaments of multiple parties. An identification and examination of such mechanisms reveals a subtle process wherein the naming effects prompted by the term GI facilitate 'narrative modality'. Here GI emerges as an inclusive solution narrative that assimilates the problem narratives of numerous other planning discourses. Thus, building upon the discussion presented above, the analysis must now turn to how such *narrative modality* operates.

9.3 Narrative Modality

In discussing the significant influence metaphor may play on problem setting in social policy, Schön (1993) outlines how the connotative reasoning³⁶ engendered by metaphor may help induce perceived solutions to problems which otherwise lack resolution. Schön also suggests that a metaphor may furnish language for the communication of a problem-solution narrative where lucidity of articulation was seen as previously absent. With regard to GI, both the presentation of a solution and the 'rebranding' (Interviewee B3) of existing problem-solution narratives is given latitude of application resultant from the 'discursive affinities' and 'contamination' (Hajer, 1993; 1995; 2005) prompted by the term's flexible signification. As noted by Hajer,

...metaphors provide a common ground between various discourses. Actors are thus given the opportunity to create their own understanding of the problem, re-interpreting various elements of knowledge outside their specific realm of competence... (Hajer, 1995, 62)

In this sense, as a metaphor, GI serves as a vehicle,

...for the discursive reduction of complexity, allowing people to communicate over complex policy issues. (Hajer, 2003, 105)

Consequently, the discursive affinities and contamination prompted by the flexible signification of the GI metaphor may be understood to facilitate the 'coupling process' (Kingdon, 1984) theorised in the MSF by enabling the attachment of a

³⁶ Schön (1993) refers to the idea-constituting properties of 'generative metaphors'.

policy solution to an array of problems. Thus, those seeking solutions to unsolved problems may adopt the GI narrative as a resolving discourse. In addition, those desiring to successfully communicate the merits of their planning activities may apply the GI discourse to their existing problem-solution narratives as a means to achieve greater weight of consideration for their specific narratives in policy formulation. In such contexts, a process of *narrative volunteering* can be said to occur.

Subsequent to the process of *narrative volunteering*, those employing GI for their own problem resolution purposes may now seek to consolidate the potency of the GI narrative by exploiting the term's flexible signification and apparent simplicity in assigning it as a solution to other issues beyond the concerns of their original problematic issue or problem-solution narrative. Capacitated by discursive affinities and contamination, in conjunction with the processes of suspension and deflection, those seeking to advance the influence of the GI narrative, and consequently their own issue specific interests, may advocate the attachment of the GI narrative to other problematic issues which they perceive as lacking a coherent solution narrative. Additionally, such advocates may seek to reframe as GI existing problem-solution narratives circulating in other policy arenas. Resultant from assumptions of GI's scientific grounding, together with the apparent simplicity and flexible signification prompted by the term's interpretation (see Chapter 7, section 7.5), those engaged in such advocacy behaviour may do so with regard to policy issues normally considered beyond their professional competences. In such contexts, a process of *narrative application* can be said to occur.

By means of such *narrative volunteering* and *narrative application* activities, those advocating the GI narrative conceived it as justifiably incorporating, representing, and where necessary resolving, both the problems and problem-solution narratives circulating in a broad array of policy arenas. Consequently, the scope of issues addressed by the GI narrative is perceived to expand with a corresponding increase in the size of the GI discourse coalition. In this sense, GI achieves *narrative modality*. A detailed explanation of this process is presented below.

9.3.1 Narrative Volunteering

Solution Adoption

Several of those interviewed for this study suggested that the GI narrative furnished a solution for the problematic issues they were endeavouring to address. In attaching the GI solution narrative to their problem, they conveyed its benefit in generating a coherent problem-solution narrative previously seen as absent in attempts to resolve a particular issue. While the content of these issues varied, in such cases of *solution adoption*, the problematic issues addressed by GI were usually directly associated with the area of expertise or role of the professional³⁷ seeking such resolution. This phenomenon was observed and expressed by one consultant involved in the production of GI documentation when concluding on perceptions of GI's merits relative to the concern of landscape professionals and ecologists,

People who are involved in landscape certainly, people who are involved in ecology certainly would see, okay, here is a concept that provides the opportunity to enshrine our particular area into the planning system where it hasn't been previously. I know ecologists would certainly make the comment that ecological planning and biodiversity planning is very piecemeal and reactive. In the past, here was a site, protect it, at all costs, draw a circle around it. Landscape the same, you know. Plant a tree to make something look prettier if you can, or whatever...green infrastructure is basically offering a potential ideal solution to those problems...and that's why it's appealing to people.
(Interviewee A2)

This perceived capacity of GI to serve as a solution to problems associated with green space planning is not confined to the activities of landscape professionals and ecologists, but rather is also conceived as applicable to planning problems centred on the management of built environments. As noted by one local authority planner,

³⁷ All of those interviewed occupied what would normally be considered 'professional' positions, with their organisational functions requiring the possession of at minimum a primary degree. Most of those interviewed possessed postgraduate degrees, with several of those interviewed having doctorates.

It [GI] would attempt to address failures in the past where we've planned for residential areas in towns and cities, that lacked open space and that lacked recreational areas...it's about linkages between areas because good urban design says that areas should be connected and we should be able to walk...and that you can provide green infrastructure to link areas and provide, they can serve other purposes such as, you know, sustainable transport routes. (Interviewee B17)

In this sense, GI is perceived to simultaneously address three interconnected problems experienced in the development management³⁸ of new residential areas. Specifically, the interviewee suggests that GI not only addresses problematic issues regarding recreational open space provision but in doing so can concurrently facilitate pedestrian permeability in residential areas and consequently furnish opportunities for non-motorised transport. This opinion was reflected in the opinions of several town planners interviewed, with most advancing the view that GI offers the potential for greater attention to green space planning issues in development proposals submitted for consideration to local planning authorities. As commented by one local authority planner when appraising the perceived problem of inadequate open space provision and its poor configuration in development proposals,

...generally stuff tends to come into authorities pre-determined almost, you know that way like, that it would be planned on the basis of where the road's coming in and then they won't deal with all the other issues joined up. They'll just deal with them and then just kind of shoehorn them in around everything else. So it's [GI] to try and say no, this [GI] is actually a centre stage piece...you have to think about this before you design what you're doing. (Interviewee B16)

Thus, through the process of *solution adoption*, particular issues previously deemed unresolved by current planning procedures are considered remedied via a GI approach. This is achieved by the attachment of GI as a solution narrative to a specific problem narrative where an identifiable means of problem remedy was

³⁸ 'Development management' in Irish planning practice refers to the activity normally referred to in the U.K. as 'development control'.

formerly seen as absent. In this way, GI facilitates *narrative modality* among a cohort of professionals seeking to address specific problems encountered in their practice activities. Augmenting this process is a parallel exercise of ‘elective rebranding’ wherein those seeking to profitably communicate the merits of their planning activities may ‘rebrand’ their existing problem-solution narratives as GI in an effort to achieve greater weight of consideration for these narratives in policy formulation.

Elective Rebranding

Coupled with the apparent discursive affinities of multiple issue-specific narratives, many interviewees alluded to a desire to ‘rebrand’ their existing problem-solution narratives as GI so as to lend them greater import in the policy process. As noted by one local authority official involved in GI advocacy,

I think it's [GI] kind of a broad idea...so to me, my bottom line is any gain from the ideas that I'm interested in is a gain, and if it's delivered through green infrastructure, great! (Interviewee B20)

Such reasoning suggests a perceived unproblematic advantage in the *elective rebranding* of planning activities as GI in endeavouring to bequeath such activities greater weight of consideration in policy deliberations. This opinion was conveyed by one QUANGO planner when explaining the decision to employ the term GI in green space planning guidance directed at local authority planners,

I suppose we used the term because it's probably, you know, to a certain extent it has a cache at the moment...I suppose the document is aimed a lot at planners and local authorities and we know the term would resonate with them. They would know what we are talking about when we spoke about green infrastructure so we used it almost as a code word. (Interviewee C5)

Here the elective rebranding of advocated planning activities as GI was opined to endow such pursuits with greater significance in green space planning policy formulation. Underpinning this elective rebranding is the perceived resonance of GI with traditional modes of planning practice. As noted by one planner engaged in GI advocacy,

I think it [GI] is an appropriate term...on a practical level you're never going to get it through, you're never going to get this accepted by your engineers, by your county managers...unless you start to think about it in the way that other issues are considered...your roads programmes or your rail programmes or your procurement programmes, all this type of stuff. Unless you start thinking about it in the systemic way that other things are thought about, you're never going to get it up there at [sic] the agenda, you know, actually think of it as, this is infrastructure, this is important stuff, this is capital...I think that for purely for those reasons I think it's an appropriate term. (Interviewee E4)

The advocacy and perceived advantage of such elective rebranding is enabled by virtue of GI's flexible signification and the discursive affinities perceived to be shared by narratives seeking to address green space related issues. Consequently, this led many of those interviewed to conclude that GI is simply a contemporary and potentially profitable rebranding of activities already extant in planning practice. This was related by one local authority interviewee when reflecting,

...the council had been developing these walkways within the city so then we came along after that and kind of said, well actually lads, do you know what, they're actually green infrastructure, you know. So it kind of was the reverse way around than maybe the model would suggest. (Interviewee B7)

The perceived advantage to be accrued from the elective rebranding of existing professional practices is not confined to urban planning activities. Rather the flexible signification of GI married to discursive affinities facilitates the elective rebranding of biodiversity centred activities as GI pursuits. The benefits of such rebranding was expressed by several interviewees, with one local authority officer concluding,

...it's [GI] very similar to ecological networks but I think it's, it's a better description. It's a better descriptive term and it's a more proactive term where you're actually trying to create something or, whereas you know, ecological networks is very, I mean it was the sort of, the buzz phrase of, you know, ten years ago. I don't think it ever really worked... (Interviewee B10)

Thus, whereas it can be inferred that ecological networks were seen as a less proactive (or even reactive) approach to biodiversity conservation, GI is viewed as ‘trying to create something’. In this sense, the elective rebranding of a networked approach to biodiversity as GI conservation is perceived to represent such endeavours in a manner more favourable to positive reception in the arena of planning policy formulation.

As previously discussed in Chapter 7 (see section 7.5) and Chapter 8 (see section 8.2), the naming effects engendered by the interpretation of what GI means, foments perceptions of GI’s resonance with the prevailing rationality of planning practice. These naming effects subsequently prompt perceptions of relevance and potential benefit via the discursive affinities of numerous issue-specific green space narratives. This consequently assists GI’s *narrative modality* by stimulating shared opinions regarding the profile raising prospect offered by GI’s communicative potential. Accordingly, advocates of particular approaches to the management of specific green space issues engage in the *elective rebranding* of their existing problem-solution narratives so as to benefit from the discerned traction of GI in deliberations on planning policy formulation. As a result, the GI discourse coalition expands both in member composition and the content of issues addressed. The processes of *solution adoption* and *elective rebranding* are illustrated in Figure 9.1 below.

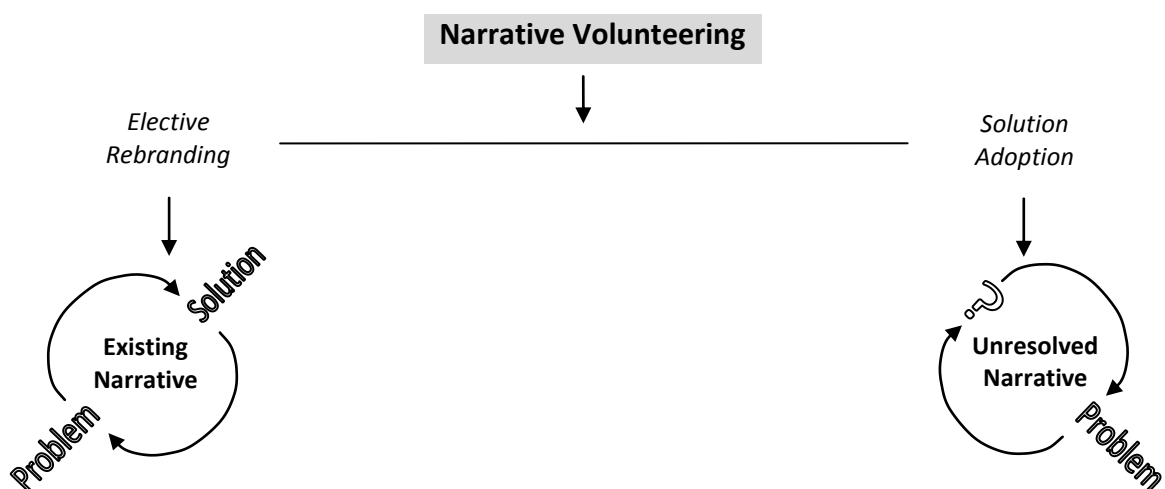


Figure 9.1
Elective Rebranding & Solution Adoption in Narrative Volunteering

9.3.2 Narrative Application

As a counterpart to *narrative volunteering*, analysis of interview material suggests a parallel process of *narrative application* in facilitating increased frequency of use of the term GI by a multitude of difference agents with respect to an array of issues. In essence, *narrative volunteering* encompasses problem solving while *narrative application* concerns solution advocacy.

Specifically, *narrative application* involves the appropriation of unresolved problem narratives circulating in non-heretofore GI related policy discourses and attaching GI as a solution to the issues referenced therein. It also entails the imposed rebranding as GI, existing problem-solution narratives and activities not termed GI by those advancing them. A detailed explanation of these processes is provided below.

Problem Appropriation

Problem appropriation involves the requisition by GI advocates of a problem narrative which they are not normally involved in resolving. Such advocates subsequently specify GI as a resolution to the problematic issue referenced. This is facilitated by GI's flexible signification and its consequent latitude for application, wherein those advocating GI as a planning approach advance it as proffering resolution to an array of potential problems. Such a process was alluded to by several interviewees and exemplified in many documents. This phenomenon is illustrated by Dr Clabby, an ecologist, in his 'Comhar Commentary' when asserting,

A growing body of evidence underlines the many health benefits of green infrastructure. Well-designed, attractive and safe green spaces are important as places to exercise. Green spaces provide play areas for children and have positive benefits for community mental health...Green infrastructure also provides many economic benefits...High-quality green infrastructure translates into higher property values and rents. It helps to attract and to hold on to the high-value industries, entrepreneurs and workers needed to underpin the knowledge economy... (Clabby, 2009)

Here GI is forwarded as addressing a broad spectrum of issues ranging from physical and mental health, through to economic development and property values. Furthermore, this article continues by advancing GI's capacity to tackle flood management and pollution control, facilitate mitigation of the urban heat island effect, as well as enabling climate change adaptation while concurrently assisting in meeting the requirements of environmental legislation (Clabby, 2009). Such problem appropriation and the ensuing advocacy of GI as a remedy to the perceived concerns of several problem narratives is often articulated in ambiguous terms, with the lack of specificity seemingly counterbalanced by the legitimacy endowed by GI's perceived resonance with the prevailing rationality of planning practice (see Chapter 8, section 8.3). Thus, GI is presented as a means to address a multitude of issues. Resultant from its *rationality resonance*, it is perceived that applying a GI approach to remedying such issues 'makes sense'. Consequently, those advocates of GI profit from its perceived aptitude at 'selling a concept' through assumptions on GI's capacity to endow issues with greater weight of consideration in planning policy formulation. This process thereby facilitates expansion of the GI *discourse coalition* and adds momentum to its *narrative modality* by legitimating the confident and flexible application of GI as a solution narrative via *problem appropriation*.

Imposed Rebranding

Paralleling the process of *problem appropriation* is the rebranding of existing problem-solution narratives as GI by advocates not normally party to the resolution of the issues referenced. Therefore, this process differs from the process of *elective rebranding* (see section 9.3.1) in that it is conducted by those not normally party to discussions on the issue in question. As such, it is termed *imposed rebranding*. Instance of this process are relatively common in discourses concerning GI with several of those interviewed for this thesis rebranding the activities of others as GI. These rebranded activities often varied widely. For example, one consultant planner who promotes a GI approach in urban design cited campaigners for urban gardening as advocating GI when asserting,

...they're campaigners, they're doing what they do and they want to do that, they're like, you have to group it under that you know, 'get out of my way I want this to happen', but it is Green Infrastructure...this is what it's about, guerrilla gardening. (Interviewee F1)

Another consultant involved in the production of GI strategies referenced as GI the more conformist activity of designing integrated constructed wetlands (ICW),

...the ICW is maybe the, it is the flagship green infrastructure project really, isn't it, you know, because it links wastewater treatment to biodiversity and visual amenity, possibly even, you know, is compatible with recreational green space. (Interviewee A7)

Such imposed rebranding is also evident in the context of guidance endorsement by GI advocates and may be illustrated by reference to the Comhar document entitled 'Green Infrastructure for Ireland' when it states,

The European Council of Spatial Planners, in a document titled 'Try it This Way: Checklist for Sustainable Development at the Local Level', reiterates the importance of Green Infrastructure planning in urban areas (although without naming it as such), suggesting possible components of the urban Green Infrastructure network and stressing the importance of its connection to the urban hinterland. (Comhar, 2010, 16)[Parenthesis in original]

Although less prevalent in application, of greater effect appears to be the imposed rebranding of existing statutory plans as exhibiting a GI approach. This is illustrated by the relatively frequent reference made to the Loughmacask Local Area Plan (LAP) as a model of GI planning. Exemplifying this process of *imposed rebranding* is the declaration of the GI advocacy document entitled 'Green Infrastructure: a quality of life issue',

The LAP demonstrates a clear understanding of context that informed the design and layout of the plan. It is evident that this Plan embraces the concept of considering Green Infrastructure from first principles in the preparation of an LAP and that Green Infrastructure sits comfortably within the plan making process. The

Green Infrastructure of this scheme is multifunctional and is not a burden on the public purse but rather a common sense approach to providing the environmental services for a new urban community. (UF and IEEM, 2010, 12)

However, the Loughmacask Local Area Plan (KKCC, 2008) does not actually mention GI and was produced prior to the re-emergence of the GI discourse in Ireland in November 2008 (see Chapter 5). This rebranding of the Loughmacask Local Area Plan as an exemplar of GI planning was a recurrent feature of interviews and was illustrated by one local authority planner when seeking to reference the emergence of GI within their area of jurisdiction. In doing so, this planner noted citation of the same local area plan as GI at the annual Irish Planning Institute conference of 2011,

I'm not quite sure when green infrastructure started coming into play here...I'd say the Loughmacask plan. It's like I said, it was used in the planning conference by the guy who was doing the presentation as an example of green infrastructure. Green infrastructure was never actually mentioned once in the plan, but the policies are written to favour that sort of set up. (Interviewee B13)

Thus, although acknowledging that GI is not referenced in the Loughmacask Local Area Plan, those advocating a GI approach to planning cite it as an example of GI via the process of *imposed rebranding*. In this manner, GI's flexible signification facilitates the imposed rebranding of other discourses perceived as having discursive affinities with the green space planning concerns of GI advocates. Consequently, the composition of the GI discourse coalition is viewed as expanding in parallel with the increasing range of issues embraced by the GI narrative. As a result, GI's *narrative modality* is further enhanced as it is perceived to legitimately provide a solution narrative to an enlarging number of problematic green space planning issues. The processes of *problem appropriation* and *imposed rebranding* are illustrated on Figure 9.2 below.

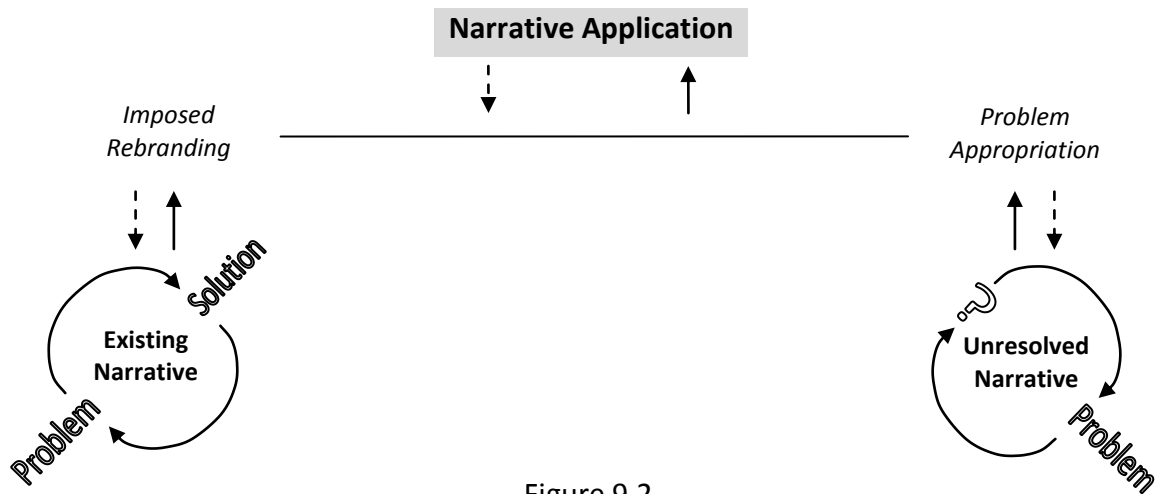


Figure 9.2
Imposed Rebranding and Problem Appropriation in Narrative Application

9.4 Conclusion

This chapter has endeavoured to address Research Question 3, namely: *how are meanings framed and advanced by different parties seeking to promote GI as a planning policy approach?* The attempted response to this question entailed outlining how GI's flexible signification permits attachment of the GI narrative to a multiplicity of problematic issues. This was undertaken by introducing and explaining how the 'mythic' qualities of *suspension* and *deflection* operate in facilitating the emergence and evolution of a discourse coalition converging on perceived discursive affinities concerning green space planning policy formulation. Subsequently discussed was how these discerned commonalities are buttressed by the discursive contamination resultant from the interpretation of GI's meaning(s) relative to conventionally conceived 'infrastructure'. Succeeding this, it was shown that perceived resonance with the prevailing rationality of planning practice fortifies the GI discourse coalition by affording the GI narrative apparent legitimacy. Demonstrated above is how in combination, these processes prompt and enable GI advocacy. This chapter has identified, described and explained a process whereby once agents adopt GI as an issue specific solution or electively rebrand their narrative as GI (problem solving), they subsequently seek to apply the GI narrative to other discourses (solution advocacy). This process has been separately illustrated in Figures 9.1 and 9.2 above, and is graphically summarised in Figure 9.3 below.

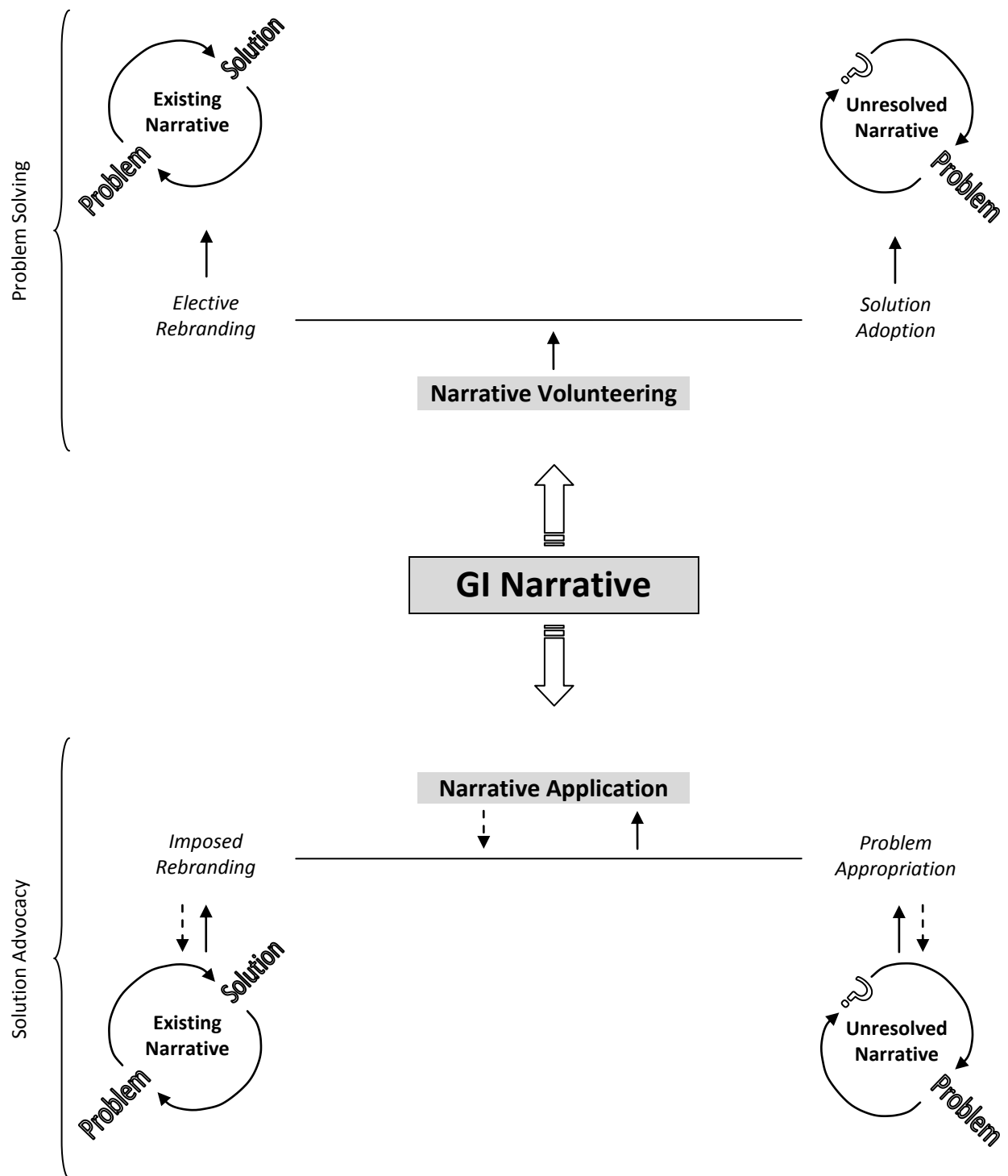


Figure 9.3
Narrative Volunteering and Narrative Application

Therefore, it is hypothesised that through the processes of *narrative volunteering* and *narrative application*, both the membership of the GI discourse coalition and the content of the issues encompassed by the GI narrative are augmented. In this way, the *narrative modality* of GI is facilitated.

It is in this context that the 'coupling' of the problem and policy streams theorised by the Multiple Streams Framework (MSF) may be observed to operate. Specifically, this process occurs in the attachment of GI as a policy solution to unresolved problem narratives (*problem adoption; problem appropriation*), and the representation of existing problem-solution narratives as GI (*elective rebranding; imposed rebranding*). Thus, it is through meaning making in the interpretation and representation of GI that the coupling of the problem and policy streams is realised.

The following chapter will extend the above discussion of agent influence on the increasing practitioner use of GI by exploring the channels of concept dissemination and the incorporation of GI references into statutory and non-statutory planning guidance.

CHAPTER 10: AGENT ACTIVITIES

10.1 Introduction

Following from the previous chapter's explanation of how the processes of narrative *volunteering* and *application* endows GI with *narrative modality*, this chapter examines the role of agent activities in facilitating the emergence and integration of GI as a policy approach within the planning system. In doing so, it will address Research Question 4: *By what means is GI disseminated and institutionalised within the landuse planning system?*

In attempting to answer this research question, the chapter presents a threefold typology for discerning the role of agent activities in facilitating the representation of GI within formal planning policy and practice. This triad of practices is namely *concept introduction*, *concept dissemination* and *concept institutionalisation*. These practices are sequentially described and analysed below. This chapter also outlines how the particularities of agent interaction with the GI discourse directly influence the ultimate institutionalisation of the concept as a planning approach. Consequently, it offers the necessary platform from which to investigate the potential implications of GI's assimilation into planning policy formulation. This examination is subsequently undertaken in Chapter 11 of the thesis.

10.2 Concept Introduction

This section investigates the dynamics of GI's re-emergence as a planning policy approach in Ireland. Specifically examined is the role of individual initiative in advancing the concept. Outlined are the reasons why one agent sought to assemble a coalition of those identified as potentially pertinent to GI's integration to planning policy formulation and practice. The effects exerted by this effort at coalition assembly are appraised. Also, considered is the part played by particular institutional attributes and managerial support in facilitating such individual initiative. In addition, this section examines the role played by an organisation with a government sponsored advocacy mandate to promote sustainable development via policy initiatives.

10.2.1 Individual Initiative

Prelude to Re-emergence

Although initially mentioned in an Irish context by Tubridy and O Riain (2002), most of those interviewed identified Fingal County Council (FCC) as the initiating source and one of the principal advocates behind GI's ascension to prominence in green space planning policy formulation. Furthermore, it was widely held among interviewees that Dr Gerry Clabby, an ecologist and FCC's Heritage Officer, was the key champion of GI both within the council and in the Irish planning system more generally. As suggested by one NGO planner advocating GI,

Gerry Clabby...I think he's probably the key person. I think probably without him we wouldn't have, maybe moved forward...I think he's probably the key champion isn't he. Everybody else has kind of just followed on you know, from that. (Interviewee E4)

For many of those advocating GI, Dr Clabby's influence is perceived as having been instrumental to the introduction and subsequent promotion of this approach in Ireland. Ironically with respect to Dr Clabby's first contact with GI, he noted that this encounter, although self-motivated, was initially unexceptional,

How I came across this concept was when I came here [FCC] first in 2003 they were doing the development plan at the time, which was adopted in 2005, and I was, just arrived after the first stage of that and the first job was 'write the natural heritage chapter for the development plan please' and I was googling things and I found this green infrastructure paper by Benedict and McMahon on the internet and I read it and I thought that's interesting, don't have time to think about it now but I'll file it away in my head and I'll think about it later. (Interview with Dr Clabby, July 2011)

However, in reflecting widespread perceptions and the broad problem narrative previously discussed in Chapter 6 (see section 6.2.2), it appears that as time progressed Dr Clabby became aware of what he considers the benefits of the GI approach outlined by Benedict and McMahon (2002). He explains the development of such ideas when conveying his observations on what he perceives as the low

profile traditionally credited to biodiversity issues in the planning policy formulation,

So you know SAC's³⁹ were very much viewed at the time as being something there that somebody else designated...but the problem with that approach was that then they [planners] were zoning land right next to them and then having an issue when somebody like me came along and said well 'now there's an issue', when you want to do something in the zoned land. So the Benedict and McMahan kind of formula of saying, well look it's about thinking early and it's about integrating these things and seeing nature conservation or other functions, like as kind of real things that you need to provide for in a planning context, you can map it, you can call it infrastructure makes it seem important, it doesn't say things like 'biodiversity' which people don't seem to understand. (Interview with Dr Clabby, July 2011)

Here, Dr Clabby expresses the view that he came to see GI as a means to address the perceived low status of biodiversity issues in planning policy formulation by offering a profile raising communicative means to address the integration of nature conservation into planning policy and practice. As previously discussed in Chapter 6 (see section 6.4), and alluded to by Dr Clabby in the extract above, this communicative act was achieved by endowing discursive weight to such issues via the connotative reasoning consequent to labelling the consideration of 'nature conservation or other functions' as 'infrastructure'. This was undertaken as a response to the perceived failure of the more scientific and unfamiliar term of 'biodiversity' to convey the importance of nature conservation to a non-scientist audience. Hence, GI was both initially perceived and employed as a means by which to articulate the importance of nature conservation, and subsequently elevate its status in planning policy formulation. Achieving this was enabled by the perceived resonance of GI with the prevailing planning rationality consequent on the term's connotations with conventionally conceived 'infrastructure' (see Chapter 7, section 7.4).

³⁹ *Special Area of Conservation* designed under the provisions of the E.U. Habitats Directive, 1992

According to Dr Clabby, his appreciation and interest in GI as a concept was intensified following further investigations into GI as a planning concept a number of years later. In particular, he became aware that GI was a discourse existing beyond academic speculation and enjoying some popularity among planning practitioners in foreign jurisdictions. This appreciation was subsequently consolidated during a study tour of the Dutch 'ecological network'. In this respect, Dr Clabby notes,

I was really impressed by their nature conservation policy at the time called 'nature for people, people for nature', and I just felt that putting people at the centre of that was really good. Something that we weren't doing at all and I felt well look that's [the] green infrastructure idea as well even though they don't call it that, but that is what it is...so then I thought...we can do that, why don't we do it, so that's kind of where all that came from. (Interview with Dr Clabby, July 2011)

Dr Clabby's emerging perception of a necessity to accommodate human landuse needs within nature conservation planning so as to both facilitate biodiversity protection and the planning of more agreeable environments for people appears to have been heavily influenced by the coincidence of this study tour with an increased realisation that GI was a planning approach adopted in a number of jurisdictions outside Ireland. This seems to have instilled a desire to introduce GI planning in Ireland so as to address issues surrounding human interactions with areas of ecological sensitivity. As noted by Dr Clabby,

...we have to get beyond regulation, you know, I mean I would be of the view that there's no point in things like the Natura 2000 network of sites, in just seeing it as a regulatory job, like that's a road to nowhere. You know we put way too much emphasis here on the regulation of these things at the moment and not enough emphasis on their potential and their ability to kind of build up community and to be places that people enjoy. (Interview with Dr Clabby, July 2011)

This developing perception of traditional environmental regulatory regimes as ‘a road to nowhere’ and the discerned need ‘to get beyond regulation’ reflects the perceived failure of existing planning approaches to ecological conservation that focus solely on the designation of particular sites for the purpose of biodiversity protection (see Chapter 6, section 6.2). This view was intensified by Dr Clabby’s evaluation that, ‘ecologists generally who all understand why biodiversity conservation is important...have not been very good at communicating this to a wider audience’ (Dr Clabby, email correspondence, March, 2012). This appraisal was lucidly conveyed when stating,

I felt well what's the point in us [ecologists] rabbiting on about this stuff and going to conferences where the only people we're talking to is ourselves and we're not talking to people who, and when the planners pull down a map and know what they want, we never know what we want other than 'protect that thing there'.
(Interview with Dr Clabby, July 2011)

Such an assessment led Dr Clabby to conclude that to effectively protect biodiversity, it is incumbent to communicate its value to society and achieve broad-based support for its conservation. This focus on communication led Dr Clabby to reason that, ‘we need to communicate the ecosystem services which biodiversity provides using the GI approach which is a language and framework that “talks to” a wider audience’ (Dr Clabby, email correspondence, March, 2012). Consequently, rather than remaining heedless to the landuse aspirations of non-ecological focused professions when formulating planning policy regarding biodiversity, Dr Clabby increasingly thought it necessary to foment support among a coalition of actors with a shared interest in green space planning. GI was identified as the communicative means by which to bridge traditional disciplinary delineations and accomplish this objective. As stated by Dr Clabby,

I like the idea then of the synergies within it [GI], in the sense that you know in order to do this stuff, I can get on board landscape architects and parks people and maybe people who have a walking and cycling agenda and so it's not just about me on my own arguing my little corner but it's about making that argument stronger by finding fellow travellers who think this kind of language if you like. So I felt the green infrastructure thing had that, all of that going for it in the sense that it looked positive...it was a language planners and spatially oriented people could understand. (Interview with Dr Clabby, July 2011)

In this sense, GI advocacy was viewed as a means from which a coalition of existing problem-solution narratives with discursive affinities centred on green space planning could achieve greater weight in policy debates by virtue of the number of issues assembled beneath the unifying rubric of 'GI' (see Chapter 9, section 9.2). It was against this backdrop that GI re-emerged as a planning discourse in Ireland at the GI conference in Malahide of November 2008. As recounted by Dr Clabby,

We had a thing in the heritage plan saying we had to have a major conference every few years so I thought well let's have a conference and for a while I was going to call it green spaces...so eventually I kind of took the courage of my convictions and said no, we'll call it 'green infrastructure', even though no one knew what it meant. (Interview with Dr Clabby, July 2011)

As previously outlined in Chapter 5 (see section 5.4.2) and discussed in greater detail below, this conference represented GI's re-introduction to planning policy debates in Ireland. Thus, Dr Clabby's role in this re-introduction process was central. Nevertheless, although Dr Clabby's endeavours to raise the profile of green space planning appear to have been instrumental to GI's re-emergence in Ireland, decisive in his ability to do so are the particular institutional attributes of the organisation in which he is located.

Institutional Facilitation

FCC is a relatively new organisation having been established in 1994 when three new local authorities⁴⁰ were created following the dissolution of Dublin County Council (Oireachtas, 1993). This comparatively recent constitution relative to most other local authorities in Ireland leads Dr Clabby to opine,

The institution here [FCC] is young...like most county councils are there for well over 100 years or more, like this one isn't, so just that sense that things are possible, that the structures that are here have only been here for 10 years so it's easy to change them...so nothing looks like it's impossible to change, if the county manager wants to change it. (Interview with Dr Clabby, July 2011)

Therefore, in addition to an insinuation of the perceived centrality of the county manager's influence in initiating organisational change, which is discussed in greater detail below, Dr Clabby concludes that the comparative youth of FCC relative to longer established authorities engenders perceptions of innovative possibilities wherein roles have not yet become 'sedimented' (Peters, 2005; Scott, 2008b). Accordingly, Dr Clabby suggests that self awareness of such dynamic potential stimulates an organisational identity of pioneering pride in which policy experimentation is favourably received rather than criticised. This assessment was expressed when suggesting,

...there's this kind of idea too that Fingal, the council does kind of different things or new things and that we're good at new things and that we're leaders somehow, you know and that people respond to that idea. So when you say to them this is a new idea, who else is doing it, no one, no one gets freaked by that, they think great no one is doing it but we're doing it, you know we're leading, that's good, you know. (Interview with Dr Clabby, July 2011)

This view was echoed and elaborated upon by another FCC interviewee, who in distinguishing FCC as an enthusiastic advocate of GI identified the age profile of the council's staff as an important factor in the institution's receptivity to GI as a new planning policy concept,

⁴⁰ Fingal County Council, South Dublin County Council and Dun Laoghaire-Rathdown County Council.

Fingal has a lot of young staff, very young staff compared to some other local authorities I know of that have a lot of older staff, and I generally find older people far less receptive to new ideas or doing these sort of things [GI] than younger ones do. (Interviewee B22)

These, and all other FCC officials interviewed for this thesis, suggested that the council's more recent establishment and age profile results in greater organisational dynamism relative to older local authorities wherein functional delineations are considered more entrenched. Consequently, those operating within FCC opine that the organisation's receptivity to new policy concepts may exceed that of other local authorities. Additionally, those local authority officials reflecting on such organisational attributes also consider the particular managerial approach of the council's senior staff to be an important factor in assisting FCC's promotion of GI.

Managerial Support

FCC officials interviewed for this thesis suggested that managerial support has been a key component in facilitating the council's advocacy of GI. The basis of such support is identified as rooted in a combination of personal-professional histories and personal-professional dispositions. Regarding the former, Dr Clabby notes,

I suppose another thing that has helped here too for me personally is that the current County Manager⁴¹ is an architect and was the Director of Planning when I came here and so I would have worked with him on the county development plan and he would have sat in an office over there, so I know him. So you know that's a real plus then when he got to be the County Manager, because it means you can go and have a conversation, which I, you know I'd have a relationship with him now that I wouldn't have had with the previous two County Managers. (Interview with Dr Clabby, July 2011)

Hence, Dr Clabby identifies a positive relationship with the council's chief executive as important to advancing his ideas on the local authority's planning policy agenda. In addition to achieving greater direct access to the council's key decision maker, Dr

⁴¹ Equivalent position to the Chief Executive in U.K. local authorities.

Clabby also concludes that the personal-professional disposition of this key decision maker has been decisive in advancing the position of FCC as an advocate of GI. Deducing this view from the manager's training as an architect and a history of previous professional contact, this conjecture is conveyed by the assertion,

I think he'd find that idea of green infrastructure as well kind of attractive in the sense that it's about quality of life, which I suppose is ultimately what architecture is about and public spaces...he understands those without even having to talk to him about it, you know, whereas a lot of other County Managers who might come from a more administrative background or an engineering background might, you might find it harder. And then he's the type of individual I think who just likes new ideas, so he's not freaked out if you come to him and say I think we should do something differently, you know. (Interview with Dr Clabby, July 2011)

Furthermore, both Dr Clabby (Dr Clabby, email correspondence, March, 2012) and other officials within the council note the endorsement for GI from departmental level management as important to facilitating its promotion. As commented by one council official,

The Director of Services for Planning...would be a strong advocate of green infrastructure and he's, you know, for the moment he's in a coordinating role in terms of the cross departmental stuff. (Interviewee B21)

Thus, it is suggested that the particular configuration of the council departments means that support by the Director of Services for Planning enables the cross departmental diffusion of the concept and the subsequent coordination of activities on its promotion. Appraisal of the significance of such senior managerial support for the advocacy of GI by FCC was echoed by another council interviewee when reasoning,

I think having buy-in from the manager and the director is a huge element to this [GI advocacy]. If you had a personality who thought this is not really that important, its only open space and stuff like that, you know, probably we wouldn't get anywhere.
(Interviewee B24)

Therefore, the common identification of FCC, and more specifically Dr Clabby, as the key initiating champion of GI in Ireland is not simply consequent on the success in communicating a personal aspiration to raise the profile of green space planning policy formulation. Rather, such advocacy accomplishment rests on a complex conjunction of: (a) individual initiative; (b) the facilitating attributes engendered by institutional history, composition and identity; (c) personal-professional relationships; and (d) the dispositions of senior management.

10.2.2 Advocacy Mandate

In addition to Dr Clabby, several interviewees identified Comhar, the Irish Sustainable Development Council, as an eminent advocate for GI. Specifically, many of those consulted perceived as important the role of Comhar's GI advocacy document entitled, 'Creating Green Infrastructure for Ireland: enhancing natural capital for human well being' (Comhar, 2010b). This document presented a map based methodology for GI planning and references several international case studies in explicating its approach.

Operating according to a three year work programme, Comhar specified a number of advocacy objectives in 2009 to pursue until the next programme review in 2011. In reflecting upon the decision to include GI promotion in the 2009-2011 advocacy programme, one Comhar interviewee identified the influential role of the FCC organised GI Conference in Malahide of November 2008 which was initiated by Dr Clabby,

...our programme was developed in 2009 and it [GI] was one of the key areas that was selected, mainly because it was seen as something that could have a huge impact and it was something that kind of makes sense...one of the first times I heard of it was [when] Fingal County Council held a conference in 2008. Gerry Clabby was heavily involved in that and they're kind of very keen to implement it and they kind of identified it as something that could really help them in terms of planning. So I suppose the arguments they were making were things that, just kind of made sense to follow it up with a research project. (Interviewee C2)

Echoing Dr Clabby's assertions on the reasons for promoting a GI planning approach, Comhar also related a problem narrative regarding the perceived failure of traditional landuse policy to facilitate effective nature conservation in Ireland consequent on its low profile in planning practice (see Chapter 6 and section 10.2.1 above). Such an assessment was reflected in interviews with Comhar staff, in which it was conveyed that GI was identified as a means to address such a problem,

You know, nature conservation, current practises weren't working and they certainly weren't working in the planning process. So we felt this [GI] is a way of trying to make a useful contribution to that. (Interviewee C8)

Specifically, GI was perceived as a means to raise the profile of nature conservation in planning policy by emphasising the society servicing functions of green spaces. Here GI was perceived as a method,

...to bring ecosystem goods and services from just a concept into something that was actually taken into account in planning decision so that whenever you look, you know, from a planning perspective, if you're looking on the environment and you have a map which would usually just be a habitat map instead of just saying what it is, it's also what it does. So it's not just the woodland, a river corridor, it's about carbon sequestration, it provides fuel, it provides flood amelioration, it provides water, all of these things...(Interviewee C8)

GI's capacity to resolve the problem of the low profile of nature conservation in landuse policy formulation via such a reorientation of how green space is conceived in planning was thought to rest in the perceived resonance of the approach with the prevailing rationality of planning practice (see Chapter 8). Such a view was expressed in a Comhar GI advocacy document when declaring that the,

Green Infrastructure approach to planning is grounded in sound science, spatial and landuse planning theory and practice.
(Comhar, 2010, 59)

Thus, inspired by the Dr Clabby-initiated and FCC-organised GI Conference of 2008, the staff of Comhar perceived GI's resonance with 'planning theory and practice' as offering a means to remedy the profile problem of nature conservation issues previously seen as lacking discernible resolution. However, for both Dr Clabby and Comhar, solving the problem of the perceived poor profile of nature conservation in planning practice entailed the widespread integration of GI into landuse policy formulation and practices. Realising this objective thus necessitated the dissemination of the concept among those deemed pertinent to its assimilation into planning and allied disciplines.

10.3 Concept Dissemination

Concept dissemination comprises the various agent activities employed in diffusing the GI concept among those deemed pertinent to its assimilation into the planning system. This entails the parallel processes of *conspicuous* and *inconspicuous promotion*. Whereas the latter involves discreet acts of concept transmission through the use of both formal and informal professional networks, the former entails public acts of advocacy. Each of these processes is discussed below.

10.3.1 Conspicuous Promotion

Coalition Assembly

The assembly of coalitions of potentially interested parties in green space planning policy formulation was identified by interviewees as a key element in the dissemination of the GI concept. Indeed, such *conspicuous promotion* marked the

re-introduction of GI into Irish planning policy debates with the GI Conference in Malahide in 2008 initiated by Dr Clabby and organised by FCC. Many of those interviewed noted that prior to this conference they would have possessed little if any knowledge regarding GI as a planning concept, with one interviewee indicating that the conference 'was almost like an awakening of the concept of green infrastructure for those attending' (Interviewee C7). Comprising a large attendance of politicians and allied landuse planning and design professionals from the public, QUANGO, NGO and private sectors, the conference represented a broadly sourced assemblage of actors potentially pertinent to the dissemination of GI among those concerned with the formulation of green space policy. As conveyed by one senior local authority planner,

There was an awful lot of people there, like I mean there was something like three hundred people at it so it was huge...and he [Dr Clabby] had all the engineers...and he had politicians and you know, it kind of sold the concept... (Interviewee B16)

By assembling such a broad based collection of actors with numerous perspectives on green space planning, mutual awareness of discursive affinities in their problem narratives was facilitated. This enabled the formation of a discourse coalition consequent to fomenting the perception that through the rebranding of their various planning concerns as GI, a range of issues could be addressed by means of a single planning approach. This observation was related by one interviewee in surmising,

...it kind of showed how doing one thing can meet a range of different things all at once, you know, so I think it just allowed the various professions and I suppose, stakeholders to see that if they bought into the concept that it will deliver stuff that all of us need. (Interviewee B16)

Almost all of those interviewed identified the conference as important in disseminating GI as a planning policy concept in Ireland. As noted by one local authority official,

I think particularly after the conference that Gerry organised, that got a lot of people thinking about it [GI] and they definitely saw the benefits of it, that was a really, really good move. (Interviewee B22)

Dr Clabby also identified that an important outcome of the conference was its role in stimulating colleagues within FCC to advocate the concept. However, such an outcome was not resultant simply from the self-motivated desire of colleagues to attend the event, but rather was consequent on efforts by Dr Clabby to generate interest in GI among fellow professionals and management within the local authority. This view was expressed by Dr Clabby when reflecting,

I invited all the directors here at the time, you know and I talked to them all, I went to them all and said look I want you to come to this and actually most of them, all of them came. Because suddenly when the thing got legs and I had all these speakers...it looked like a big kind of Fingal County Council event so people did come on board. (Interview with Dr Clabby, July 2011)

Subsequent to their attendance at the conference, Dr Clabby noted an enthusiasm within the local authority for the promotion of GI. This conference-engendered coalition of support prompted an aspiration to integrate the concept into the forthcoming Fingal County Development Plan. Such a desire was to help consolidate an identity for FCC as one of the foremost champions of GI; a perception held both by council staff and those outside the local authority referencing the green space policy provisions promoted by FCC as an example of GI planning.

As discussed above (section 10.2.2), Comhar adopted the promotion of GI as an objective for its three year 2009-2011 programme. The decision to include GI within this programme was influenced by the FCC GI Conference in 2008. As part of this programme, Comhar commissioned the production of a GI Baseline Research Study. The project specifications accompanying the tender for this project required the presentation of preliminary results at a conference held in November 2009 (Comhar, 2009a). Whilst this conference addressed many issues relating to

planning and sustainability, presentations were made of draft GI planning work produced by the Comhar consultant team. Attendance at this conference was later used as to identify and source participants for a specific Comhar GI workshop the following spring (Comhar, 8th February 2010). The format of this workshop consisted of a number of presentations on the draft GI planning research undertaken by the Comhar consultant team. Feedback was then sought from the audience. However, in addition to providing input into the ongoing development of Comhar's GI work, such *conspicuous promotion* was initiated so as to specifically facilitate assembly of a constellation of actors identified as potentially important to the dissemination, and ultimately the implementation of the GI concept. This function of the GI workshop, and the Comhar advocacy strategy more generally, was outlined by one Comhar interviewee when stating,

...the real audience was policy makers...it wasn't just the report, it was the whole process of developing the report because we did it in a very participative way, we were inviting all the people who would have been the target audience to get involved in the actual preparation of the work... (Interviewee C8)

Reflecting on the production of the Comhar GI report published in August of the same year (Comhar, 2010b), one of the consultant team members involved in its research, drafting and presentation concluded that it was in this process of *coalition assembly* that the *conspicuous promotion* of GI by Comhar was most successful. This view was expressed in the assertion,

I think maybe, possibly the workshop had the most impact, in that it pulled together a whole lot of people from government departments and planning departments to talk about the concept and that was very useful. (Interviewee A2)

Nevertheless, such *coalition assembly* was not the only form of *conspicuous promotion* undertaken by those seeking to advance the concept's dissemination and integration into planning policy formulation. Key to such activities was the provision of references in facilitating orientation for those perceiving GI as a means to remedy their unresolved policy problems or as a way to achieve greater consideration for their existing problem-solution narratives (see Chapter 9).

Reference Provision

Several of those interviewed suggested that the provision of references upon which to orientate interpretations of GI is an important factor in the dissemination of the concept. In this sense, the 2008 GI Conference is perceived by many as significant in having introduced the concept to an Irish audience via examples of successful planning activities in other jurisdictions deemed to epitomise a GI planning approach. This view of the role played by reference provision in the dissemination of the GI concept was expressed by several interviewees and appraised by one local authority official with regard to the decision by FCC to advance the approach,

...because the manager got behind it and all the directors and seniors...I think seeing that, and we'd people over from America and Holland and places like that giving presentations and they were talking about what it had done for them, you know, that I think they could see that internationally it was working and that nationally there was an interest, that I think was the key catalyst.
(Interviewee B24)

Such presentations and the resultant interpretation of GI's potential applicability in an Irish context instilled in some FCC officials a desire to integrate GI planning into their own work. Witnessing the influence of such presentations also engendered the perceived necessity of reference provision in fomenting the coalition of support seen as required to facilitate dissemination of the GI concept. Such a view was expressed by one FCC interviewee when concluding,

...they [land owners and planners] need to see the examples first of all, there's no point telling them from a book or a picture...I think Fingal is kind of quite a bit ahead at this stage, so if we can show that it works it might be a lot easier to convince others, like we have a map now, we have a program of building that infrastructure so we can go back to people, [and say] 'and these are the projects that we're doing'. (Interviewee B22)

This perceived need to furnish references from which to illustrate the advocated benefits of a GI approach was also identified by those within Comhar as an important element in the concept's promotion among policy makers. Specifically, those within Comhar discerned the confusing array of internationally dispersed GI

exemplars as problematic to the concept's dissemination. Thus, one of the primary functions of the GI Baseline Research Study (Comhar, 2010b) was reference provision regarding what GI entails. Endeavouring to achieve this, the Comhar report collated and lucidly presented a series of case studies which it deemed to help illustrate the GI concept. This aspiration was conveyed by one Comhar interviewee when noting,

...if you're looking at a planning approach well yes, then there's information on how to produce [GI] in countries like the Netherlands and Estonia and America on how people have used that approach, I mean you can look for case studies on how it's been used for conservation and things but you know, one of the things that we found is there wasn't really a one stop shop or something that you could go to that told you about what Green Infrastructure was as a concept, how it could be used, etc, etc so that's why we tried to pull a lot of that stuff into the report so it would just act as a source of information. (Interviewee C8)

As discussed above (see section 10.3.1), part of the production process of Comhar's GI Baseline Research Study involved the presentation of a draft version of the document at a conference in November 2009. Comhar used this conference as an opportunity for reference provision in clarifying and advancing what it deemed was an appropriate interpretation of GI for Ireland. Here, Comhar presented a number of cartographic based examples of how local authorities in Ireland could assemble and employ an assortment of existing databases to formulate GI planning strategies.

In addition to Comhar's work, the Urban Forum⁴² sought to maintain interest in GI planning following the 2008 GI Conference. Comprising a coalition of professional institutes focused on promoting shared concerns on built environment issues, the Urban Forum sought to achieve this by combining efforts with the Institute of Ecology and Environmental Management (IEEM) in disseminating awareness of the

⁴² 'A joint initiative by the five Institutes representing the built environment professions in Ireland; Royal Institute of Architects in Ireland, Society of Chartered Surveyors, Engineers Ireland, Irish Planning Institute and Irish Landscape Institute. The Urban Forum facilitates and promotes debate on issues pertaining to urban planning and urban design within Ireland.' (UF & IEEM, 2010, 1)

concept to both its professional members and those with an interest in the built environment more generally. Particularly, it aspired to expand the Irish-specific reference furnished by the Comhar GI Baseline Research Study. As recalled by one of the authors of the GI advocacy document emanating from such combined efforts, it was hoped to produce,

...a document or a pamphlet on green infrastructure that would, at a very basic level, would provide a definition, which I think is very useful because there are now two documents⁴³ in the public domain in Ireland that someone could quote for a definition of green infrastructure...I mean we've seen other similar documents produced in the UK but I think it was good to have, create our own... (Interviewee A7)

In this sense, Irish *reference provision* was employed as a means to advance the GI concept. Particularly, such *reference provision* facilitated the dissemination of the GI planning approach among a cohort of allied professions seen as responsible for urban landuse planning policy formulation. This function was expressed by one of the document's authors when reflecting on its purpose as,

Ultimately awareness raising or another way of thinking about that is, is seeding, seeding the term green infrastructure and the concept of green infrastructure through, through the body of people, of persons working in the built environment and beyond. (Interviewee A7)

While 'seeding' the GI concept via the provision of references was perceived as essential to the approach's dissemination, concurrent with such activity was the 'broadcasting' of its benefits to a variety of audiences involved in the planning and management of green spaces.

⁴³ The other document referred to here is the Comhar document published in August 2010 entitled, *Creating Green Infrastructure for Ireland: enhancing natural capital for human well being*. The genesis, form, content and influence of this document is discussed above.

Broadcasting

In addition to the abovementioned GI Conference in Malahide in November 2008 and the Comhar presentation of its draft GI Baseline Research Study at the Annual Joint Biodiversity Conference in November 2009, those advocating GI sought to *broadcast* the approach's benefits at various venues and to an assortment of individuals perceived as influential in planning policy formulation. For example, in April 2010, the director of Comhar employed material produced in drafting Comhar's GI Baseline Research Study to structure a presentation on GI to the Irish Planning Institute's Annual Conference (Comhar, 2010d). In November of the same year, Dr Clabby outlined the GI approach being promoted by FCC in a presentation on biodiversity and planning to the Institute of Ecology and Environmental Management (IEEM) at its Autumn Conference (Clabby, 2010). In May of the following year Dr Clabby delivered a presentation at a conference organised by the Dublin Regional Authority as part of a European regional planning initiative known as the Peri-Urban Regions Platform - Europe (PURPLE). Here, Dr Clabby outlined the potential role of a GI planning approach in facilitating the development of sustainable communities (Clabby, 2011). In addition to presenting at the IEEM and PURPLE conferences, Dr Clabby was also actively involved in *broadcasting* GI via presentations to colleagues within the local authority in which he is embedded and through presenting on the concept to those charged with managing local authority public green spaces via the Parks Professional Network (refer to section 10.3.2 below). As reflected on by Dr Clabby,

I talked to people or if people ask me to give a talk I did it. And I suppose because I had a background in lecturing and stuff, you know I was happy to do all that stuff. (Dr Clabby Interview)

Hence, Dr Clabby's self motivated initiative in confronting the perceived low profile of green space in policy formulation resulted in the re-emergence of GI via the 2008 GI Conference. His professional history as a university lecturer and enthusiasm for the concept's dissemination were also important factors in helping to broadcast GI's advocated merits among audiences of varying disciplinary backgrounds deemed relevant to the approach's integration to landuse planning.

The Irish Planning Institute (IPI) Annual Conference also occurred in May 2011. One of the contributing authors to the combined Urban Forum and IEEM GI advocacy document was invited by the IPI to deliver a presentation on GI at this conference. The presentation that was given employed illustrations to outline the merits of GI to a large audience of planning professionals, many of whom were directly involved in the formulation of green space planning policy (MacDomhnaill, 2011). The rationale for the IPI seeking this presentation was rooted in the perceived harmonisation of the GI concept with planning activities and its perception as a progressive approach to landuse management (see Chapter 8, section 8.2.1). As such, the IPI judged that knowledge regarding the GI planning approach should be disseminated among the planning profession. This opinion was expressed by one IPI member involved in seeking GI's inclusion as a presentation at the conference when declaring,

I think sometimes in the planning profession it's very important that we continually educate ourselves and continually kind of keep up to speed...getting it [GI] out there and talking about it at the IPI conference, I think that's a service to our members that we're kind of saying to them look, this is what's coming down the track, this is another way of looking at things and I think that's important.
(Interviewee B12)

Thus, in addition to *coalition assembly*, and *reference provision*, *broadcasting* was employed as a means by which to disseminate the GI concept among a cohort of planning and allied professionals considered pertinent to its integration into landuse policy formulation. However, the dissemination of the GI planning approach was not confined to conferences, publications and presentations. Rather paralleling such *conspicuous promotion* was the concept's advocacy by way of 'inconspicuous promotion'.

10.3.2 Inconspicuous Promotion

Inconspicuous promotion operated simultaneous to that of *conspicuous promotion*. However, whereas the latter employs publicity to disseminate the GI concept and engender support for its integration to planning policy and practice, *inconspicuous promotion* entails discreet acts of concept transmission through the use of both formal and informal professional networks.

Formal Professional Networks

Besides disseminating the concept among a national constellation of green space planning policy interests, and encouraging the formation of a coalition of support for the concept within FCC, the 2008 GI Conference in Malahide was also instrumental in instigating a network of GI advocates interested in promoting the concept among a number of professional institutes. As discussed above (see section 10.3.1), this was initiated through the auspices of the Urban Forum, and latterly the IEEM. One attendee at the conference recalled the processes leading to the Urban Forum's involvement in GI advocacy when stating,

Fingal hosted a conference on green infrastructure in 2008 and the promoter⁴⁴ of the conference was anxious...that there would be some follow-on from that conference...so the Urban Forum discussed it and suggested that they could facilitate a colloquium on green infrastructure...So the colloquium was held, it was well, reasonably well attended and the chairman of the Urban Forum at the time...he suggested after the colloquium meeting you know, for me to consider another follow-on from it, you know, is there anything else that we could do, so it was then that I came to him with the concept of producing a document or a pamphlet on green infrastructure. (Interviewee A7)

In this sense, inconspicuous promotion via a formal professional network helped fashion a discourse coalition of supporters by way of discursive affinities among a constellation of professions concerned with urban landuse planning issues (see Chapter 9, section 9.2.1). Such actors subsequently sought to pool their perceived shared interests by forging an advocacy network of allied institutions seeking to

⁴⁴ Dr Clabby, Heritage Officer, FCC

promote their member's interests through advancing the concept's dissemination. Resultant from this process was the publication of a GI advocacy document produced, disseminated and endorsed by the institutes of the Irish planning, engineering, landscape architecture, ecological and surveying professions (UF and IEEM, 2010).

Outside of the role played by these professional institutes, many of those interviewed identified both parks and heritage officers as key to the dissemination of the GI concept within the local authority system. As observed by one senior local authority planner,

I think it will always be the likes of parks and the heritage officers that will always lead the way because...an element of them is coming in from outside because of the heritage, their connection to the Heritage Council. That is, part of their role is to keep pushing the council to do things that they naturally don't do. (Interviewee B16)

Working on a broad definition of 'heritage', the function of these heritage officers is to help coordinate and provide input to numerous council activities ranging from natural environmental issues through to landscape and archaeology, as well as built and cultural heritage matters (see Chapter 5, section 5.2.3). As such, their activities frequently interact with the local planning policy development process. There are twenty seven heritage officers in Ireland distributed throughout various local authorities. Although it is not mandatory for a local authority to employ a heritage officer, the majority of the larger county councils and all but two⁴⁵ local authorities in the country's major urban centres chose to do so. The ability for heritage officers to disseminate and promote new heritage management concepts with the local authority in which they are situated is facilitated by knowledge exchange between heritage officers. This is assisted by the Heritage Officer Network. This network is coordinated by the Heritage Council, which is the state sponsored body responsible for the promotion of heritage related issues in Ireland. Among those heritage officers interviewed, all identified this professional network as central to the

⁴⁵ Limerick City Council and Waterford City Council.

dissemination of the GI concept within local authorities. This was expressed by one such heritage officer when noting,

I think it's very important, you know, we meet four times a year...so we have a heritage officer's training course, a two day training course...at which, you know, pertinent issues are discussed. And again the green infrastructure has come up again and again. So, you know, heritage officers go back to their own counties and see where they can start implementing that.
(Interviewee B9)

Additionally, some of those interviewed noted the position of Dr Clabby as a member of the Heritage Officer Network as an important factor in aiding the dissemination of the concept throughout local authorities. This observation was conveyed by one heritage officer when suggesting,

I think the heritage officers have been quite instrumental and Gerry [Dr Clabby] in particular, has been very instrumental in getting it talked about within the local authority system...
(Interviewee B7)

This deduction is made consequent to Dr Clabby's use of the GI Conference which he organised in 2008 as a training session for his heritage officer colleagues (Interviewee B7). Thus, by using an established professional network of heritage officers, in which he was embedded, Dr Clabby was able to disseminate the GI concept among a receptive audience of colleagues whose function is to advocate heritage management within local authorities. In this sense, an existing formal professional network was employed to precipitate the circulation of the GI approach throughout the planning system by enrolling in its advocacy those charged with assisting in the formulation of local authority planning policy relevant to a wide array of heritage issues.

Along with the Heritage Officer Network, the GI concept was also disseminated by means of the Parks Professional Network. This is a network of officials charged with the management of open spaces within local authorities. Similar to the Heritage Officer Network, the function of the Parks Professional Network is to facilitate

knowledge exchange among professionals working in different councils. As noted by one local authority parks professional,

I suppose what we've done is we've tried to bring speakers to the network to explain about green infrastructure...the whole idea is to spread the information that's there, and green infrastructure is one of the things we want to spread. (Interviewee B4)

By invite from the Parks Professional Network, Dr Clabby provided one such presentation, thereby aiding the dissemination of the concept among those charged with the management of local authority parks. Subsequently, this network decided to advocate the GI approach among its members. Furthermore, Comhar provided a presentation on GI at the Parks Professional Network Seminar Day in June 2010 (Comhar, 2010e). Thus, in conjunction with the various professional institutes comprising the Urban Forum, and in addition to the Heritage Officer Network, the Parks Professional Network was employed to facilitate the dissemination of the GI concept. Consequently, the circulation of the GI concept within the local authority systems was effected through multiple entry points and from numerous disciplinary perspectives via established formal professional networks. Concurrent with this process of dissemination via established formal professional networks was the use of informal professional networks of contacts and colleagues to advance the concept's circulation throughout the planning system.

Informal Professional Networks

Several interviewees noted the importance of informal relationships among professionals as key to the dissemination of the GI concept within the planning system. As observed by one local authority planner when discussing adoption of the GI concept,

...it all comes down to if you work in an area a long time you build up relationships...a lot of it in local authorities is down to that relationship network that you have that you've someone you can ring up, there's very little formal structure for inter-disciplinary working in local authorities. (Interviewee B14)

Thus, the perceived vacuum left by the lack of formal structures for inter-disciplinary activity in local authorities among those not party to strong formal professional networks, such as the Heritage Officer Network, is filled by the use of informal professional networks in facilitating knowledge exchange. Also suggested by this interviewee is that such networks develop over time. Therefore, in contrast to 'enacted' (Scott, 2003; 2008b) formal professional networks whose establishment is ostensibly designed to facilitate knowledge exchange, informal professional networks evolve among professionals with existing working relationships to enable the successful exchange of knowledge regarding inter-disciplinary issues falling outside the administrative delineations of the local authority system. In the case of GI, informal professional networks were important in disseminating the inter-disciplinary GI concept among a cohort of senior planning officials positioned in local authorities. As noted by Dr Clabby,

A lot of people came through here in the boom period and so I'd know planners like around the place, you know, more than I probably should and it's good, they're in senior positions now around places. (Interview with Dr Clabby, July 2011)

The significance of such relationships with a dispersed community of senior planning officials was manifested in the decision by those drafting the Regional Planning Guidelines for the Greater Dublin Area 2010-2022 (DRA and MERA, 2010) to promote GI. As recalled by the planner responsible for drafting these regional planning guidelines (RPGs),

I had come out of Fingal County Council and would have known Gerry Clabby very well...he came to me when he was talking about organising the green infrastructure conference [2008 Malahide GI Conference]...he basically came to me with the concept and said you know, would you agree to have the regional authority as one of the organising, kind of, the supporters of it...he explained the concept and I thought it was a great idea and I thought...how timely it was because it was just at the start of the review of the RPGs...so we backed the conference and then I suppose in backing the conference and seeing how the conference went, decided that

that was definitely something that the RPGs could get involved in.
(Interview with Deidre Scully, July 2011)

In this way, an informal relationship founded on a history of having worked together within the same organisation facilitated discussion on the potential promotion of the GI concept within the Regional Planning Guidelines for the Greater Dublin Area. Such informal professional networks were also identified as important in furnishing examples of GI planning in Ireland which could be employed in the provision of GI references towards which to orientate planning activities. This was noted by one of the authors of the Urban Forum and IEEM GI advocacy document when reflecting,

...colleagues, landscape architectural colleagues and ecologist colleagues have been able to direct me towards literature and books...it's basically you know, [a] network, somebody puts you in touch with somebody, like probably would be an example with... [name⁴⁶]. Someone gave me his phone number and I rang him up and went down and met him, and he showed us around...(Interviewee A7)

Thus, although in some cases such informal professional networks purely assisted in furnishing examples of GI for advocates seeking GI references and the broadcasting of the concept's merits, with regard to the regional planning guidelines, a personal-professional relationship was central to the approach's institutionalisation in planning policy. As such, whereas formal professional networks may have facilitated widespread dissemination of the concept throughout the planning system, an informal relationship between key actors positioned by professional role and fortuitous timing was central to the approach's formal representation in statutory planning policy. This process of 'concept institutionalisation' is examined next.

⁴⁶ Person's name removed to ensure their anonymity.

10.4 Concept Institutionalisation

The Irish planning policy hierarchy is a three tier structure (see Chapter 5, section 5.2.2). Since the advent of the Planning and Development (Amendment) Act 2010 (Oireachtas, 2010), all landuse policy provisions within this structure must be consistent with the stipulations provided in higher tier guidance. Hence, 'your local area plans [are] referenced to your county development plan, [the] county development plan is referenced to the RPGs' (Interviewee B19). In this sense, many of those interviewed felt that inclusion and advocacy of the GI concept within the various Regional Planning Guidelines (RPGs) is decisive to institutionalising GI as a planning approach within the landuse governance system. As concluded by one local authority official who advocates a GI planning approach,

...it has to be in the regional planning guidelines first. That has to be translated down to the next level in the county development plan and then so on into your local area plans...it can't be purely reliant on just the personnel within the local authorities that if they have an interest in this that you will come up with a green infrastructure strategy. It has to be at a higher level that every, county development plan is required to have a green infrastructural strategy. (Interviewee B1)

Thus, those advocating a GI approach to planning surmise that its institutionalisation cannot be realised solely through promotion by interested members within local authorities. Rather, they contend that such institutionalisation necessitates direction from the regional tier of the planning hierarchy on the requirement to include GI within local level landuse policy. Therefore, those advocating GI at the local authority level in the councils of the Greater Dublin Area were generally receptive to the promotion of the concept within the Regional Planning Guidelines for the Greater Dublin Area which was formally adopted June 2010. As reasoned by one local authority planner,

I feel the idea of green infrastructure in the RPGs is basically putting the seed into local authorities that this is something that they have to do in their development plans. Once it's planted in the development plans there is no getting away from it. (Interviewee B2)

Such development plans comprising written text and accompanying maps form the primary planning guidance document within a local authority area. Councils are legislatively obliged to produce and formally adopt a new development plan every six years. In addition, local authorities are required to commence production of a new development plan in year four of this six year cycle (Oireachtas, 2000). Consequently, several interviewees concluded that the timing of the introduction of a new policy initiative during this production period influences its assimilation into the forthcoming plan. As remarked by one local authority official with regard to GI,

I suppose it's something up and coming you know, perhaps it's the timing, each county has their own timing set out for their development plan so pretty much you can only decide on what's relevant at the time. So green infrastructure, if it's becoming the vogue or the thing to be doing, well then as each county introduces their new development plan it will probably become either a chapter or a section in their development plan. (Interviewee B23)

This observation appears especially pertinent with regard to a number of counties located within the Greater Dublin Area, where GI enjoys greatest representation in statutory planning policy. Indeed, consequent on the dissolution of Dublin County Council and its replacement with three separate county councils⁴⁷ in 1994 (Oireachtas, 1993), the development plan production time table for each of these comparably new authorities runs approximately in parallel. The Dublin City Council development plan production period also corresponds with these authorities.

Therefore, the introduction of a new policy initiative at an opportune moment for integration into one of these plans would entail its fortuitous timing for assimilation into all four plans. It transpired that all four authorities formally adopted new development plans between November 2010 and April 2011, thus implying that all four authorities commenced preparation of these plans between approximately November 2008 and April 2009. Given that the Malahide GI Conference occurred in November 2008 and was attended by policy planners from all of these local authorities, it can be surmised that those formulating the green space planning

⁴⁷ Fingal County Council, South Dublin County Council and Dun Laoghaire Rathdown County Council

policy for each of these plans would have been aware of the GI concept. It is also noted that Kildare County Council, one of the local authorities within the Greater Dublin Area and adjacent South Dublin County Council, also formally adopted its current development plan in May 2011, implying commencement of plan preparation in approximately May 2009.

Interviewees from each of these local authorities indicated the important role played by *conspicuous* and *inconspicuous promotion* in the dissemination of GI within their employer organisation. Thus, it can be deduced that prior to the adoption of the Regional Planning Guidelines for the Greater Dublin Area (RPGGDA) in June 2010, awareness of the GI concept would have existed among the planning staff in each of these local authorities. In this sense, rather than introducing the approach afresh, the RPGGDA gave greater weight to GI's institutionalisation by promoting the integration to planning policy of a by now familiar concept. This is evidenced from the fact that GI was already represented in the draft plans for public consultation of Dublin City, Fingal County, South Dublin County and Kildare County Councils prior to the formal adoption of the RPGGDA in June 2010⁴⁸. However, GI was not represented in the development plan for Dun Laoghaire Rathdown. This development plan was formulated in a cycle between six months to a year ahead of the other plans. It was thus initiated and formally adopted at minimum of half a year prior to the formal adoption of all the other development plans in the Dublin region and the coming into force of the RPGGDA. Nevertheless, the first planning guidance document produced by this council subsequent to the adoption of its county development plan advocated a GI approach to local area planning by way of a proposed variation to this county development plan (DLRCC, 2011). Thus, by the winter of 2011 the GI planning approach had become

⁴⁸ Wicklow County Council, which is located within the Greater Dublin Area, did not represent GI in its draft development plan for 2010-2016 issued for public consultation between October and December 2009. Rather, following a review of submissions on this draft public consultation document in March 2010, it was decided by the Council to include a section on GI. The Wicklow County Development Plan 2010-2016 was formally adopted in September 2010. It includes two objectives on GI (Section 17.7: GI1 and GI2). Although staff at this local authority have been quizzed regarding the process leading to GI's representation in this plan, it has not been possible to definitively establish the route leading to its inclusion in the plan.

institutionalised within regional and local authority planning policy formulation across the most densely populated region of the state (see Chapter 5, section 5.6).

Although, the concept was circulating widely among planning and allied practitioners by the winter of 2011, and was cursorily represented in a number of county development plans⁴⁹ adopted in other regions during this period, institutionalisation as a planning policy approach outside the Greater Dublin Area was comparatively less well represented⁵⁰. This may reflect the development plan preparation cycle, as most county, town and city development plans under review since November 2008 have included GI policy provisions when formally adopted. Nevertheless, the short references to GI in a number of county development plans, largely removed from the Greater Dublin Area, suggests the infiltration of the concept into more rural south and west coast council areas beyond Ireland's more urban and affluent eastern region. As concluded by one local authority planner,

I think the more it's talked about and the more it turns up in plans the more it becomes common practice to build it in and for those that aren't maybe as driven about it...it will become the norm for them to consider it...Now it mightn't be something that they have their heart and soul in but it will be seen as something that is part of the job and not something that's new. The more that it becomes part of the job the better, because then it's in every plan everywhere. (Interviewee B16)

Hence, by virtue of its increasing representation in common planning parlance and practice, it is perceived that the now well represented concept of GI planning will become a standard approach to planning policy formulation throughout Ireland. In this sense, it is assumed that GI planning will move beyond its current institutionalisation in the policy formulation activities of planning authorities in

⁴⁹ Clare County Development Plan 2011-2017 (adopted January 2011); Waterford County Council Development Plan 2011-2017 (adopted February 2011); and Sligo County Development Plan 2011-2017 (adopted May 2011).

⁵⁰ The one exception to this is the Galway City Development Plan 2011-2017, which was formally adopted in February 2011, and as discussed in chapters 5 and 9 above, rebranded its long established 'green network' approach as GI.

Ireland's eastern regions⁵¹ and ultimately be institutionalised throughout all the planning authorities of the state by becoming 'the norm' of planning practice.

10.5 Conclusion

This chapter has endeavoured to address Research Question 4, namely: *By what means is GI disseminated and institutionalised within the landuse planning system?* This required an exploration of agent activities in disseminating the GI concept. In venturing to achieve this, the chapter has presented a threefold typology for discerning the role of agent activities in facilitating the representation of GI within formal planning policy. This triad of practices is namely *concept introduction*, *concept dissemination* and *concept institutionalisation*.

The discussion presented in this chapter identifies the centrality of policy entrepreneurialism in stimulating debate regarding GI. Specifically described is how individual initiative in response to the perceived low profile of biodiversity and green space issues in planning practice and policy resulted in the introduction of GI to landuse policy discussions. This exposition also explains how such initiative was facilitated by institutional attributes and managerial support. Additionally, the discussion identifies and explains the GI promotion role of an organisation with a government sanctioned advocacy mandate.

This chapter has also described how concept dissemination was achieved via a dual process of *conspicuous* and *inconspicuous promotion*. In particular, it is outlined how the promotion of GI among those involved in the formulation of planning policy, and the subsequent advocacy of GI by these individuals, primed the policy agenda landscape for concept integration when regional guidance, as well as county, town and city development plans came up for review. Consequently, it is concluded that a conjunction of fortuitously positioned self-motivated personalities and opportune timing in the legislatively prescribed planning guidance cycle was decisive in the institutionalisation of GI as a planning approach in Ireland.

⁵¹ The Mid-Eastern Region and the Dublin Region which together comprise the Greater Dublin Area.

It is in this sense that the activities of both Comhar, and especially Dr Clabby, in introducing and advancing the GI concept via various forms of *conspicuous* and *inconspicuous promotion* exhibit what the Multiple Streams Framework (MSF) terms 'policy entrepreneurialism' (see Chapter 3, section 3.3.1). In particular, Dr Clabby demonstrated entrepreneurial capacity in representing GI as a solution (policy stream) to a broad spectrum of problematic policy issues (problem stream). This was enhanced by his ability to present GI as harmonising with the prevailing rationality of planning practice, and to capitalise upon favourable organisational attributes and managerial dispositions (politics stream). Such adept entrepreneurialism enabled Dr Clabby to successfully 'couple' the problem, policy and politics streams when 'windows of opportunity' emerged for the institutionalisation of the GI concept within the planning system. The following chapter will extend this discussion by offering an interpretation of the potential implications of the institutionalisation of the GI planning approach.

SECTION 5: DISCUSSION

(Chapters 11-13)

This final section of the thesis examines the case study findings presented in Section 4 relative to the academic literature discussed in Section 2. It furnishes an innovative model of meaning making in the policy process. Thus, this section provides an original contribution to our theoretical knowledge of the policy process. This section consists of three chapters.

Chapter 11 considers the potential implications of GI's institutionalisation into landuse planning policy in Ireland.

Chapter 12 addresses deficits in our knowledge of the policy process by offering an exposition of the role played by meaning making in the initiation, promotion and adoption of a new policy approach.

Chapter 13 concludes the thesis by providing an overview of the analysis, an outline of its findings and a discussion of its academic contributions. An identification of the study's limitations is also furnished and some suggestions for future research offered.

CHAPTER 11: POTENTIAL IMPLICATIONS

11.1 Introduction

Following on from the previous chapter's discussion of *concept institutionalisation*, this chapter addresses Research Question 5 of the thesis, namely; *What are the potential implications of the institutionalisation of a GI planning approach?* However, by virtue of the concept's nascent position in Ireland, supply of an ex-post assessment of the approach's repercussions would be premature and difficult to substantiate. Thus, this chapter draws upon the analysis presented in previous chapters to help furnish some inferences regarding the possible implications of GI's institutionalisation as a planning policy approach in Ireland.

The chapter begins by showing how the GI approach may reposition the burden of proof with regard to the consideration of issues in environmental planning. The ensuing section discusses how the emergence of GI advocacy in Ireland may reflect the ascension of a broader international paradigm to environmental management by institutionalising a form of ecological modernisation in the Irish planning system.

11.2 Repositioning the Burden of Proof

Reference has been made throughout this thesis to the diverse benefits of GI advocated by those seeking the concept's assimilation into planning policy formulation and practice. Such proclaimed merits are significant in number resultant from the apparent simplicity and flexible signification (see Chapter 7, section 7.5) that underpin the expression's assorted application (see Chapter 9, section 9.3). Fundamental to such advocated benefits is the bestowing on the various issues associated with green spaces greater status in the policy formulation process. Indeed, as discussed in Chapters 6 and 10 (see sections 6.3 and 10.2 respectively), GI emerged in Ireland as a response to a problem narrative regarding the perceived low profile of green space issues in planning policy formulation. The solution advanced in addressing this problem was to endow the consideration of such areas with greater discursive weight by rebranding them as 'infrastructure'.

This was conceived as engendering a ‘narrative of necessity’ wherein the issues associated with such locations ‘sounds more essential’ (Interviewee C3). However, as discussed in Chapter 7 (see section 7.5), the particularities of GI’s *entitlement* prompts interpretation via connotative reasoning whereby ‘green’ spaces are constituted in terms of conventionally conceived ‘infrastructure’. Thus, such spaces are comprehended within the context of their role in servicing the current maintenance and future development of society. It is in this sense that GI planning is advocated as a proactive approach to sustaining communities. This was conveyed by the Urban Forum and IEEM when asserting,

The spirit of Green Infrastructure differs from the traditional approach to conservation which emphasised preservation. It is a proactive concept that seeks the sustainable development of natural resources, in particular their multi-functionality to maximise ecosystem services. Strong Green Infrastructure plans and strategies will allow communities and economies to grow without a loss of biodiversity or depreciation in quality of life. (UF and IEEM, 2010, 3)

Thus, GI is here portrayed as a ‘proactive concept’ which in departing from the ‘traditional approach to conservation’ enables economic growth without biodiversity loss or reductions in quality of life. This argument was echoed by Dr Clabby in his declaration that,

*Land-use planning is one of the key areas where we need to successfully integrate environmental considerations if we are to move towards a ‘Smart Economy’. A key to achieving this is finding ways in which we can align environmental and economic goals in the planning system. Green infrastructure planning provides a practical way in which to do this....It recognises the fundamental contribution that green space makes to our quality of life, and then aims to plan for its protection, provision and management in a comprehensive way in **tandem** with plans for growth and development. (Clabby, 2009) [Emphasis in original]*

In this context, GI planning is conceived as a means by which to reconcile environmental protection and economic growth in a way that is mutually beneficial to both objectives (Boucher and Whatmore, 1993; Zimmerer, 2000). This functions-focused approach 'differs from the traditional approach to conservation' (UF and IEEM, 2010, 3), by repositioning green space planning from an emphasis on preservation to a concentration on the means by which landuse governance can 'maximise ecosystem services' for society (UF and IEEM, 2010, 3). Consequently, attentiveness to an ecocentric approach on the protection of ecosystems is displaced by a focus on anthropocentric utility regarding 'how do we continue to provide viable functions for society' (Interviewee B20). As outlined by one consultant planner involved in the production of GI advocacy documentation,

...green infrastructure does, or should in my view, focus on the functionality of landscapes. What do the individual and collective parts of a landscape do, what ecosystem services do they perform. What do we want them to do and that allows us to come up with specific policy and projects to achieve that. (Interviewee A2)

Here the GI approach is seen to position the consideration of 'the individual and collective parts of a landscape' relative to an assessment of the functions to society provided by those 'individual and collective parts'. Hence, GI repositions the 'burden of proof' from that of an obligation for green space planning policy proposals to demonstrate no or negligible adverse affects on the environment towards an expectation that the environment should deliver ecosystems services for society. This repositioning of perspectives on green space planning towards anthropocentric utility was manifested in the assertions of almost all interviewees with regard to GI planning. An example of such altered perspectives was offered by one local authority officer when discussing GI,

...one of the things that's now coming to the fore from an ecological point of view is ecological functions. Like for example if you have a wet area beside a river, whether that area can provide a soak pit, an area for soakage in times of flooding or if you've a woodland close by to a city, it can provide a carbon sink for that city...or the fact that if you have grass, vegetation along a river, a buffer zone along a river, that's not just waste land, that's actually

providing an area where pollutants are being captured so they're not entering the water course, so the water courses aren't dirty and therefore there's not as much cleaning. Those kind of benefits of biodiversity I suppose are beginning to be discussed more and become more prominent... (Interviewee B3)

In extending this repositioning of planning from an ecocentric need to demonstrate protection of the environment to a requirement to anthropocentrically specify the ecosystems services provided by green spaces, GI may become a development enabling mechanism. Accordingly, the *narrative modality* of GI may furnish a 'discourse of reassurance' wherein 'No tough choices need to be made between economic growth and environmental protection' (Dryzek, 2005, 172). This potential aspect of GI was signalled by one senior planner when discussing the relationship between green space planning and flood risk management,

...you're looking at it from a much more holistic point of view and not just seeing it as an isolated undeveloped site, you're seeing it as part of what facilitates development. If it's going to flood it's not much use, but if you have a bit of land that will take away flood waters fairly rapidly or store them or whatever, that therefore is part of your infrastructure for your urban environment or if you want to call that green infrastructure or whatever... (Interviewee B18)

In this sense, whereas GI (re)emerged in Ireland as a response to the perceived low profile of green space issues in planning policy formulation, rather than addressing this by simply endowing such issues greater weight of consideration, the GI approach may stimulate a re-evaluation of *how* green space issues should be considered. This repositioning of green space issues from an ecocentric perspective to a focus on anthropocentric utility modifies society's relationship to the environment by viewing all environment types as in some way providing human centred services. Consequently, green space planning becomes a matter of anthropocentric functional selectivity as opposed to binding habitat conservation wherein 'no distinguishable line can be drawn in practice between ecological knowledge and value judgements' (Evans, 2007, 147). Accordingly, the anthropocentric functional efficiency of natural environments can be appraised,

and may even be justifiably improved by GI planning. Here, the meaning making activity that gives new ontological status to green spaces may 'shift the terms of debate away from environmental protection towards environmental management' (Taylor, 2005, 170) as the 'technical-rational model' (Owens et al., 2004, 1945) of planning practice obscures the value judgements inherent to decision making (Kallio et al., 2007). Thus, compromising the existing ecological integrity of an area by intentionally transforming or consciously affecting its ecological characteristics may be scientifically legitimated relative to the principles of a GI planning approach should such compromising activities be deemed to enhance the provision of services to society. As maintained by one consultant planner,

It's the forward planning of resources that appeals to me, it's the fact that, it's the idea that you can create resources whereas in the past we've always spoken of these things as resources that must be protected or conserved at all cost and act against their diminishment. What appeals to me is the idea that we can enlarge and improve upon the functionality of environmental resources and create systems...we need to make better systems, we need to make complementary systems to natural ones...it's like we can make engines of environmental services basically. Using these building blocks, physical building blocks and proper policies, correct policies. Any cities can be engines for environmental resources, if they design and manage them properly. That's why it appeals to me. (Interviewee A2)

This appeal of GI as the ability to 'make engines of environmental services' is illustrative of how much the concept had evolved over the 2002 to 2011 period⁵² and the degree to which it may have become estranged from the original rationale for its introduction as a means to reverse habitat fragmentation. In this sense, 'statements about the natural world represent social and institutional constructions' (Irwin, 2001, 74) wherein GI discourses reflect an epistemology favourable to aspirations for anthropocentric utility (Forsyth, 2003; Lorimer, 2008). Specifically, Chapter 6 (see section 6.2) discussed how concern regarding habitat fragmentation constituted a *root problem narrative* that furnished the initial

⁵² From the expression's first mention in an Irish context in 2002 (Tubridy and O Riain, 2002) to its inclusion as statutory policy in several County, City and Town Development Plans by late 2011.

stimulus for a *broad problem narrative* on the estimated low profile of green space issues in planning policy formulation in Ireland. However, the ultimate consequence of addressing the *broad problem narrative* by employing a GI approach may not so much be the ascension of green space issues on the policy agenda, but rather may be *how* such issues are considered.

In this context, repositioning the principles informing green space planning from an ecocentric ‘burden of proof’ to an anthropocentric requirement to demonstrate ecosystems services may intensify the *root problem narrative* by way of expediting habitat fragmentation through viewing green spaces as ‘what facilitates development’ (Interviewee B18). Furthermore, the society centred servicing focus of GI may precipitate attrition of the ecological integrity of those very habitats deemed threatened by fragmentation in an effort ‘to enlarge and improve upon the functionality of environmental resources’ (Interviewee A2). Thus, while advocates of GI stress its multifaceted benefits, the particularities characterising the concept’s evolution in Ireland may paradoxically risk undermining the rationale for its initial introduction.

11.3 Ecological Modernisation and the Planning System

The emergence and evolution of GI advocacy in Ireland may be seen as the national manifestation of an ascending international approach in conservation policy concerned with emphasising the instrumental value of environments to society as a means by which to advocate their preservation. While at a global level the narratives embodying this paradigm focus on highlighting the variety of generalised ecosystems services provided to society (MEA, 2005), at supranational and national tiers of governance, such narratives frequently stress the need to facilitate the multifunctional benefits of green spaces so as to obtain socio-political and economic support for the advancement of issues associated with these areas (EEA, 2011). It is in this context that the emergence of GI in Ireland may be understood as furnishing a mechanism to address the broad problem narrative of the perceived low profile of green spaces issues in planning policy formulation (see Chapter 6). This is conveyed by one local authority official when noting,

...the whole nature conservation is totally changed [sic], it's now about ecosystem services, you know we've moved into a different place, it's not just about making sure everything is ok and we're not damaging it...so the green infrastructure paradigm...or ecosystem services paradigm is about how do we continue to provide these viable functions for society, while doing what we need to do, like building a road, not just how do we do minimal damage... (Interviewee B20)

Hence, GI is perceived as a means by which to facilitate 'nature conservation' by integrating a new set of principles for the landuse planning of green spaces which emphasises the 'functions for society' provided through the ecosystems services facilitated by such areas (Roberston, 2012). The prominence given to arguments centred on 'use in this green stuff' (Interviewee A5) reflects the GI approach to planning advocated in North America, with several authors assuming compatibilities between biodiversity conservation and the human use of environments so as to garner support for green space consideration in policy formulation (Ahern, 2007; Erickson, 2006; Weber et al., 2006). Similarly, such an approach is advanced by the supranational European Environment Agency (EEA) via the concept of GI, whose essential features the EEA identifies as 'connectivity, multifunctionality and smart conservation' (EEA, 2011, 30). This confirms previous discussions by the European Commission on the potential for GI planning to provide a range of ecosystems services to society concurrent with the protection of ecosystems (Karhu, 2011; Sylwester, 2009).

Such a turn to accentuating the multifunctional potential of green spaces in seeking their conservation is also evident at the national level in Europe. For example, Kambites and Owen (2006) and Amati and Taylor (2010) describe the multifunctional and society servicing potential of GI in a UK context. Other authors identify emerging arguments in England for a departure from traditional green belt policy and a move towards a more multifunctional approach to peri-urban green space planning as a means to realise the potential services provided by such areas for urban residents (Thomas and Littlewood, 2010; Wilson and Hughes, 2011). Similarly, in their discussion of conservation planning in the Netherlands, Van Der

Windt and Swart (2008) outline how recreation, flood management, and agriculture were introduced into the evolving concept of ecological corridors to facilitate greater social and political palatability, and thus capacitated the delivery of such corridors as elements of the Dutch National Ecological Network.

An analogous process can be observed in an Irish context where GI is advanced as a means by which to advocate the anthropocentric multifunctional potential of green spaces in seeking to implement biodiversity conservation measures. This approach to ecosystems services was alluded to by several interviewees and was especially evident with respect to the advocated commensurabilities between biodiversity conservation and recreational amenity provision. As noted by one local authority officer,

...so how do you get people to the stage of wanting to do this, of wanting to implement green infrastructure and implementing conservation measures. Do you have to tie it up in a nice little package by offering amenity along with it as well? Well I think you do, and at the end of the day people have to benefit from this...
(Interviewee B9)

By appealing to such suppositions on anthropocentric 'use' as a necessary prerequisite for 'conservation', the GI planning approach may be conceived as an extension of the ecological modernisation paradigm into landuse policy formulation. Conventionally understood as a 'positive-sum game' (Hajer, 1995, 26) that offers 'a potential basis for reconciling economic development with ecology and providing 'win-win' outcomes for nature and economy' (Thomas and Littlewood, 2010, 212), ecological modernisation is most commonly seen as facilitating synergies between nature conservation and economic development (Redclift et al., 2000) via the application of technocratic solutions to environmental problems (Hajer, 1993) or as a 'restructuring of the market economy' (Carter, 2007, 227). In this sense, integrating GI into planning policy formulation may be seen to offer the prospect of addressing green space issues without challenging the orientation of a planning system focused on development facilitation (Kitchin et al., 2012b; Taylor, 2005). As noted by one senior public authority planner,

I think the development plan, I mean just even by its name talks about development doesn't it, you know, and I mean, really that's a function of the planning [sic] is to co-ordinate...and facilitate development in a sustainable manner... (Interviewee B18)

Here, an appeal to planning's function to 'facilitate development in a sustainable manner' may be inferred to reflect the 'positive-sum game' (Hajer, 1995, 26) of ecological modernisation embodied in the perceived resonance of GI with the prevailing rationality of planning practice (see Chapter 8, section 8.2) that underpin its legitimacy in landuse policy formulation. This shared perspective on GI's legitimacy facilitates the concept's *narrative modality* (see Chapter 9, section 9.3) as a progressive approach to planning that proffers the possibility of simultaneously resolving numerous green space issues without deviating from conventional planning rationalities. Reflecting such suppositions, this embodiment of ecological modernisation in the GI approach is to be achieved through the application of 'a typical rational planning methodology' (Comhar, 2010b, 61).

However, GI's coalition-consolidating appeal as a 'techno-institutional fix' (Hajer, 1995, 32) for the complex and multifaceted issues associated with green space planning risks undermining the viability of such areas in a drive to address the *broad problem narrative* supplying the initial impetus for the concept's introduction. Specifically, courting populism in seeking to give green space planning greater prominence may ultimately institutionalise within the planning system a positioning of nature relative to an anthropocentric interpretation of its utility value (see section 11.2). Here the modification of previously protected environments may be justified by facilitating their long term conservation via enhancing the awareness of the improved ecosystems services they provide to society. As noted by Hajer with regard to the ecological modernisation of Dutch environmental politics during the 1990s,

Talking about nature as infrastructure creates a link to the importance of nature as amenity (which is essentially a functional idea), but also allows for an engineering approach to nature. If nature is seen as infrastructure, we can also make a move from conservation to the actual creation of new (and better?) nature.
(Hajer, 2003, 106)

Thus, it is conceivable that should such a perspective achieve legislative endorsement and subsequent institutionalisation as *the* approach to green space policy formulation in Ireland, landuse planning policy and practice may run counter to the ecocentrism that furnished the original stimulus for the first mention of GI in Irish policy advocacy (Tubridy and O Riain, 2002) (see Chapters 5 and 6). Conversely, should the prospective impediments to GI's institutionalisation prove too great (see section 11.2), it is conceivable that the particular attributes of the discourse would nevertheless furnish,

...a rhetorical rescue operation for a capitalist economy confounded by ecological crisis. This would diffuse the radical potential of environmentalism and deflect the energies of green activists without really changing the politico-economic system to make it more ecologically sustainable and socially convivial.
(Dryzek, 2005, 174)

As such, it is possible that whether it succeeds or fails, the ultimate implication of GI's advocacy as a planning policy approach may be to paradoxically precipitate ecosystem attrition and exacerbate the *root problem narrative* of habitat fragmentation which furnished the impetus for the concept's initial introduction to Irish planning debates (see Chapter 6, sections 6.2.1 and 6.3).

11.4 Conclusion

This chapter has endeavoured to furnish some deductions on the potential implications of GI advocacy in Ireland. Here it is suggested that the GI approach may constitute *repositioning the burden of proof* with regard to the consideration of issues in environmental planning. Furthermore, it is inferred that the emergence of GI advocacy in Ireland may reflect the ascension of a broader international paradigm to environmental management by institutionalising a form of *ecological*

modernisation in the Irish planning system regarding its treatment of nature. Building upon the empirical research of preceding chapters, the thesis next addresses deficits in our knowledge of the policy process by drawing theoretical inferences from the case of GI's emergence in Ireland.

CHAPTER 12: THEORISING THE POLICY PROCESS

12.1 Introduction

Chapters 5 to 11 of this thesis have sought to empirically demonstrate the role of meaning making in the policy process. This chapter seeks to build upon this work by specifically discussing how such research addresses the overarching aim of the thesis, namely: *To address a gap in our knowledge of the policy process regarding the important role of meaning making in the initiation, promotion and adoption of a new policy approach.* This is achieved by first identifying and outlining deficiencies in our knowledge of the policy process. By inference from the case study of GI's ascension in Ireland, the chapter subsequently presents an account of how forms of representation and interpretation may resolve issues of problematic policy ambiguity. In doing so, the chapter examines and explains the ways in which meaning making activities may constitute the reality addressed by policy so as to reflect and reinforce prevailing rationalities of professional practice. Following this, the theoretical contributions of this approach are described. The chapter concludes by detailing how careful attention to the role of meaning making addresses identified gaps in our understanding of the policy process.

12.2 Theorising the Policy Process

As previously discussed in Chapters 1 and 3, the policy process is conventionally conceived as a form of 'applied problem-solving' (Howlett et al., 2009, 4) wherein a 'technically orientated rational model of policy making' (Fischer and Gottweis, 2012, 2) is perceived to operate. In this view, where difficulties arise in formulating solutions, these are seen to be rectified by more information about the problem at hand (Fischer, 2003). However, such a linear comprehension of the policy process fails to account for how agents resolve issues of problematic policy ambiguity where there exists a 'state of having many ways of thinking about the same circumstances or phenomena' (Feldman, 1989, 5). In such situations a conventional understanding of policy making fails as problem identification is rendered inconclusive and solution formulation is left indecisive. Consequently, in such

circumstances, studying the policy process requires attention to the persuasive power of representation in providing clarity and direction regarding problem recognition and solution specification (Goodin et al., 2006; Hannigan, 2007; Stone, 2012). Accordingly, as argued in Chapter 3, (see section 3.1) enhancing knowledge of the policy process requires consideration of how reality is represented in policy debates through interpretations of signification, significance and applicability. Thus, it necessitates concentration on how ‘meaning making’ functions both in and through the policy process.

This attention to meaning making involves an acknowledgement that the reality of a policy entails an ‘perceptual interpretive element’ (Kingdon, 1984, 115) wherein meaning is produced and ‘situated in a particular context’ (Yanow, 2006a, 228). Emerging during the early 1990s, literature centred on this ‘interpretive turn’ (Yanow, 2007b, 405) to policy analysis argues that it is through such meaning making processes that representations of reality are constructed, and the persuasive work of policy gets done. However, as discussed in Chapter 1, (see section 1.1.2) most labour within the field of interpretive policy analysis assumes the policy process to be a site of struggle for dominance and control over issues of contested meaning (Epstein, 2008; Hajer, 1995; 2003; 2005; Howarth, 2010; Howarth and Griggs, 2012; Roe, 1994; Schön and Rein, 1994; Stone, 2002; Yanow, 2000; 2002). Even where such adversarialism is not foregrounded, its existence is presupposed by advancing post-positivist methods of conflict prevention, most commonly in the form of normatively orientated ‘collaborative planning’ (Healey, 2005; 2012; Innes and Booher, 2003) or ‘deliberative practice’ (Buchstein and Jorke, 2012; Dryzek, 2012; Dryzek and Hendriks, 2012; Fischer, 2009; Forrester, 1999).

Myerson and Rydin (1996) adopt a different approach by concentrating on how rhetoric functions to realise the purposes for which it is deployed rather than focusing on how deliberation should be conducted to facilitate better policy (Fischer, 2003; 2009; Fischer and Mandell, 2012; Forester, 1999; 2009; Healey, 1993; 2005; 2012). However, this study by Myerson and Rydin (1996) centres on the contours of an argument’s structure wherein the rhetorical composition is

explicit. Consequently, the presuppositions of interlocutors that may give currency to certain forms of argumentation are not investigated in detail. This renders the explanation deficient in elucidating 'how' the interpretation of rhetorical devices assists or inhibits traction in policy debates. Additionally, their study does not address 'how' the new understandings engendered by rhetorical devices may be disseminated and institutionalised. Furthermore, they do not address 'whose' interests are served by such rhetorical devices.

Thus, there has been relatively limited interpretive policy analysis work dedicated to investigating how meaning making operates through processes of policy persuasion in the absence of disagreement or explicit attempts to avoid conflict. Yanow (1996) goes some way to addressing this deficit with regard to her employment of a theory of 'myth' in explaining how the use of metaphor may suspend and deflect logical inconsistencies and potential criticism in policy debates (see Chapters 3 and 9). While Yanow places centre stage the role of meaning making in policy formulation, the illuminating possibilities of this work are restricted by its failure to adequately detail how the resolution of problematic policy ambiguity may result from a counter intuitive process whereby solutions are specified in advance of problem identification and subsequently applied to a range of problematic policy issues.

Hence, there are a number of key gaps in theoretical explanations of the policy process. These are as follows:

- (a) Policy process theory fails to adequately account for how agents resolve issues of problematic policy ambiguity through widespread voluntary and unanimous support across a range of organisation types and disciplines for a policy proposal where there exists significant potential for dispute.
- (b) Theorists have largely failed to identify and comprehensively explain the interpretive mechanisms that engender new policy concepts.

- (c) Theories of the policy process have neglected to describe and explain how meaning making in and through the policy process may prompt new perceptions of reality that render problematic policy ambiguity amenable to resolution by existing policy formulation practices.
- (d) Policy process theory within both the positivist and post-positivist traditions fails to provide a context sensitive model to explain the emergence, evolution and institutionalisation of a new policy approach.

As previously outlined in Chapter 3 (see sections 3.5 and 3.6), it is contended that these gaps in our knowledge can be addressed by innovatively combining elements of the Multiple Streams Framework (MSF) with a discourse analysis approach to the interpretation of policy process dynamics. In particular, such a theoretical approach enables the formulation of an explanation of how a new policy approach may emerge, evolve and be institutionalised by successfully balancing the requirement for theoretical abstraction with sensitivity to the context in which policy activity is situated. By deduction from the study of GI's emergence and evolution in Ireland between November 2008 and November 2011, the understanding of the policy process dynamics supplied below stresses the importance of particular forms of representation to the ascension of a new policy approach. Focused on the ontological, epistemological and coalition-stimulating consequences of the strategic use of naming, this hypothesis has been termed a 'theory of policy entitlement'.

12.3 A Theory of Policy Entitlement

The term 'entitlement' is borrowed from the work of Burke (1966) who in stressing the selective and abstractive function of naming draws attention to how this procedure may concurrently abbreviate the complex while specifying the ontological status of something. A rhetorical consequence of such 'entitlement' is that it prompts the impression that what is entitled has always existed autonomous of its entitlement and was waiting to be discovered as the logical end of investigation (Schiappa, 2003, 115). In this context, entitlement may be

comprehended as the means by which the realities of policy activity are produced. In venturing to understand this phenomenon, the theory of entitlement presented below outlines a multi-tier process by which such a policy reality is discursively constructed, gains traction, is advanced by parties to policy debates, and is ultimately institutionalised by way of statutory policy provisions. For purposes of clarity, the description below has been divided into a four stage process comprising *interpretation*, *resonance*, *dissemination* and *institutionalisation*. However, these various processes may occur in parallel or overlap as the new policy concept is propagated in different organisational, professional and/or geographic quarters.

12.3.1 Interpretation

Entitlement involves the naming of something. More specifically it may be conceived as the calling into existence through language that which of its own accord does not enjoy ontological status outside what is attributed to it by the naming process (Fischer, 2003, 42). In such circumstances, the named (entitled) entity is endowed an ontological status as, for example, an object, event, substance or vague feeling (Schiappa, 2003). It is through this status-endowing process of entitlement that both the existence of something, and consequently our assumptions on how that thing can be known, are given (Burke, 1966; Litfin, 1994). Thus, in calling something into existence through naming, entitlement furnishes a reference. It is from such a reference that assumptions regarding existence status and ensuing knowledge deductions can be constructed (Hacking, 1983; O'Brien, 2006; Norris, 2005).

However, such socially coordinated 'epistemic access' (Boyd, 1993, 483) does not imply uniformity of interpretation regarding the properties of an entitled entity. Rather, a reference may only supply a shared path for interpretation (Ricoeur, 1975 (2002)). The specifics of the interpretation produced are dependent on the subjective perspectives of the interpreter, albeit the latitude for subjectivity is constrained by the conventions of language use (Chandler, 2007; Peirce et al., 1998). This is most apparent when that which is entitled involves bestowing a unifying ontological status and consequent epistemological assumption on a set of

entities conventionally deemed separate and accordingly conceived differently. In such circumstances, as may be observed in the emergence of new policy concepts, the introduction of a new term may be required (Dryzek, 2005; Myerson and Rydin, 1996; Yanow, 1996). However, given the need to reduce the complexity of ontologically unifying an assortment of entities normally considered discrete, the term employed would likely need to be a familiar word or conjunction of familiar words applied in a new context (Hart, 2008). This both dissipates potential rejection of the newly entitled entity through the appearance of familiarity while concurrently directing interpretation of the entity's ontological and associated epistemological status. In this situation, appreciating the entitled entity involves an 'imaginative leap' (Chandler, 2007, 127) by the interpreter in transferring comprehensions of the familiar onto the entitled entity so as to reduce levels of abstraction (Lakoff and Johnson, 2003). Thus, although the entitled entity is itself given independent ontological status, the entitlement process operates via use of metaphorical reasoning, wherein 'we talk and, potentially, think about something in terms of something else' (Semino, 2008, 1).

Thus, interpretation of the ontological status and ensuing epistemological position of the entitled entity is achieved by way of *connotative reasoning*. This understanding of something new and abstract in terms of the familiar engenders perceptions on the *apparent simplicity* of comprehending that which is entitled. Consequently, metaphors may provide a vocabulary in which to perceive new policy concepts within the existing discursive field of established disciplines. However, in transferring connotations from the familiar onto the new or abstract in this manner, such reasoning not only enables appreciation of the introduced entity, it also constitutes how that entity is to be perceived. Furthermore, employing connotative reasoning in the constitution of an entitled entity facilitates a degree of polysemantic latitude in the transfer of attributes (connotations) from the familiar to the new entity. This latitude for interpretation forms a reciprocal arrangement wherein the apparent simplicity in conceiving the entitled entity assists in its variable application. In this way, the entitled entity may subsume multiple entities normally considered discrete. Such *flexible signification* thereby operates in a

relationship of reciprocity with *connotative reasoning* and *apparent simplicity* as a triad of ‘naming effects’. A diagrammatic representation of the ‘naming effects’ engendered by entitlement is presented in Figure 12.1 below.

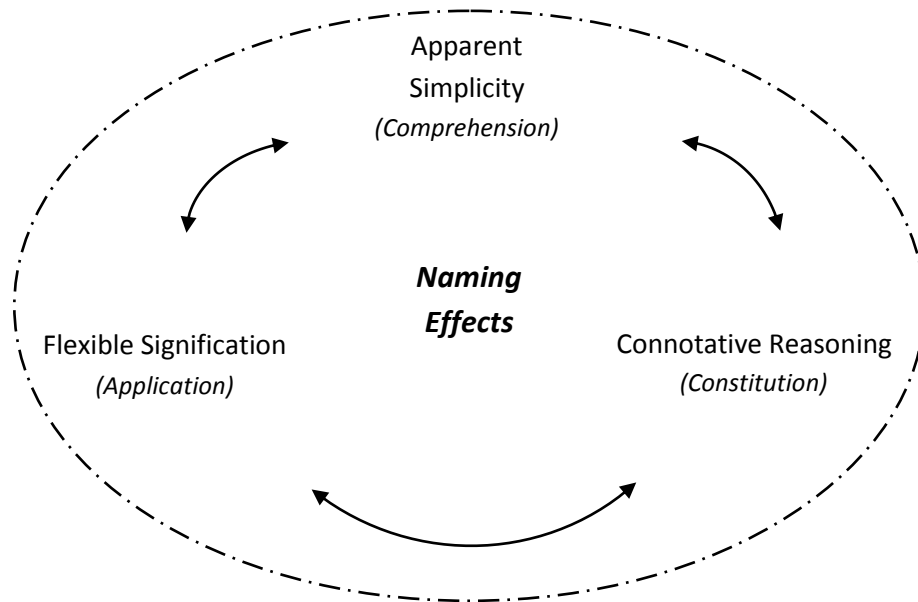


Figure 12.1
Diagrammatic representation of the *naming effects* of entitlement

Understood in the context of policy studies, this triad of naming effects facilitates the linguistic constitution of a concept (entitled entity) which may incorporate multiple problematic issues and thereby enable the provision of a unifying policy solution. For example, this was the case where a multitude of issues were subsumed beneath the label of GI by means of connotative reasoning and flexible signification associated with the conjunction of the familiar words ‘green’ and ‘infrastructure’ (nature conservation, recreation provision, flood management etc.). Concurrently, apparent simplicity and connotative reasoning facilitated deductions from the word ‘infrastructure’ that such issues were both necessary for society and could be planned in much the same way as conventionally conceived ‘infrastructure’.

However, this mediation of meaning by connotative reasoning cannot be objective, as it obliges the interpreter to subjectively invest that which is being interpreted with a signification it does not already possess by way of existing formal denotation (Black, 1962; Knowles and Moon, 2006; Kövecses, 2002). In this context, it can be conjectured that in the use of entitled concepts ‘policy analysts are situated knowers thinking and writing from particular points of view’ (Yanow, 1996, 27). Thus, the flexible signification engendered by a concept’s entitlement facilitates its appropriation for the particular needs of the end user.

However, as the entitled concept potentially encompasses a multitude of issues, this capacity for the concept to be ‘positioned’ (Hajer, 2003) relative to the requirements of the user may result in recalibrating the relationship between that which is encompassed by the concept and the user of that concept. For example, as discussed in Chapter 11 (see section 11.3.1), a potential implication of GI’s institutionalisation as a planning approach in Ireland is a repositioning of the burden of proof in landuse governance from an ecocentric focus on the protection of habitats to a requirement for such areas to demonstrate anthropocentric utility. In this sense, the process of entitlement may be seen to do policy work by repositioning power relationships between the issues encompassed by the entitled concept and those who advocate the unifying policy solution deemed to address such issues. Through this process, resolution is thereby brought to problematic policy ambiguity by engendering a reality wherein those formulating policy have the power to define the source of the problems in question, and the ability to specify how they may be remedied (Foucault, 1963 (2003); 1976; 1977b).

12.3.2 Resonance

For a policy approach to gain traction among those parties concerned with the issues encompassed by the entitled concept, the principles upon which the policy approach is predicated must resonate with the prevailing rationalities to which those parties adhere (Freidson, 1986). Such *practice accord* may manifest in a perceived ability to easily tailor existing policy formulation and implementation methods to the requirements of the new policy approach (Hajer, 1995). Similarly, it

may manifest in a perceived capacity to employ familiar language or disciplinary jargon in discussing the entitled concept when deducing from the naming effects of entitlement the appropriate interpretation of both the concept's meaning and applicability (Boyd, 1993; Potter, 1996). For example, this was demonstrated with respect to the emergence and evolution of the GI planning approach in Ireland, where antecedent policy concepts and methods focused on the 'design', 'construction' and 'management' of 'infrastructure' and 'networks' was transferred onto new ideas for 'delivering' nature conservation via GI planning (see Chapter 5, sections 5.4 and 5.5; and Chapter 8, section 8.2).

The perceived legitimacy to enunciate on the consideration of issues by those advocating the policy approach must be respected by those to whom it is introduced (Fry and Raadschelders, 2008). This qualification of legitimacy, or *enunciative position*, is directly dependent on the rationalities to which the parties subscribe (Benton and Rennie-Short, 1999; Litfin, 1994; Steffek, 2003; 2009). As shown in Chapter 8 (see section 8.3), those advocating a GI planning approach in Ireland sought to harmonise with modernist rationalities in seeking legitimacy for their arguments (Aronowitz, 1988; Gane, 2004; Wagenaar and Cook, 2003; Weber, 1922). This entailed a process of 'stake inoculation' wherein effort was expended to represent GI as grounded in impartial and scientifically sourced knowledge claims removed from subjective opinions (Goffman, 1979; 1981; Levinson, 1988; Potter, 1996). Here, symbolic acts of mapping, counting and comparison were used to produce an array of plans, diagrams, reports and references that weaved a 'web of signification' (Allan, 2005, 12) which reinforced the enunciative position of those promoting GI.

The policy approach must also be perceived to possess a degree of *functional advantage* above that of existing policy approach(es) used in tackling the problematic issues subsumed by the entitled concept (Rogers, 2003). A diagrammatic representation of the attributes necessary for the rationality resonance of a new policy approach and the relationships between this and naming effects of entitlement is presented in Figure 12.2 below.

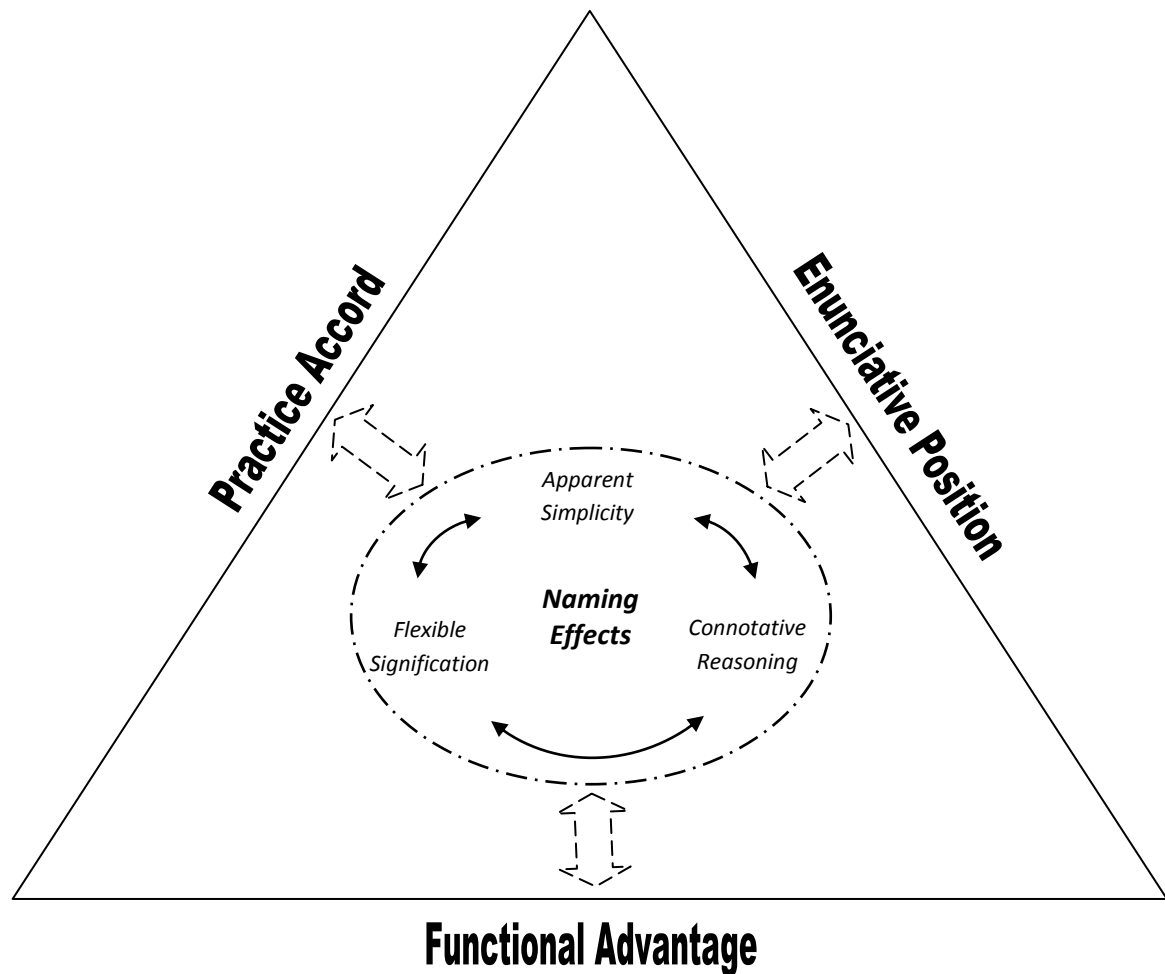


Figure 12.2
Diagrammatic representation of the relationships between
naming effects and *rationality resonance*

While the perceived functional advantage of a new policy may generally relate to its opined efficiency or effectiveness relative to that of previous policy or lack of policy, it is feasible that its gain may also lie, simultaneously or not, in the enunciative position it may endow upon those introducing the concept (Gottweis, 2003). This possibility is resultant from the flexible signification engendered by a concept's entitlement which permits its interpretation, use and promotion in addressing the specific requirements of its advocate(s). In this way, the functions to which the entitled concept is put may dependent on the intent of those advocating its introduction (Kingdon, 1984; Zahariadis, 2003). Thus, it is conceivable that should a corollary of such advocated employment involve the reallocation or consolidation

of the power to enunciate on an issue (Crampton and Elden, 2007), an advantage of introducing an entitled concept may be perceived, tacitly or otherwise, as its distribution of enunciative legitimacy (see section 12.4.3). As such, those advocating for the introduction of a new policy concept may do so in seeking to advance and/or reinforce the position of authority accorded to their profession.

12.3.3 Dissemination

Agent Activity

The dissemination and subsequent institutionalisation of such a new policy approach does not occur in a vacuum. Rather, its success is predicated on the advocacy work of those agents involved in its promotion. Therefore, effectively comprehending how policy entitlement may result in the institutionalisation of a new policy approach necessitates an appreciation of the role played by agent activity in disseminating a new policy approach. This commences with the initial introduction of an entitled concept to those potentially involved in its adoption and advocacy. While the concept will already constitute particular meanings for the agent introducing it, the process of presenting it to a wider audience offers latitude for its comprehension. Here the influence of naming effects operating through the prism of rationality resonance prompt interpretations relative to the policy requirements of the parties to whom it is introduced. Reflecting the assertions made by various policy theorists (Kingdon, 1984; Mintrom, 2000; 2009; Roberts and King, 1991; Schneider et al., 1995), empirical analysis undertaken in this thesis suggests that the activities of policy entrepreneurs are key to both the processes of initial introduction and subsequent dissemination.

In particular, Chapter 10 has shown how the dissemination of a new policy concept may entail agent activity in both its conspicuous and inconspicuous promotion. The latter form of advocacy involves discreet acts of concept transmission through, for example, the use of both formal and informal networks (Lieberman, 2002; Mintrom and Vergari, 1996). This research demonstrates that significant to the successful dissemination of a new policy approach is the access a policy entrepreneur enjoys to formal networks influential in policy agenda-setting (Kingdon, 1984; Koski, 2010;

Zahariadis, 2003). Similarly, the analysis previously discussed in Chapter 10 substantiates the view that informal relationships with those in agenda-setting and decision making positions is an important factor in determining the successful dissemination of a new policy concept (Mintrom, 2000; Mintrom and Norman, 2009).

In contrast to such inconspicuous methods of concept advocacy, conspicuous forms of policy promotion encompass public practices aimed at demonstrably building coalitions of support and advocating the benefits of the new policy approach (Mintrom and Vergari, 1996). As detailed in Chapter 10 (see section 10.3), such practices may include presentations and lectures, as well as the publication of advocacy material. Conspicuous promotion may also involve organising the physical assembly of those deemed pertinent to the assimilation and advocacy of the policy approach. This may be undertaken so as to engender informal networking for concept dissemination while simultaneously facilitating communication of both the functional advantages of the policy approach and its potential range of applications. In the case of GI's emergence in Ireland, an example of such dissemination activity is provided by the Malahide GI Conference of November 2008, where assembling an array of actors variously associated with landuse management stimulated the propagation of diffusion networks. Thus, through forms of both conspicuous and inconspicuous promotion, policy entrepreneurs may cultivate a broad based coalition of support for a policy approach.

Discourse Coalitions

Many of those who advance a discourse analysis approach to the study of policy propose that what bestows currency on ideas in the policy process is the common subscription to a specific narrative that clarifies meaning in situations of policy ambiguity (Epstein, 2008; Hannigan, 2007; Zahariadis, 2003). Such 'discourse coalitions' permit the discernment of shared adherence to a particular narrative while simultaneously allowing a multitude of interpretations of the meaning embodied in that narrative (Hajer, 1993; 1995). In this sense, the power to

engender a discourse coalition may be conceived as deriving from its ability to facilitate 'discursive affinities' (Hajer, 1995, 66) among the many issue-specific narratives of those parties involved. Hajer suggests that such affinities may not refer to actors and their intentions but rather 'operationalizes the influence of discursive formats on the construction of problems' (Hajer, 1995, 67).

This capacity of discourse affinities to shape the conception of the policy problems has been shown with respect to the evolution of GI discourses in Ireland. In particular, various discursive affinities associated with both the words 'green' and 'infrastructure' facilitated coalescence around GI narratives of numerous issues and interests heretofore considered separately. As demonstrated in Chapters 6, 9 and 11, those subscribing to the narratives of the GI discourse coalition did so consequent on the perceived advantages bestowed in reconceptualising their policy issues in terms of 'infrastructure'. From this perspective, agents could forge arguments with regard to the importance of their specific issues of concern (Kingdon, 1984). Such reconceptualisation also offered the prospect of resolving problematic policy ambiguity by suggesting that longstanding issues of problem identification and decision ambivalence could be remedied through the logics employed in relation to conventionally conceived 'grey' infrastructure. Thus, a perception emerged that nature conservation, recreational facilities provision and other complex policy issues could be solved via the traditional modes of planning, design, delivery and management associated with services engineering.

In addition, it has been shown how the entitlement of the GI planning approach in Ireland promoted concord between recreation planners, conservation ecologists and flood management engineers (see Chapters 9 and 10). Achieving this required the suspension of plausibly perceived incompatibilities or logical inconsistencies in providing a unifying policy solution to an assortment of potentially disparate problems (see Chapters 8 and 9). This was accomplished by means of the 'mythic' qualities of those narratives engendered by GI's entitlement.

Myth

The ability to suspend possible differences in advancing a narrative from which all parties to the discourse coalition are perceived to profit accords with the theoretical application of myth by Yanow in the context of policy and organisational analysis (Yanow, 1996; 2000). The term myth is employed here to designate a 'narrative created and believed by a group of people which diverts attention from a puzzling part of their reality' (Yanow, 1996, 191). The idea of myth forwarded in this context is not conceived as an evaluation of a narrative's veracity. In this sense,

It is not a question of whether a given description is an objective picture of reality but whether a given description receives the intersubjective assent of relevant members of a discourse community. (Schiappa, 2003, 111)

As such, myth in the context of policy analysis refers to a particular narrative format that facilitates subscription by a broad range of issue-specific interests through proffering apparent commensurability in situations where plausible discrepancies may coincide. Demonstrated in Chapters 8 and 9 is how through the process of *rationality resonance*, entitlement facilitates the naturalisation of a mythic narrative by its perception as the 'commonsense' or 'natural' view of things (Barthes, 1957 (2009)). Shown here is how the reconceptualisation of green spaces as infrastructure is seen to 'make sense' (Interviewees A2, B13, B16, B20, C5), and in doing so anthropocentrically repositions nature as that which can be planned to service society in much the same manner as conventionally conceived infrastructure. The relationship of such a mythic narrative to the processes of entitlement is presented in Figure 12.3 below.

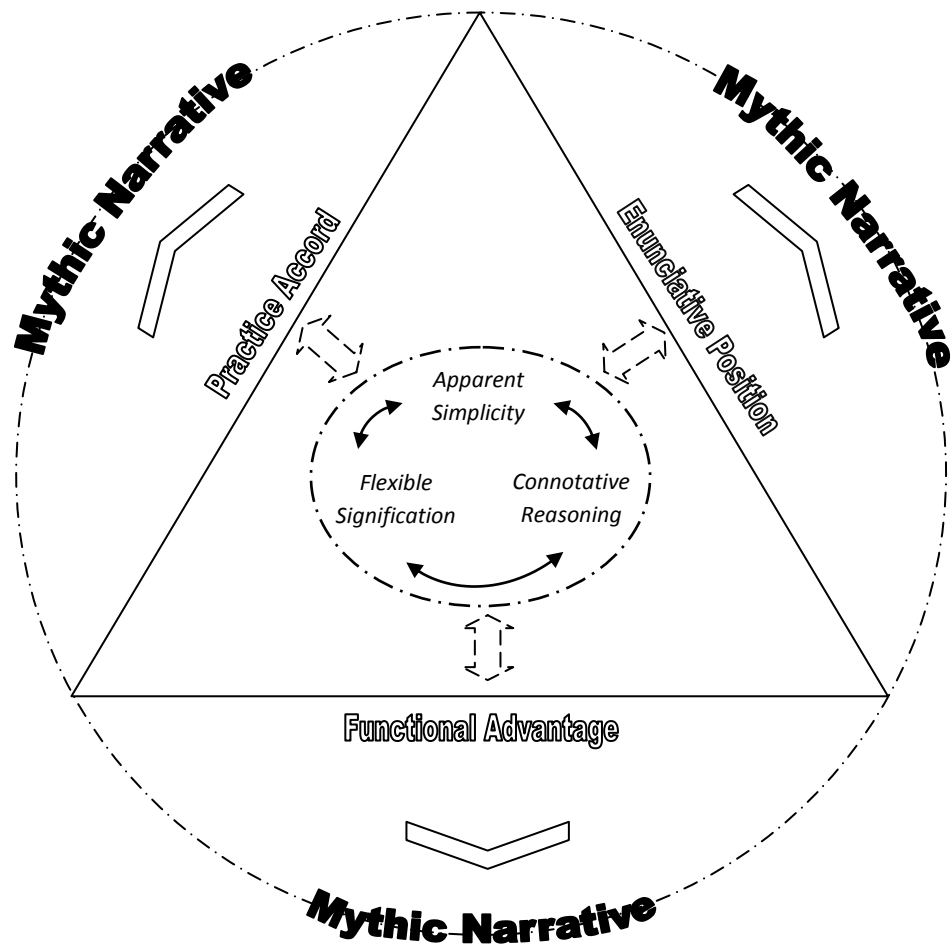


Figure 12.3
Diagrammatic representation of the relationships between
naming effects, rationality resonance & myth

Modality

By enabling the suspension of potential inconsistencies, the mythic qualities of the narrative prompted by concept entitlement facilitates the propagation of a policy approach through allowing multiple parties with various interests to espouse the same broad set of principles for problem resolution. In this way, myths do policy work by enabling those who subscribe to them to cooperate on issues in respect of which there is significant potential for disagreement. Accordingly, mythic narratives achieve what may be termed *modality* by capacitating the legitimate association of a policy approach with an array of problematic issues as well as existing problem-solution storylines. Consequently, expansion of the policy approach's discourse coalition is facilitated.

Resultant from the flexible signification engendered through the naming effects of concept entitlement, those seeking remedy to unsolved problems may adopt the mythic narrative as a resolving discourse. This phenomenon is here termed 'solution adoption'. Also, those desiring to communicate the merits of their existing policy activities may rebrand their current problem-solution storylines in a manner that harmonises with the mythic narrative. This phenomenon is here termed 'elective rebranding'. Given the choice of those with problematic issues and problem-solution storylines to respectively adopt the mythic narrative and electively rebrand their storyline in accordance with it, in such contexts, a process of *narrative volunteering* can be considered as operative. This process can be understood as a 'coupling' (Kingdon, 1984) of the problem and policy streams theorised in the Multiple Streams Framework (MSF). However, diverging from the prevailing application of the MSF in academic literature (Boscarino, 2009; Robinson and Eller, 2010; Zahariadis, 2003; 2007; Zahariadis and Allen, 1995), the investigation presented in this thesis shows that such coupling may occur concurrently across numerous discrete policy formulation arenas and with regard to several different policy issues (see Chapter 9). Moreover, such coupling activities may be undertaken by numerous agents associated only by virtue of their subscription to the mythic narrative in which they perceive different advantages consequent on various interpretations.

Subsequent to this process, those employing the mythic narrative may now seek to consolidate support for their policy interests by assigning the mythic narrative to other issues beyond their immediate concerns. This may be undertaken on the assumption that widening the applicability of issues which the policy approach is seen to address strengthens the perceived value of the policy approach they now subscribe to. Thus, advocates of this mythic narrative may promote its coupling to other problematic issues which they perceive as lacking a coherent solution narrative. Additionally, such advocates may seek to rebrand as examples of the mythic narrative's policy approach, existing problem-solution storylines circulating in other policy arenas. In such contexts, a process of *narrative application* can be deemed as operative. *Narrative application* thus operates via analogous, but

diametrically positioned processes to *narrative volunteering*. Accordingly, ‘problem appropriation’ and ‘imposed rebranding’ characterise this process.

Thus, this conception of how the problem and politics streams may be coupled presents a more nuanced understanding than the processes of attaching problems to solutions that is normally presented by MSF theorists (Boscarino, 2009; Kingdon, 1984; Roberts and King, 1991; Zahariadis, 2003; 2007; Zahariadis and Allen, 1995). Specifically, MSF theorists have focused on the dual processes of either the conventional coupling of problems with policies or the unconventional attaching of pre-determined solutions to problems. However, the analysis outlined in this thesis details four possibilities whereby the problem and politics streams may be coupled (solution adoption, elective rebranding, problem appropriation and imposed rebranding). The relationship of such processes to those previously discussed is summarised in Figure 12.4 below.

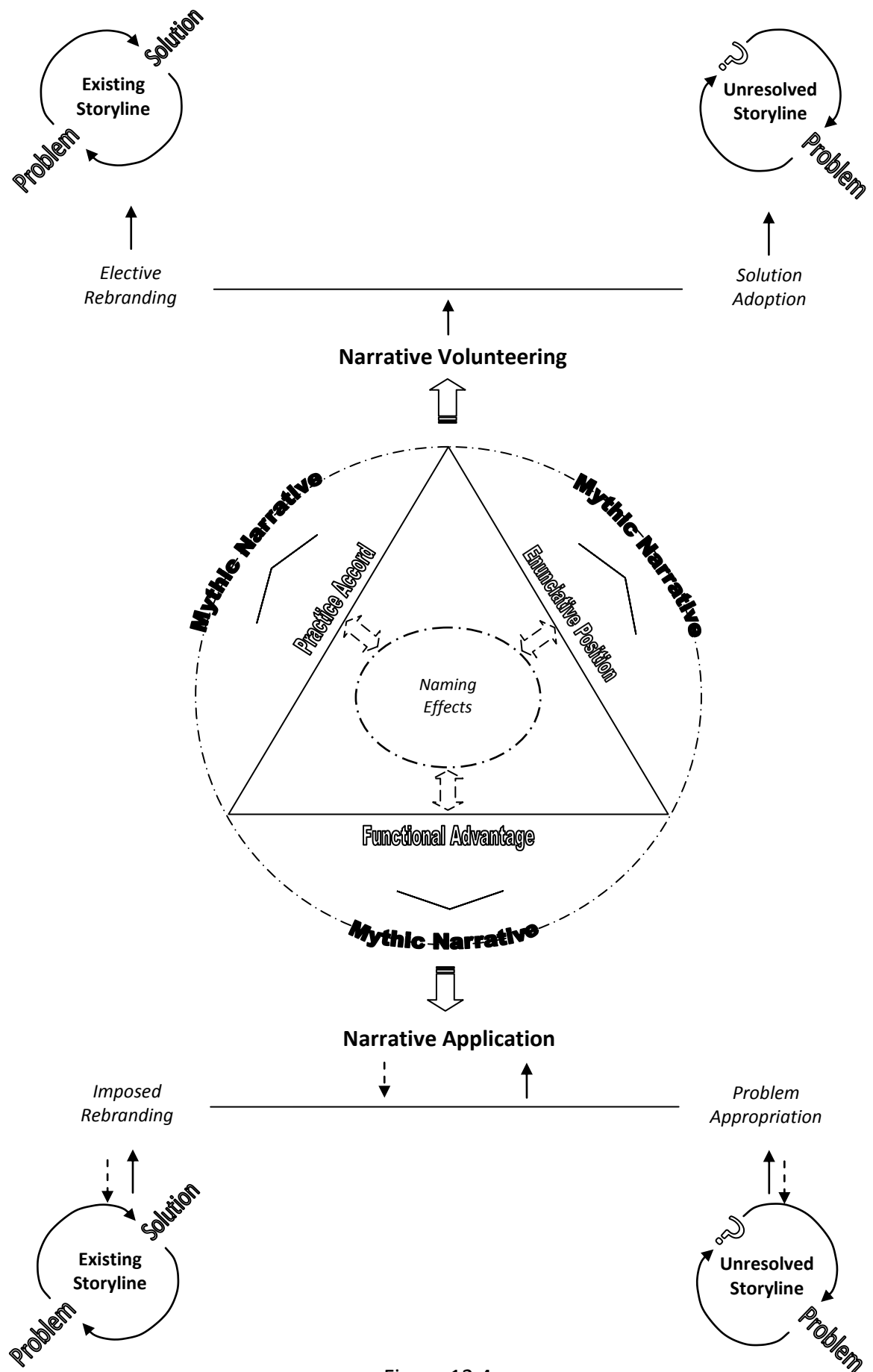


Figure 12.4
Diagrammatic representation of *policy entitlement* in the relationships between *naming effects, rationality resonance, myth & modality*

The explanation advanced here holds that those advocating a mythic narrative may promote it as justifiably incorporating and representing both the problems and problem-solution storylines circulating on a broad array of policy issues. This is achieved by means of *narrative volunteering* and *narrative application*. Consequently, the scope of issues addressed by the policy approach implied by the mythic narrative is perceived to expand with a corresponding increase in the apparent size of its discourse coalition. For example, Chapter 9 has shown how this process occurred in the dissemination of GI in Ireland wherein the concept was increasingly applied by an expanding discourse coalition to a widening array of policy issues. Thus, the conception of discourse coalition dynamics presented here allows for the artificial inflation of the coalition's apparent size through its member's endeavours to rebrand the storylines of others not necessarily supportive of the coalition's assertions. This may be undertaken as a deliberate strategy to advance a particular policy concept. As such, it extends the notion of discourse coalitions proposed by Hajer (1993; 1995; 2005; Hajer and Laws, 2006), which advances a consensual process wherein 'actors group around specific storylines that they employ' (Hajer, 1995, 13)[emphasis added]. Accordingly, the explanation presented in this thesis adds greater depth to our appreciation of how such coalitions may form and function in policy advocacy. This process is summarised in Figure 12.5 below.

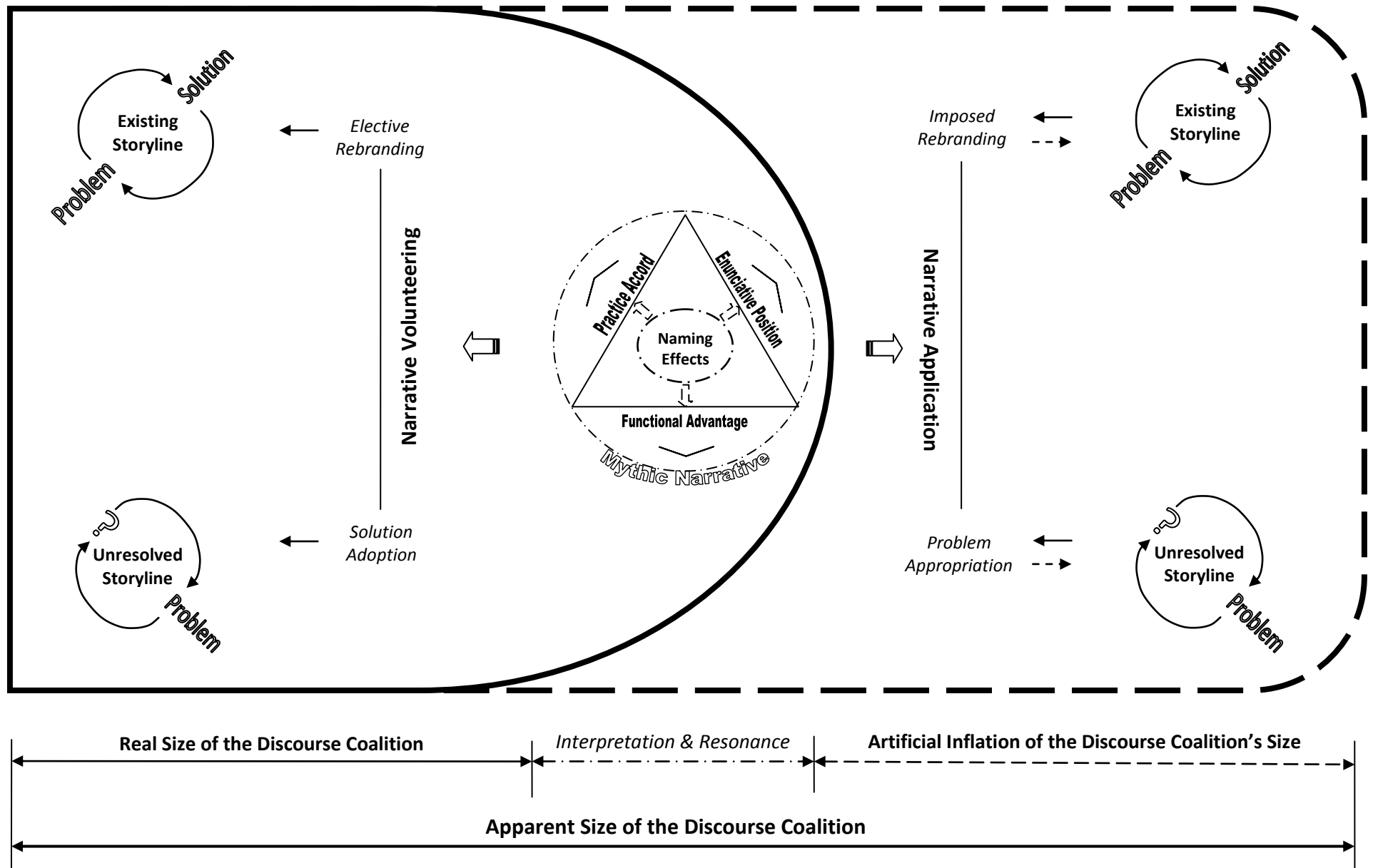


Figure 12.5
Artificial Inflation of Discourse Coalition Size by *Narrative Application*

12.3.4 Institutionalisation

In its advocacy by a broad based discourse coalition and its representation as the solution to numerous problematic issues, the new policy concept becomes 'an idea in good currency' (Schön, 1973, 127). Empirical research conducted for this thesis demonstrates that subsequent to the initial introduction of a new concept by a policy entrepreneur, several policy entrepreneurs may emerge and operate in different policy arenas. This propagation of entrepreneurial activity is facilitated by the interpretive latitude of what the entitled policy concept may signify as it is applied to the assorted policy requirements of different policy agents (see Chapter 9, section 9.3). Thus, in contrast to the prevalent presumptions of policy theorists that entrepreneurial activity usually comprises the activities of a single individual or organisation (Boscarino, 2009; Kingdon, 1984; Mintrom, 2000; Mintrom and Norman, 2009; Zahariadis, 2003; 2007; Zahariadis and Allen, 1995), this analysis shows that the successful rise of a new concept on the policy agenda may involve its seemingly concurrent emergence from many policy arenas as the number of policy entrepreneurs increases over time.

Furthermore, this investigation demonstrates that the institutionalisation of new policy may result from a complex process of concept advocacy that moves both up and down the policy hierarchy along formal and informal networks rather than in one direction (see Chapter 10, section 10.3). Consequently, it departs from theories of the policy process that foreground the institutionalisation of new ideas resulting from top-down specification through the policy hierarchy (Taylor, 2005; Guess and Farnham, 2011) or bottom-up advocacy for change by motivated groups and/or individuals (Cobb et al., 1976; Giugni, 2004; Hill and Hupe, 2009).

Additionally, the explanation of policy entitlement presented here shows how the embracing of a new concept by a broad range of agents involved in policy formulation activity, primes the policy landscape for concept institutionalisation when windows of opportunity arise. In this way, it advances an explanation of how the institutionalisation of a new concept may occur gradually but steadily, and from numerous quarters, as opportunity windows materialise in different policy arenas at different times (see Chapter 9, section 9.3 and Chapter 10, section 10.4). Thus,

this interpretation of policy process dynamics departs from the standard comprehension of opportunity windows in policy theory wherein such windows are conceived as short in duration and infrequent (Birkland, 2004; Cobb and Primo, 2003; Kingdon, 1984; Zahariadis, 2003). Accordingly, this explanation adds greater depth to our understanding of the processes by which a new policy concept may become progressively institutionalised as windows of opportunity frequently emerge in different policy contexts and for varying durations.

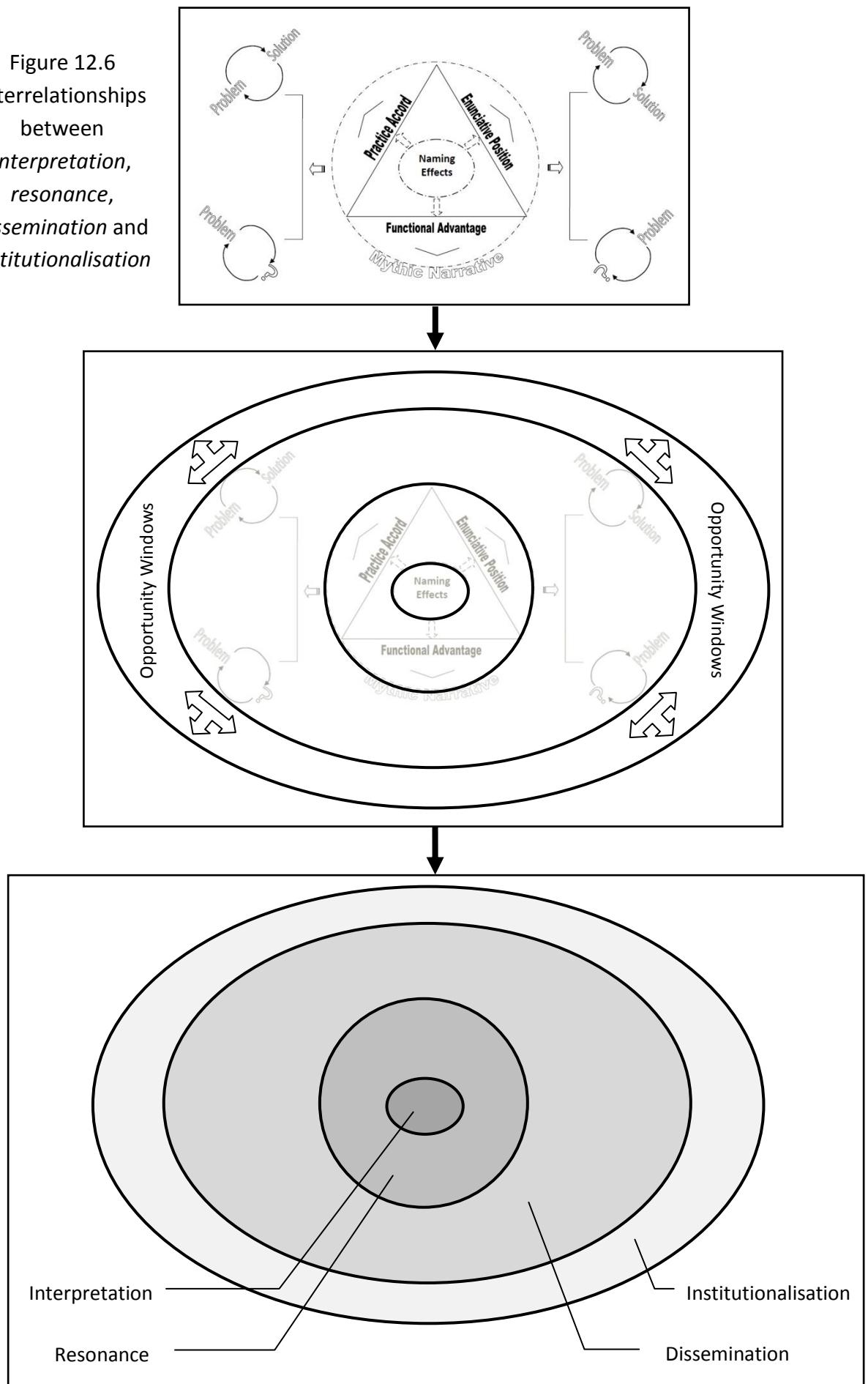
12.4 Enhancing Knowledge of the Policy Process

12.4.1 Benefits of an Interpretive Approach

The explanation of policy dynamics presented above situates a discourse analysis approach within the MSF. In doing so, it enhances knowledge of the connections between the interpretation of meaning and the role of policy entrepreneurship in the emergence, evolution and institutionalisation of a new policy approach. This is achieved by conceiving the policy process as an interrelationship between *interpretation*, *resonance*, *dissemination* and *institutionalisation*. This interrelationship is summarised on Figure 12.6.

These various stages may occur in parallel or overlap as the new policy concept gains traction in different organisational, professional and/or geographic quarters. Present throughout and connecting all these stages is the activity of motivated agents who employ various methods of conspicuous and inconspicuous promotion to disseminate the new policy concept and build coalitions of support for its institutionalisation. In this way, the explanation furnished above provides clarity to the ‘the messy realities of the public policy process’ (Howlett et al., 2009, 29) that is ‘parsimonious to be sure, but not over simplified’ (Greenberg et al., 1977, 1543).

Figure 12.6
Interrelationships
between
interpretation,
resonance,
dissemination and
institutionalisation



By giving prominence to the position of subjective interpretation, this approach avoids the determinism of policy process theory based on reductive rational choice models of social activity (Graftstein, 1992; Kiser and Ostrom, 1982; Ostrom, 2005; Scharpf, 1997), Marxist inspired explanations of ideological hegemony (Howlett, 2010; O'Sullivan, 2003), or the inevitabilities characteristic of historical institutionalism (Rayner, 2009; Sanders, 2006; Thalen, 1999). In attending to the detailed mechanics of interpretation, this explanation also evades the vagueness of explanations reliant on macro-sociological theories, such as structuration theories (Giddens, 1984; Bourdieu, 1972; Sewell, 1992), to describe the institutionalisation of new policy concepts (Crowley, 2006; Delmas, 2002; Scott, 2008b).

Furthermore, the explanation of policy process dynamics presented here describes how a new policy concept may emerge, evolve and be institutionalised in the absence of dispute in situations where there exists significant potential for disagreement. As such, this explanation departs from the adversarialism presupposed by the majority of policy process study in both the positivist and post-positivist traditions (Baumgartner and Jones, 2007; Fischer, 2003; Fischer and Mandell, 2012; Glynnos and Howarth, 2007; Graftstein, 1992; Hajer, 2005; 2011; Healey, 2012; Howarth and Griggs, 2012; Howarth and Torfing, 2005; Juntti et al., 2009; Majone, 1989; Roe, 1994; Scharpf, 1997; Shanahan et al., 2011; Stone, 2012; Weible et al., 2011; Yanow, 2000; Zahariadis, 2003).

12.4.2 Addressing Limitations of the MSF

The MSF supplies various benefits for the study of the Irish GI story between November 2008 and November 2011. Nevertheless, a number of limitations to the framework's explanatory potential were identified and discussed in Chapter 3 (see section 3.4.3). The empirical analysis presented in this thesis addresses these deficiencies. Specifically, this investigation enables greater clarity with regard to the conception of *opportunity windows*, *policy entrepreneurialism*, the *politics stream* and the *coupling process*.

Opportunity Windows

Hypothesising the existence of opportunity windows is a useful mechanism to explore the temporal dynamics of the policy process. However, the lack of specificity of how such opportunity windows should be conceived to operate has drawn critical comment from scholars attempting to apply the MSF to local issues (Robinson and Eller, 2010). In particular, Kingdon's (1984) repeated assertions regarding the short duration of such windows without actually specifying the likely period of their opening, requires clarification. Moreover, MSF theorists generally contend that such opportunity windows are infrequent (Birkland, 2004; Zahariadis, 2003).

In contrast to such claims, this thesis has demonstrated that opportunity windows may not necessarily be short in duration where policy has a local dimension. For example, in the case of County or City Development Plan production in Ireland, they may remain open for a period of almost two years (see Chapters 5, 9 and 10). Furthermore, as shown in Chapter 10 (see section 10.2.1), a generally receptive political environment, managerial support and positive organisational identity permits the frequent occurrence of opportunity windows as legislatively required plan reviews routinely emerge and the production of non-statutory documentation is regularly initiated.

An additional criticism regarding how both the originators of the MSF (Kingdon, 1984) and most researchers working with the framework (Boscarino, 2009; Burgess, 2002; Lieberman, 2002; Zahariadis and Allen, 1995) envisage an opportunity window is the assumption that entrepreneurs simply 'respond' to opportunities as they materialise in the problem, policy or politics streams (Birkland, 1997; 2004; Zahariadis, 2003; 2007). However, this disregards the role potentially played by entrepreneurs in advancing a particular interpretation of either an extant condition or policy proposal so as to 'create' an opportunity window. For example, this thesis has shown that Dr Clabby displayed policy entrepreneurialism in initiating, organising and presenting at the Malahide Green Infrastructure Conference of November 2008 (see Chapter 10, section 10.2.1). As discussed in Chapters 5 and 10, this conference was significant in both introducing the GI concept to Irish

planning and allied professionals, as well as building a discourse coalition supporting the integration of a GI approach into planning practice.

Policy Entrepreneurialism

In following Kingdon (1984), public policy theorists most often envisage an entrepreneur as an individual (Mintrom, 2000; Mintrom and Norman, 2009; Roberts and King, 1991; Schneider et al., 1995). However, this thesis substantiates the research of a minority of MSF theorists (Boscarino, 2009; Thiberghien, 2007) by showing how policy entrepreneurialism may manifest in various formats, such as QUANGOs and formal professional networks of fortuitously positioned and motivated actors. For example, this has been demonstrated with respect of the role of Comhar in advocating a GI planning policy approach via publications and presentations, as well as the Heritage Officer and Parks Professionals Networks in advocating GI in plan production (see Chapter 10, sections 10.2 and 10.3).

The Politics Stream

As previously discussed in Chapter 3 (see section 3.4.3), a deficiency with the MSF is the imprecision as to what constitutes the politics stream. This is the least developed aspect of the hypothesis (Sabatier, 2007b). Of concern here is the significance Kingdon (1984) allocates to the vague concept of 'national mood'. Whereas Zahariadis (2007) has attempted to argue the relevance of this concept, his failure to empirically demonstrate its pertinence invites continuing uncertainty regarding its use in understanding the policy process.

The comprehension of policy process dynamics advanced in this thesis addresses this limitation by replacing the imprecisely defined concept of 'national mood' with a detailed description of the role played by *rationality resonance*. Chapters 7 and 8 have demonstrated that perceptions of how a concept harmonises with existing disciplinary rationalities influences its traction among practitioners. Shown is how such 'rationality resonance' influences perceptions of a new policy concept as innovative and proactive. In so doing, such opinions facilitate embracing and promotion of the new policy concept by organisations whose members identify themselves as professionally progressive. Similarly, such views regarding a concept

as innovative and proactive influences the decision to support it by organisations mandated to advocate best professional practice (see Chapter 10, sections 10.2.1 and 10.2.2).

The Coupling Process

MSF theorists have focused on detailing the operation of two ways in which problems and policy solutions may be coupled. These comprise the sequential identification of problems and their subsequent attachment with solutions or the counter intuitive coupling of pre-determined solutions to problems (Boscarino, 2009; Kingdon, 1984; Roberts and King, 1991; Zahariadis, 2003; 2007; Zahariadis and Allen, 1995). However, this thesis presents a more nuanced understanding of the coupling process. In particular, described are four possibilities whereby the problem and politics streams may be coupled consequent to successful resonance with the prevailing rationalities of professional practice (politics stream). These four possibilities are namely: solution adoption; elective rebranding; problem appropriation; and imposed rebranding.

As discussed in section 12.3.3 above, this more nuanced understanding of the coupling process also facilitates an enhanced appreciation of how a discourse coalition may appear to rapidly expand. This is achieved by demonstrating how the artificial inflation of the coalition's apparent size may result from its members' attempts to rebrand the storylines of others not necessarily supportive of the coalition's arguments. By theorising and detailing the processes of 'problem appropriation' and 'imposed rebranding' this thesis thereby extends the discourse coalition hypothesis advanced by Hajer (1993; 1995; 2005; Hajer and Laws, 2006).

12.4.3 Agent Positioning

A discourse analysis approach to understanding the policy process involves an appreciation of how those who participate in policy advocacy are 'positioned' (Hajer, 2003) by the discourses they promote relative to the subjects of deliberation, fellow advocates and other potential stakeholders. Thus, how agents align themselves with, and shape different discourses, may be understood to specify the power positions from which social actors can communicate and act with

influence (Foucault, 1980; Glynos and Howarth, 2007). In this way, discourses can be seen to part constitute the identities of social actors by creating particular 'subject positions' (Hajer, 1995).

As discussed in Chapter 3 (see section 3.5), such positioning is facilitated by how governing activity in modern western democracies is intrinsically linked to perceptions of professional competence grounded in the possession of knowledge deemed credible by modernist rationalities (Aronowitz, 1988; Freidson, 1986; Fry and Raadschelders, 2008). Consequently, those perceived as possessing such knowledge assume identities constituted by power relationships, and enjoy relative to others, the capacity to identify, control and legitimise the very issues taken to be the subjects of deliberation (Epstein, 2008; McHoul and Grace, 1993). This is facilitated through asymmetries in the ability to deploy legitimating forms of knowledge that harmonise with prevailing empiricist rationalities (Fischer, 2007; Gottweis, 2003).

This phenomenon is demonstrated in Chapter 8, where it is outlined how endeavours to represent GI as rooted in scientific methodologies influenced the form of its advocacy, perceptions of its meaning, and the credibility of those who enunciated upon it. Detailed is how practices of 'stake inoculation' (Goffman, 1979; 1981; Levinson, 1988; Potter, 1996), such as cartography and quantification, were employed to present the impression of impartiality seen as crucial to resonating with the 'technical-rational model' (Owens et al., 2004, 1945) of knowledge production prevalent in Irish planning practice.

Hence, forging 'subject positions' (Hajer, 1995) through representation in the policy process constitutes an important element of governing activity. This is consequent on the contention of this thesis that 'the question of who should have the authority to make definitional decisions amounts literally to who has the power to delineate what counts as Real' (Schiappa, 2003, 178). Thus, what is asserted here accords with a Foucaultian concept of power relations (Foucault, 1980), in which different forms of knowledge in different contexts result in the allocation of power to those who can deploy such knowledge through the perceived legitimacy of their

enunciations. As such, it presents an understanding of power as dispersed throughout numerous sites in the policy process rather than singularly located⁵³. For example, in the case of GI's ascension in Ireland, this is demonstrated by the influence and activities of those who are seen as able to deploy the apparent impartiality of 'objective' scientific methods of knowledge production (see Chapter 8). In this way, it has been demonstrated that meaning making in and through the policy process may function to enhance the positions of certain individuals, organisations and/or networks through engendering a knowledge-power-identity nexus perceived as possessing the capacity to deploy means of knowledge production that accord with prevailing rationalities.

12.5 Conclusion

Attention to the role of meaning making moves beyond conventional assumptions of the policy process as a form of 'applied problem-solving' (Howlett et al., 2009, 4) wherein policy formulation is conceived as a linear progression from problem identification to solution specification (Birkland, 2005; Hill, 2009; Kraft and Furlong, 2010; Simon, 2009; Smith and Larimer, 2009). Accordingly,

This step to treat policy practice as the site at which interpretive schemata are produced and reproduced is a significant one. It builds on the linguistic account of policy making that employs narratives – stories, metaphors, myths – to create an image of the world that is acted upon and that constitutes that world at the same time. (Hajer and Laws, 2006, 264)

Hence, through an in-depth interpretive analysis of GI's emergence, evolution and institutionalisation in Ireland, this thesis challenges conventional understandings of the policy process which erroneously partition the 'real' and the 'representational'. This is achieved by demonstrating how 'Policies and political actions are not either symbolic or substantive. They can be both at once' (Yanow, 1996, 12). Consequently, this thesis addresses a gap in our knowledge regarding the meaning

⁵³ The concept of power advanced here is one delimited by a requirement to resonate with prevailing rationalities. Thus, the focus is on how legitimate enunciation is explicitly and implicitly both restricted and enabled, as well as how its source generates particular effects. Consequently, this conception of power differs from Lukes' (2005) understanding of power dynamics as surreptitious 'power over' others.

making mechanisms by which concepts are engendered, interpreted and given currency in policy debates. This is accomplished by advancing a 'theory of policy entitlement' which identifies and comprehensively explains the 'interpretive schemata' (Hajer and Laws, 2006, 264) that give traction to new concepts within policy formulation activity. Fundamental to this explanation is a focus on the role of symbolic language, acts and objects in both constituting and communicating interpretations of a new policy concept's signification, significance and applicability.

Central to this explanation is that meaning making both in and through policy is a contextual process wherein prevailing professional rationalities determine what a policy is perceived to remedy and how it is advocated. Consequently, this explanation addresses lacunae in our understanding of how the policy process may engender new perceptions of reality that render problematic policy ambiguity amenable to resolution by existing policy formulation practices. This is achieved by outlining how the interpretation of meaning relative to prevailing rationalities may 'will to truth' (Foucault, 1976, 55) the realities that enable problem definition and make solution specification possible. Therefore, this explanation offers a method to explore how bringing 'new possibilities into being is, of necessity, to introduce new criteria for the objective application of the new ideas that permeate our world' (Hacking, 2002, 23). Hence, the explanation forwarded here opposes the view dominant among policy process theory, such as the Advocacy Coalition Framework (Sabatier and Weible, 2007; Weible et al., 2011), by emphasising that 'Meanings are not just representations of people's beliefs and sentiments about political phenomena; they fashion these phenomena' (Wagenaar, 2011, 3).

This explanation also addresses deficits in our knowledge of how agents resolve issues of problematic policy ambiguity in a manner that facilitates seemingly unanimous support for a policy proposal where there exists significant potential for dispute. This is accomplished by showing how the interpretive requirements of ambiguous signification facilitate a degree of polysemy tempered by the prevailing rationalities of professional practice. In stressing the role of mythic narratives in suspending logical inconsistencies and deflecting potential criticism (Barthes, 1957 (2009)), this explanation demonstrates the function played by such ambiguous

signification in furnishing the means through which various motivations may be synchronised to make action possible (Cobb and Elder, 1983; Fischer, 2003).

Accordingly, it is proposed that in cases where problematic policy ambiguity appears resolved by common subscription to a new concept, what the analyst should attend is how symbolic language, acts and objects suspend potential conflict between different interests (Yanow, 2000). It is here that 'access' (Sherratt, 2006, 19) may be gained to the interpretive schemata of contextually situated policy practice. Through this, the rationalities underpinning such practice(s) may be revealed.

13.1 Research Overview

This thesis has sought to explore and explain the processes which have facilitated the rapid emergence, evolutionary trajectory and institutionalisation of the GI planning policy approach in Ireland. Specifically, the investigation has sought to examine *why*, *how* and *by what means* the GI approach has been introduced, interpreted and advanced in planning policy formulation in Ireland between November 2008 and November 2011. Such research is employed in considering the possible implications of the institutionalisation of this concept in the Irish landuse planning system.

To answer these questions the thesis adopted a discourse centred interpretive approach focused on the constitution and implications of the 'meaning' of GI. Here meaning is understood as comprising interpretations of GI's signification, significance and applicability. Investigated was how such interpretations influence the configuration of the GI planning policy approach in Ireland. Situated within the field of interpretive policy analysis (Hajer and Wagenaar, 2003; Fischer, 2003; Fischer and Gottweis, 2012; Roe, 1994; Stone, 2002; Wagenaar, 2011; Yanow and Schwartz-Shea, 2006), this entailed an examination of the context sensitive constitution of meaning, and consequently the potential implications of such meaning(s) (Blaikie, 2010; Glynos and Howarth, 2007; Schwartz-Shea and Yanow, 2012).

The research involved extensive documentary analysis of both Irish and international planning policy related material. The investigation also involved the analysis of semi-structured interviews with 52 interviewees from the public, QUANGO, NGO and private sectors. Public sector interviewees were drawn from local, regional and national levels of planning governance. Such interviewees were selected on the basis of both statutory and non-statutory GI advocacy documentation they were involved in producing. Private sector, QUANGO and NGO interviewees were specifically contacted and interviewed consequent on either

their identified role in GI advocacy or their potentially key coordinating position in promoting GI as a planning policy approach. Participant observation at two GI related workshops was also undertaken.

13.2 Research Findings

13.2.1 Interpreting GI's Meaning

This thesis has sought to examine *why* GI emerged in Irish planning policy debates, *who* promoted it, and *how* it was advocated in planning policy formulation. Addressing these questions has enabled an understanding and explanation of how forms of communication and representation influence both the promotion and adoption of a new policy concept as a way in which to resolve an array of policy issues.

The research has outlined how the initial impetus for introducing the term 'GI' into Irish planning policy debates originated from a desire to address the perceived low profile of ecological conservation issues in planning policy formulation. The analysis demonstrates how employing the term GI provokes the assumption that what is labelled 'GI' is something similar to conventionally conceived infrastructure. This perspective is engendered by the ambiguous signification of the term GI and a requirement to interpret its meaning by way of association with ideas and objects that are familiar. Thus, by virtue of widespread familiarity with the word 'infrastructure', and the associations of indispensability ascribed to it, those advocating the allocation of greater emphasis to planning for ecological conservation sought to employ the word 'infrastructure' as a linguistic device for the attribution of greater weight to nature conservation issues in planning policy formulation. This enabled exponents of GI to fashion a narrative of necessity with regard to maintaining the ecological integrity of habitats.

However, resultant from the term's ambiguous signification, it is shown how the conjunction of the words 'green' and 'infrastructure' can be flexibly interpreted and applied such that, 'Green infrastructure is a text and people bring their own values and meaning to it' (Interviewee A7). Consequently, this thesis has shown how via interpretations of the word 'green', GI quickly expanded from its initial focus on

ecological conservation to addressing multiple issues variously associated with 'green spaces' including, flood management, waste water treatment, sustainable transport, recreation provision, climate change adaptation, public health and economic development. As such, the analysis shows how use of the term GI has come to encompass a wide array of policy issues previously considered discrete.

Accordingly, this thesis details how the requirement to interpret the meaning of GI by way of connotation influences perceptions of its attributes and that which it is seen to signify (Gibbs, 2008; Lakoff and Johnson, 2003; Ortony, 1993; Semino, 2008). This facilitates the reconceptualisation and repositioning of a wide array of green space typologies, and the issues associated with such areas, from that traditionally treated as residual elements in policy formulation to that judged as providing crucial services to society.

13.2.2 Conceiving a GI Planning Approach

Advocates of a GI planning approach suggest,

There's two dimensions to green infrastructure, it's a noun and it's a verb. It is the collective open space and environmental resources that we use and that wildlife uses and it is the process of managing those resources. (Interviewee A2).

This thesis has demonstrated how GI as a label (*noun*) both for describing the services to society provided by a multitude of green space typologies, and those green spaces in themselves, is translated into a planning approach (*verb*). In particular, this research shows how interpretations of GI as analogous to conventionally conceived infrastructure prompt assumptions that it can be planned, designed, delivered and managed similar to familiar forms of 'grey' infrastructure (roads, sanitary services, drainage etc). This assumption is reinforced by subsuming antecedent narratives concerning both traditionally conceived infrastructure provision and the management of a diverse array of green space associated issues.

This examination shows how those who advocate GI stress its legitimacy as an 'objective' and 'systematic' approach to green space planning consequent on its association with the design, delivery and management of conventionally conceived infrastructure. This supposition is manifest in the focus on cartography and quantification. The objective legitimacy of the approach, and the impression of advocate impartiality, is also promoted via reference to what is advanced as GI planning in other jurisdictions by parties unconnected to landuse policy debates in Ireland.

Thus, this analysis reveals the key role played by prevailing 'disciplinary rationalities' (Freidson, 1986; Fry and Raadschelders, 2008) in giving the GI approach traction among planning and allied landuse professionals. This is effected through the perceived resonance of GI's meaning, and the activity of facilitating its provision, with the disciplinary self-assessment of planning as an 'evidence based' activity simultaneously concerned with the provision of development enabling infrastructure and ecological conservation.

13.2.3 Disseminating the GI Concept

This thesis has shown how individual initiative in response to the perceived low profile of biodiversity and green space issues in planning practice and policy provided the initial impetus for advocacy of the GI concept in Irish landuse governance debates. This examination has revealed how such initiative was facilitated by favourable institutional attributes such as organisational identity and a disposition of colleagues towards the acceptance of new policy ideas (Scott, 2008b). The research has also demonstrated the importance of managerial support in permitting GI advocacy by organisational members.

This analysis charts how the GI concept was initially disseminated by fomenting an alliance of potential advocates and the propagation of diffusion networks by physically assembling concept disseminating and implementing agents. Paralleling this was a provision of references whereby the meaning and potential applications of the GI concept in an Irish context were presented so as to orientate

interpretation of the concept and thus assist its explanation during the dissemination process.

The research demonstrates how formal and informal professional networks were concurrently employed to discretely disseminate the GI concept throughout the planning system. It has also shown how such networks enabled the targeted diffusion of the concept among a cohort of agents closely associated with green space planning policy formulation. This subsequently facilitated the more widespread dissemination of the concept.

Shown is how the dissemination of the GI concept was, and continues to be enabled by its presentation as a unitary solution narrative that proffers discursive affinities between the problem narratives held by a diverse assemblage of agents. The thesis demonstrates the way this is achieved by illustrating how the latitude for interpretation of what the GI concept means permits its presentation as a solution to a multiplicity of problematic issues. Identified, described and explained is the process whereby once an agent adopts GI as an issue-specific solution or chooses to rebrand their existing problem-solution narrative as GI, they subsequently seek to apply the GI narrative to other discourses. This is perceived as offering greater weight of consideration in policy formulation of each agent's policy objectives by virtue of inclusion with an increasing number of issues deemed to be addressed by the GI concept.

The analysis presented in this thesis also reveals how GI's ambiguous signification engenders polysemantic potential whereby the interpretation of the term's meaning is relative to the interests and needs of the interpreter. The research clarifies how such latitude for interpretation facilitated the emergence of a solution narrative that suspends potential logical inconsistencies (Barthes, 1957 (2009); Yanow, 1996; 2000) and deflects possible criticisms regarding assumptions of landuse commensurability. Also shown is how GI discourses accommodate multiple antecedent problem and solution storylines.

Demonstrated by this thesis is how the promotion of the GI concept by such processes facilitated its dissemination and adoption by those involved in the formulation of planning policy during the November 2008 to November 2011 study period. Shown is how this primed the policy agenda landscape for concept integration when regional guidance, as well as county, town and city development plans came up for review. Consequently, it is concluded that a conjunction of fortuitously positioned self-motivated personalities (Mintrom, 2000) and opportune timing (Howlett et al., 2009; Kingdon, 1984) in the legislatively prescribed planning guidance cycle was decisive in the institutionalisation of the GI planning approach in Ireland.

13.2.4 Potential Implications of GI

Although the GI concept is inchoate in an Irish context, this thesis enables the formulation of some deductions on the potential implications of GI advocacy in Ireland. While those who advocate the GI concept may be correct in asserting that it will facilitate ecological conservation, it is noted that the concept's institutionalisation may conversely prove injurious to this objective.

This thesis concludes that the emergence of GI advocacy in Ireland represents the national manifestation of an ascending international approach in conservation policy concerned with emphasising the instrumental value of environments to society as a means by which to advocate their preservation (EEA, 2011; Karhu, 2011; MEA, 2005; Mol et al., 2009; Sylwester, 2009). In this manner, the GI planning approach may be conceived as an extension of this 'ecological modernisation' paradigm into landuse policy formulation (Carter, 2007; Dryzek, 2005; Dunlap et al., 2002; Hajer, 1993). In harmony with this paradigm, integrating GI into planning policy development may be seen to supply a 'sustainability fix' (Temenos and McCann, 2012) by offering the prospect of addressing a wide array of green space issues without challenging normal Irish planning practices orientated towards the facilitation of development (Kitchin et al., 2012a). Specifically, by interpreting GI's meaning through the prism of a prevailing planning rationality premised on a 'technical-rational model' (Owens et al., 2004, 1945) of professional practice, GI is perceived as a feasible 'techno-institutional fix' (Hajer, 1995, 32) for

negotiating the complex issues associated with pressures both of and for growth. In this way, the institutionalisation of GI may reposition planning policy debates from analytical discussions on how the autopoietic integrity of ecosystems *can* be protected towards normative deliberations on how habitats *should* be conserved to enhance their anthropocentric utility.

Consequently, the institutionalisation of the GI planning approach may comprise a repositioning of the 'burden of proof' (Rosa and Da Silva, 2005) with regard to the consideration of issues in environmental planning. Here, preference may be given to those habitats and species that are deemed most commensurate with the perceived development needs of society (Evans, 2007). Furthermore, this analysis suggests that the principles of GI planning may justify intentionally transforming or consciously affecting the ecological characteristics of a site should such activities be deemed to facilitate the provision of an 'improved' habitat considered more attuned to development requirements (Hajer, 2003). Accordingly, this concept may precipitate the erosion of existing ecosystems integrity by legitimising their modification consequent to serving the requirements of continued physical and economic growth. Therefore, the particularities characterising the concept's evolution in Ireland may paradoxically risk undermining the rationale for its initial introduction as a means to assist the better conservation of existing habitats.

13.3 Research Contributions

Interpretive policy analysis of the emergence, evolution and implications of GI planning is very limited, and where evident, is largely uncritical (e.g. Kambites and Owen, 2006) . Hence, this research addresses a lacuna in policy analysis literature relating to planning. By avoiding the conventional approach of academic studies in summarising the multifarious advocated benefits of GI planning (e.g. Mell, 2008), this investigation presents an original and critical examination of the role played by forms of reasoning in stimulating presuppositions regarding GI. Specifically, the study reveals the importance of addressing the potential influence exerted by such interpretive processes on suspending logical inconsistencies (Yanow, 1996). It demonstrates that failure to provide definitional clarity and precision in the shared comprehension as to what GI means may only engender a deceptive and temporary

allaying of conservation and development related problems, rather than providing an enduring remedy to challenging planning issues.

In relating a specific examination of GI's ascension in Irish landuse governance with broader academic debates regarding environmental planning and policy development, this research also addresses a gap in environmental policy literature between a focus on the interpretive analysis of localised case studies (Evans, 2007; Hajer, 2003; Thomas and Littlewood, 2010) and the interpretive examination of international debates (Epstein, 2008; Hulme, 2009; Myerson and Rydin, 1996). In particular, this research addresses the dearth of literature on how the harmonisation of local planning activity with an international paradigm stressing the instrumental valuation of nature (Carter, 2007; Dryzek, 2005; Hannigan, 2007; Mol et al., 2009) may be understood as the translation of broader discourses into local policy formulation in a struggle to 'make environmental problems manageable for the existing structures of industrial society' (Hajer, 1995, 265).

This thesis also provides a number of empirical and theoretical contributions to understanding the role played by the interpretation of meaning in shaping the content, currency and consequences of policy more generally. In particular, the research presents an empirically substantiated contribution to knowledge on how the complex processes of policy emergence and evolution may construct the apparently independent conditions of a reality appropriate to the subjective requirements of those advocating a policy's institutionalisation. In this way, the study responds to recent calls for greater analytical emphasis on the influence of 'context' (Schwartz-Shea and Yanow, 2012; Wagenaar, 2011) and agent 'positioning' (Hajer, 2003; Torfing, 1999) in the constitution of a policy's reality. Thus, this analysis runs contrary to dominant policy process theories that launch their investigation from presuppositions on shared understandings of a policy's meaning (Compston, 2009; Ostrom, 2005; Sabatier and Weible, 2007; Scharpf, 1997). Rather, this study contributes to a growing body of literature that seeks to unpack the 'blackbox' (Latour, 1999) that effaces the interpretive processes of a policy's constitution (Fischer, 2003; Glynos and Howarth, 2007; Yanow and Schwartz-Shea, 2006).

In making such a contribution, this research draws upon the work of a number of philosophers not normally associated with policy studies (Barthes, 1957 (2009); Beardsley, 1958 (1981); Boyd, 1993; Burke, 1966; Richards, 1936 (1965); Ricoeur, 1975 (2002); Schiappa, 2003). In conjunction with more familiar interpretive policy theorists (Hajer, 1995; Stone, 1997; Yanow, 2000), and by employing certain structuring elements of the MSF (Kingdon, 1984), this facilitates the formulation of an innovative theoretical approach to the conduct of interpretive policy analysis. With a focus on the interactions between language, logic, identity and need, this approach offers a 'plausible account' (Charmaz, 2006) as to how relationships between the object of a policy and the subject of policy activity may be modified by discourse in presenting this amended situation as the 'natural order of things' (Berger and Luckmann, 1966; Hacking, 2002; Foucault, (1969) 1972). Therefore, this research presents an original contribution to policy theory by sensitising future interpretive analyses to possible causal processes influencing the content and currency of new policy concepts.

13.4 Research Limitations and Future Research

Although this research presents a detailed context for the emergence of GI in Ireland prior to November 2008, the analysis primarily focuses on the three year period between November 2008 and November 2011. Future research should therefore explore the evolution of the GI discourse in Ireland subsequent to this study period. Such an examination should include attention to identifying and explaining future departures from the findings of this research, including: any variation in the speed with which the concept achieves policy agenda presence; alterations in the constitution of GI; inclusion of new actors in the concept's advocacy and adoption; and the (re)positioning of actors consequent on an evolving narrative. In particular, future consideration should be given to the appearance of GI references in county and town development plans in more rural areas. Due to legislatively prescribed planning policy production cycles (see Chapter 5, section 5.2.2), many of these areas had six year plans already in place in November 2008 when GI emerged as a popular planning discourse in Ireland. Thus, focusing attention on the plans produced in such areas would enable an understanding of how GI may be interpreted in novel ways in different contexts as it is adopted, or

rejected, by new actors. Directing attention to policy formulation in these areas may also provide insight as to how the (re)interpretation and application of GI discourses in such localities may (re)position the actors promoting or contesting its institutionalisation. Consequently, more potential implications of GI's institutionalisation as a policy approach may emerge and be identified.

This research has concentrated on the emergence, evolution and institutionalisation of the GI policy approach in Ireland. While the GI concept enjoyed statutory representation in an array of planning guidance documents by the end of the study period in November 2011, it had not yet been 'tested' by way of implementation. Thus, future research should examine how the particularities of the concept's evolution and institutionalisation affect its implementation. This may allow a comprehension of how the accord characteristic of GI's emergence, evolution and institutionalisation up to November 2011 is maintained. Conversely, it may permit an appreciation of why and how widespread consensus breaks down as contest surfaces regarding ownership of the concept and who has the right to legitimately enunciate on its meaning.

Finally, the interpretive approach developed in this research should be trialled in other contexts and with regard to other policy concepts to facilitate an assessment of the explanatory potential it offers. Warranting further investigation is the how the timely deployment of symbolic language, acts and objects by policy entrepreneurs may successfully 'couple' problems to solutions. Future research should examine how such 'carriers of meaning' (Yanow, 2000, 17) resonate with the diverse policy objectives of various actors in a way that facilitates apparent accord. Such research should study how such apparent consensus enables concept currency and institutionalisation despite differences in understandings regarding the concept's applicability. For example, analysis could be undertaken in the UK regarding the roles played by meaning making and policy entrepreneurialism in the emergence, evolution and institutionalisation of planning policy discourses concerning 'Green Growth' (Hallegatte et al., 2012; OECD, 2012).

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APPENDICES

APPENDIX A: Master Interview Guide

(Interview Guides were tailored to Interviewees)

- Q 1 How long have you been working with XYZ?
- Q 2 What is your current position within XYZ?
- Q 3 What roles do you perform in your job?
- Q 4 Did you work anywhere else previous to your current job?
- what was your position there?
 - what roles did you perform there?
- Q 5 Can you outline for me what in your opinion 'green infrastructure' is?
- Q 6 In your opinion, how do you think the separate words 'green' and 'infrastructure' relate to the wider concept of green infrastructure? (Put differently, what are the associations carried by the words 'green' and 'infrastructure', and how do they relate to the term 'green infrastructure' with regard to the concept as you understand it?)
- Q 7 What main issues do you think 'green infrastructure' tries to address?
- Are there any other issues which green infrastructure addresses?
- Q 8 From your point of view, in what ways do you think 'green infrastructure' attempts to address these issues?
- Q 9 In your opinion, does the concept of 'green infrastructure' differ from other approaches to address these issues?
- Q 10 In your opinion, are there any disadvantages or potential disadvantages to using the green infrastructure approach in planning?
- Q 11 Can you remember, roughly, when you were first introduced to the concept of 'green infrastructure'?
- Q 12 Has your understanding of the concept of 'green infrastructure' changed over time?
- Q 13 Where do you source your information from about 'green infrastructure'?

- Q 14 Do you think that your educational and professional experience in anyway influences your understanding as to what green infrastructure means?
- Q 15 In your opinion, who if any, are the key advocates of green infrastructure in Ireland? (Who is championing the cause of promoting green infrastructure planning?)
- Q 16 Who do you think should be championing the cause of green infrastructure planning?
- Q 17 In your opinion, what are the main drivers behind green infrastructure planning in Ireland – (why, if at all, is it being promoted?)
- Q 18 In your opinion, what is the method used for ‘green infrastructure’ planning? (How is green infrastructure planning undertaken?)
- Q 19 Do you envisage XYZ (organisation name) advocating a green infrastructure planning approach?
- Q 20 Following an affirmative answer: In your view, how would the advocated benefits of such an approach be disseminated to relevant actors within the planning system?
- Q 21 Following an affirmative answer: In your opinion, how would such an approach be integrated into the planning system?
- Q 22 What level of input do you have in the drafting of XYZ (document name)?
- Q 23 Can you outline for me the process by which these XYZ (document name) are/were drafted?
- Q 24 In your view, what, if any, are the greatest obstacles to the successful roll-out of the green infrastructure approach and its full integration into the planning system?
- Q 25 Do you think that what is termed ‘green infrastructure planning’ is increasing in popularity in planning circles in Ireland?
- Q 26 In your opinion, do you think that others may have different understandings to you on what green infrastructure means?
- Q 27 In your opinion, is there anybody else that I should speak to regarding the emergence and/or use of green infrastructure in planning in Ireland?

Table 4A.1
Relationship Between Research And Interview Questions

Thesis Research Questions	Interview Guide Question Number
<u>Research Question 1:</u> <i>Why has the GI concept emerged and why is it advocated as a planning approach?</i>	7,17
<u>Research Question 2:</u> <i>What does 'GI' mean and how is such meaning constituted?</i>	2,3,5,6,7,8,9,11,14,18,20-21,26
<u>Research Question 3:</u> <i>How are meanings framed and advanced by different parties seeking to promote a GI planning approach?</i>	7,9,10,11,12,13,15,21,27
<u>Research Question 4:</u> <i>By what means is GI disseminated and institutionalised within the landuse planning system?</i>	1,2,3,4,11,12,13,15,16,20-21,22-23,24,25,27
<u>Research Question 5:</u> <i>What are the potential implications of the institutionalisation of a GI planning approach?</i>	7,8,9,10,18,19-20,22-23,24,25,26
*hyphenated numbers are linked questions (whether to ask the second question was determined by the response to the first question)	

APPENDIX B: Detailed Schedule of Interviewees

Table Appendix 4B.1

Interview Details*

Sector (no. of interviewees)	Profession	Position	Interview Format	Date	Duration (minutes)
National political (2)	Architect/ Politician	Former Minister of State for Horticulture, Sustainable Travel & Planning and Heritage	In Person	09.05.11	30
	Landuse Planner	Former Special Political Advisor	In Person	12.07.11	98
Central Government Planning (3)	Transport Planner	Strategic Planner	In Person	30.05.11	35
	Administrator (Outdoor Recreation)	Senior Executive Officer	Phone	04.07.11	96
	Landuse Planner	Senior Planning Advisor	In Person	18.08.11	40
Regional Planning Authority (5)	Landuse Planner	Regional Planner	In Person	06.07.11	51
	Landuse Planner	Regional Planner	In Person	07.07.11	58
	Landuse Planner	Regional Planner	In Person	08.07.11	68
	Landuse Planner	Regional Planner	Phone	13.05.11	42
	S.E.A. Officer	Ecologist	In Person	19.07.11	53
Local Planning Authority [Executive] (19)	Ecologist	Heritage Officer	Phone	16.05.11	40
	Parks Management	Senior Executive Parks Superintendent	In Person	17.05.11	72
	Landscape Architect	Executive Parks Superintendent	Phone	19.05.11	52
	Landscape Architect	Executive Parks Superintendent	Phone	23.05.11	60
	Ecologist	Heritage Officer	Phone	23.05.11	54
	Landuse Planner	Executive Planner	Phone	25.05.11	41
	Ecologist	Heritage Officer	In Person	25.05.11	120
	Heritage Management	Heritage Officer	Phone	26.05.11	50
	Landuse Planner	Senior Planner	In Person	27.05.11	70
	Landuse Planner	Executive Planner	In Person	17.06.11	71
	Landuse Planner	Executive Planner	Phone	27.06.11	61

Table Appendix 4B.1**Interview Details***

Sector (no. of interviewees)	Profession	Position	Interview Format	Date	Duration (minutes)
	Landuse Planner	Urban Planner	In Person	28.06.11	61
	Landuse Planner	Executive Planner	In Person	30.06.11	65
	Ecologist	Heritage Officer	In Person	20.07.11	114
	Parks Management	Senior Parks Superintendent	In Person	28.07.11	84
	Ecologist	Executive Parks Superintendent	In Person	08.08.11	80
	Engineer	Senior Engineer	In Person	09.08.11	76
	Landuse Planner	Senior Executive Planner	In Person	10.08.11	58
	Ecologist	Heritage Officer	In Person	06.09.11	32
Local Planning Authority [Political] (1)	Scientist	Councillor	In Person	06.07.11	54
QUANGO (7)	Policy Analysis	Policy Analyst	In Person	09.05.11	35
	Archaeologist	Head of Policy	Phone	10.05.11	38
	Recreation Planner	Development Officer	In Person	19.05.11	50
	Landuse Planner	Manager of Environment and Planning	Phone	27.05.11	35
	Recreation Management	Head of Recreation	Phone	27.06.11	70
	Ecologist	Ecologist	Phone	27.06.11	40
	Ecologist	Director of Research	Phone	30.06.11	41
NGO (4)	Ecologist	Natural Environment Officer	In Person	09.05.11	30
	Ecologist	Policy and Advocacy Officer	Phone	12.05.11	31
	Ecologist	International Coordinator	In Person	05.07.11	57

Table Appendix 4B.1

Interview Details*

Sector (no. of interviewees)	Profession	Position	Interview Format	Date	Duration (minutes)
	Barrister	Transport and Planning Coordinator	In Person	18.07.11	43
Private Consultancies (11)	Landuse Planner/ Landscape Architect	Senior Planner	In Person	21.04.11 & 05.07.11	36 & 34 (70)
	Landuse Planner/ Landscape Architect	Senior Planner	Phone	26.04.11	35
	G.I.S. Consultant	Director	Phone	27.04.11	30
	Ecologist	Director	Phone	29.04.11	47
	Ecologist	Senior Ecologist	Phone	03.05.11	40
	Landuse Planner/ Landscape Architect	Director	Phone	04.05.11	30
	Landuse Planner/ Landscape Architect	Director	In Person	13.05.11	115
	Landscape Architect	Director	Phone	13.06.11	64
	Surveyor	Director	In Person	14.06.11	67
	Landuse Planner/ Urban Designer	Director	In Person	05.07.11	71
	Landuse Planner	Director	In Person	18.08.11	67
*Names and organisation details are not specified to ensure interviewee anonymity					

APPENDIX C: Data Analysis Codes

1 st Cycle (105 Codes)	2 nd Cycle (45 Codes)	3 rd Cycle (22 Codes)	4 th Cycle (8 Codes)
Network	Eco-connectivity	Solution Root Specification	Solving
Connectivity			
Links			
Management	Conservation		
Conservation			
Protection			
Communication (Inter-professional)	Weight (Discursive)	Solution Narrative Conclusion	
Work With	Use Integration		
Many Uses			
Integration			
Balance			
Compromise			
Awareness (Intrinsic Value)	Awareness Raising	Solution Narrative	
Awareness (Ecoservices)			
Fragmentation	Eco-Fragmentation	Root Problem Narrative	Problematising
Immobility			
Too Late	Reactive	Problem Narrative	
Reactive			
Don't Care	Low Priority		
Low Priority			
Competing Issues			
Inhibiting	Inhibiting		
Lack of Awareness	Low Awareness		
Plan	Association (Infrastructure)	Connotative Reasoning	Naming Effects
Design			
Deliver			
Manage			
Services			
Benefit			
Need/Require/Essential			
Perform			
Network	Patterning (Infrastructure)		
Link			
Connection			
Nature/Natural Heritage	Association (Green)		
Conservation			
Environment			

1 st Cycle (105 Codes)	2 nd Cycle (45 Codes)	3 rd Cycle (22 Codes)	4 th Cycle (8 Codes)
Landscape			
Natural Sensitivity			
Natural Spaces			
Parks (human use)			
Sustainability			
Sustainable Development	Patterning (Green)		
Corridors			
Green Space			
Urban Centred			
Suburban	Spatial Applicability	Flexible Signification	
Peri-Urban			
Rural			
Universal			
Umbrella/Generic Term			
GI as Noun	Thing/Act		
GI as Verb			
Simple/Ease/ Uncomplicated	Simplicity	Apparent Simplicity	
Integration	Integration	Functional Advantage	
Holism			
Accommodating Variety	Multifunctionality		
Multifunctionality			
Surveying	Quantification	Enunciative Advantage (Stake Inoculation)	
Data Citation			
Mapping (Centrality)	Cartography		
Mapping (Evidence)			
Mapping (Communication)			
Reference	Comparison	Rationality Resonation	
Planning’s Role	Raison D’être		
Natural Home			
Cross referenced with 1 st Cycle codes: <ul style="list-style-type: none">▪ Association (Infrastructure)▪ Association (Green)▪ Patterning (Infrastructure)▪ Patterning (Green)	Language Familiarity		Practice Accord
Plans	Existing Vehicles		
Strategies			
Mapping (GIS)			
Development Control			

1 st Cycle (105 Codes)	2 nd Cycle (45 Codes)	3 rd Cycle (22 Codes)	4 th Cycle (8 Codes)
Zoning Maps			
Guidelines			
No Disadvantages			
Assumed Compatibilities	Suspension	Myth	
Assumed Consensus			
Balance	Deflection		
Champion	Champion	Champion	Dissemination
Personal-Professional Contacts	Personal-Professional Contacts	Inconspicuous Promotion	
Existing Network Access	Network Access		
Presenting	Broadcasting	Conspicuous Promotion	
Publishing	Reference Supply		
Assembling	Coalition Assembly/Building		
Mandate/Function/Role	Mandate/Function	Mandate/Function	
Managerial Support	Managerial Support	Institutional Facilitation	
Young	Organisation Particularities		
Identity as Dynamic			
Idea Receptive			
Serendipity	Windows	Opportunity Windows	
Obligatory Plan Making			
Optional Policy Making			
Solution Adoption	Endogenous Attaching	Problem Provisioning	Advancement
Inside Reframing	Endogenous Reframing		
Solution Specification	Exogenous Attaching	Solution Provisioning	
Outside Reframing	Exogenous Reframing		
Eco Mod	Eco Mod	Eco Mod	Ecological Modernisation
Definition Requirement	Direction	Delivery Obstacle	Potential Impediments
Empty Signifier			
National Guidance			
Legislative Requirement			
Regional View			
Resource Constraints	Resource Constraints		
Disciplinary Fragmentation	Coalition Dissolve		
Ownership Issues			
Cross-Purpose Talking			