Connotations of Credibility:

policy, evidence and actor legitimation in landuse governance

Mick Lennon

Abstract

This paper explores the role of meaning making in delineating legitimate forms of evidence in policy work and how this positions certain actors within the processes of policy formulation. In particular, the role of connotation as a form of interpretation is discussed. Explained is how language, acts and objects function in both constituting and communicating the ontological and epistemological assumptions upon which a policy rationale may rest. A case study of the emergence of green infrastructure landuse planning policy in Ireland is employed to inform and illustrate the paper's argument.

School of City and Regional Planning,

Cardiff University,

Glamorgan Building,

King Edward VII Avenue,

Cardiff,

Wales,

United Kingdom,

CF10 3WA,

Email: LennonMJ@cardiff.ac.uk

*Disseminated for discussion purposes only

1.0   Introduction

Wagenaar notes that 'meanings are not just representations of people's beliefs and sentiments about political phenomena; they fashion these phenomena' (2011, 3). Consequently, meaning making is a form of 'reality making', wherein the attributes of something – its ontology – is constitued through our perception of it.   Once such an ontology is engendered, inferences emerge on how we can and should come to know it– its epistemology.   One way in which to investigate how such reality making occurs is by focusing on the role of discourse in constructing a 'shared way of apprehending the world' (Dryzek, 2005, 9). Here discourse 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).   In the field of landuse planning, examining both 'why' and 'how' actors employ discourse in their meaning making activities offers a window on the assumptions upon which the principles of a new planning approach rest. This is achieved by studying how discourses function to regularise both ontological and epistemological interpretations of a particular issue, and thus how the basic principles of social action are structured in relation to it (Fischer, 2003).   Thus, studying why and how meaning making occurs is a way of understanding what makes some forms of knowledge legitimate and others not. In other words, it enables an appreciation of what makes something 'evidence'. Furthermore, attention to meaning making facilitates an examination of how the presentation of legitimate forms of evidence may serve as a means for positioning actors in planning policy debates and providing the rationale underpinning specific policy perspectives. This paper explores these interrelationships between evidence and meaning making through a case study of the emergence of green infrastructure (GI) planning policy in Ireland.

2.0   Meaning Making and Evidence in Policy Practice

Although a broad church of approaches, those engaged in interpretive policy analysis share the assumption that all forms of human communication is socially meaningful and that these meanings are shaped by social, cultural and political struggles manifested through context specific discourses (Hajer, 2011; Fischer and Forrester, 1993; Glynos and Howarth, 2007; Roe, 1994; Stone, 2002; Yanow and Schwartz-Shea, 2006). Accordingly, interpretive

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 embedded in specific places during certain periods. Consequently, the analysis of discourse shifts the focus from objective truths to a 'will to truth' (Foucault, 1976, 55). Thus, the task of the interpretive policy analyst is not to evaluate whether statements are true or false, but rather to investigate how such 'truths' are mobilised, for as noted by Epstein (2008, 13), *'studying discourses is a means to taking a critical step out of what the discourses actually say in order to observe what they do.'* Because professional disciples prescribe what can be counted as 'truths' within a particular subject area, a significant part of the work done by disciplinary discourses is the generation of valid forms of 'evidence' (Benton and Rennie-Short, 1999; Fry and Raadschelders, 2008; Litfin, 1994; Steffek, 2003; 2009). As the perceived legitimacy of landuse policy generally relies on reference to a 'technical-rational model' (Owens et al., 2004, 1945) of knowledge production[1], the capacity of a proposed policy to resonate with such technical-rational premises 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 likely to assume identities constituted by power relationships, and enjoy relative to others, the ability to identify, control, legitimise and mobilise the very issues taken to be the subjects of deliberation (Owens, 2005; Owens et al., 2004; Richardson, 1996; Rydin, 2003; 2007; Rydin et al., 2007).

In examining how meaning making bestows legitimacy upon evidence in policy practice, it is important to remain attentive to the role of language, acts and objects as 'carriers of meaning' (Yanow, 2000, 17). Such 'artifacts' (ibid, 14) comprise symbols that weave a 'web of signification' (Allan, 2005, 12) in structuring the reality both constituted by, and addressed in policy work (Howarth and Torfing, 2005; Stone, 2002). 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, symbolic artifacts (language, acts, objects) communicate through connotation rather than denotation

---

[1] 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.

(Edelman, 1964). Where such symbolic artifacts are perceived to connote knowledge legitimated in accordance with accepted disciplinary standards, they may be conceived as representing factual statements and thereby meet approval (Ockwell and Rydin, 2006; Swaffield, 1998). Seen in this light, symbolic artifacts 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, they may enable the 'collective centring' (Hajer and Laws, 2006, 260) that allows constellations of actors to coalesce around, and subscribe to, a particular series of assumptions as to 'what counts as real' (Schiappa, 2003, 178), and as a corollary, what counts as 'evidence'. Hence, symbolic language, acts and objects may furnish the connotations that 'will to truth' (Foucault, 1976) interpretations of evidence credibility and the legitimacy of those providing it. Drawing on the scrutiny of documentary material and the analysis of fifty three interviews with actors positioned in QANGO and NGO bodies, as well as across national, regional and local level planning authorities, this paper will now illustrate how such theoretical concerns play out in practice through exploring the emergence of green infrastructure (GI) planning policy in Ireland.

3.0   The Emergence of GI Planning in Ireland

3.1   Prologue

In November 2008, Fingal County Council organised a GI conference in Malahide, North County Dublin, Ireland. Prior to this conference reference to GI in Irish planning advocacy and guidance documentation had been limited (Tubridy and O Riain, 2002; UCD et al., 2008). However, in the wake of this event, mention of GI in such documentation increased significantly. By November 2011, the GI planning approach had achieved representation in statutory guidance at national, regional and local levels, while also enjoying reference in many non-statutory planning policy and advocacy documents.

3.2   Seeing Green

The initial impetus for introducing the term GI into the Irish planning policy context stems from a desire to address ongoing issues of ecosystem degradation perceived as largely resulting from habitat fragmentation. It was widely held among those concerned with nature conservation that such habitat fragmentation was consequent on the low profile of

nature conservation issues in Irish planning policy formulation. In response to this, some of those seeking to promote the significance of nature conservation in policy development sought to establish a means by which to elevate the comparative weight of consideration assigned to such issues in landuse planning discussions. By virtue of widespread familiarity with the word 'infrastructure', and the associations of indispensability attached to it, those advocating the allocation of greater emphasis to nature conservation employed the word 'infrastructure' as a linguistic device facilitating the reconceptualisation of green spaces generally from residual areas to locations providing crucial services to society. This new approach thereby relabelled green spaces as GI. This enabled exponents of this GI approach to fashion a 'narrative of necessity' with regard to such areas. However, such a narrative served as a carrier of connotative meaning for a broader series of ontological and epistemological presumptions on how green spaces should be conceived. As such, naming had effects.

3.3   Naming Effects

According to Berger and Luckmann (1966, 112), *'the fundamental legitimating 'explanations' are...built into vocabulary'*. Central to this is the process of naming. As noted by Burke (1973, 4), *'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'*. Therefore, the naming process my be conceived as process of reality construction (Potter, 1996, 82). A rhetorical effect of this is that it creates the impression that what is named has always existed independent of its labelling, and in a sense, was waiting to be discovered as the logical conclusion of investigations (Schiappa, 2003, 115). It is in this context that labelling green spaces as GI engendered certain presumptions. However, a number of those interviewed felt that although clearly connoting a presumption of something necessary, the term GI does not immediately refer to an obviously defined entity. Rather, such interviewees suggested that what the term signified was initially ambiguous to the interpreter. This attribute of 'ambiguous signification' meant that reaching apparent clarity of interpretation necessitated reasoning what the expression represented by exploring its connotations. Although such connotative reasoning 'works on the subjective level' (Fiske, 1990, 87), Chandler notes that as,

> *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)

Echoing concepts theorised by Berger and Luckmann (1966), Fiske outlines how such intersubjective responses to interpretation mean that *'it is often easy to read connotative values as denotative facts'* (Fiske, 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 that what is signified represents a collectively understood literal denotation masks the attributes of associative interpretation intrinsic to the sign's comprehension (Chandler, 2002). 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), facilitated a sense of necessity in the associative interpretation of an otherwise ambiguous term. Indeed, the potency of connotations related to the word 'infrastructure', and the common familiarity with such connotations, elicited a sense of literal denotation of the expression 'green infrastructure' that partially concealed the process of association required in its interpretation.

It was as a reference to green spaces that most of those interviewed interpreted the word 'green' with respect to the term GI. However, as noted by many interviewees, the scope of spaces represented by the use of the word 'green' in the context of the expression 'green infrastructure' was plentiful. This was expressed by one planning authority officer when he suggested,

> *...the word green you know, it can encompass anything to do with the natural environment really...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. It gives you broad scope I suppose to examine the area that you want to.* (Interviewee B2)

External to the expression 'green infrastructure', 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)

> ...it's a word that extends from the historic use of if from road and rail, that kind of thing... (Interviewee D2)

> Infrastructure is in some ways you know, roads, power lines, harbours, airports, that to me is, is a country's infrastructure. (Interviewee C6)

Thus, assembling the words 'green' and 'infrastructure',

> ...bends the understanding a little bit...it's possible to build it into 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)

The manner in which the conjunction of these words generated a metaphor that fostered a reconceptualisation of green space necessitates an understanding of the way the two words are asymmetrically positioned relative to each other in terms of how they perform their meaning endowing functions. Ivor Richards (1936 (1965)) provided insight into this by proposing 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 calls the 'vehicle'. In the present case, the idea (tenor) which the advocates of GI sought to convey was the importance of green spaces. The vehicle used to communicate this tenor (idea) was the expression 'green infrastructure'. However, as stressed by Paul Ricoeur, *'The metaphor is not the vehicle alone but the whole made of the two halves'* (Ricoeur, 1975 (trans.1977)(2002), 93). It follows that use of the term 'green infrastructure' (vehicle) to convey the importance of green space (tenor) not only achieved the manifest objective of the communicative act, but also altered perceptions on how the significance of green space was conceived. Max Black (1968) suggests that this alteration transpires by the work of metaphor in 'organising' our interpretation of what is being conveyed. With regards to GI, the subject 'organised' is the word 'green' (green space), while that engaged in organising is

the word 'infrastructure'. The effect of this organising of interpretation was outlined by one planner when commenting,

> *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 how you use these spaces or areas and what you use them for. So when you put the two of them together you actually do get quite a useful phrase in terms of creating infrastructure...* (Interviewee B2)

Hence, forging the metaphor 'green infrastructure' enabled the configuration of specific ontological and epistemological interpretations as to the nature of green spaces ('green'), their appropriate functions, and how these areas can be planned ('infrastructure'). In this sense, 'green infrastructure' became a *conceptual metaphor*.

In their seminal study of metaphor's capacity to direct thought, Lakoff and Johnson (2003) identify categories of conceptual metaphors, as ontological or structural.   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 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 (ibid). However, as is noted by Lakoff and Johnson (2003, 264), these categories are not mutually exclusive, but rather, *'All metaphors are structural (in that they map structures to structures); all are ontological (in that they create target domain entities).'*   Therefore, the evocations inherent to metaphorical mapping from source to target domains not only specify an ontology for that which is

conveyed, but also stipulate an associated epistemology that structures responses to such metaphorically induced realities.

Applied to the term 'green infrastructure', such an understanding suggests the conceptual organisation of green spaces ('green') through reference as 'infrastructure'. This occurs by mapping associations from commonly conceived notions of infrastructure (source domain) onto comprehensions of what green space planning entails (target domain). Thus, as noted by one consultant,

> *It's 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)

Several interviewees alluded to the force of metaphorical reasoning in forging an understanding of 'green infrastructure' that is commensurate with conventionally conceived 'infrastructure'. As noted by one planner,

> *I think it's a clever combination of words and that infrastructure suggests systems and mechanics and planning and all of those things, you know, it's kind of scientific in its nature.* (Interviewee A2)

This metaphorical transference from the source to target domain of 'systems', 'mechanics' and 'scientific' associations in the reconceptualisation of green space functions consequently influenced the interpretation as to how approaches to planning for such areas should be conducted. Indeed, most of those questioned felt that a GI approach to green space planning was a rational process utilising a coherent methodology in the deduction of conclusions from scientifically assembled evidence. In this context, one planner asserted,

> *It's thinking of that connectivity and those green spaces as traditionally you would think of physical infrastructure...you're doing it in some methodical way. There's an evidence base underpinning what you're trying to achieve...you're doing this rationally.* (Interviewee E4)

Such perceptions of GI planning as following a 'technical-rational model' (Owens et al., 2004, 1945) of knowledge production engendered presumptions as to what counts as evidence and who can enunciate upon it. Specifically, the interpretation of GI planning as

'scientific in its nature' (Interviewee A2) necessitated a capacity to discuss versions of the world construed as objective, factual and impersonal. Consequently, the perceived legitimacy of GI knowledge claims required the apparent evacuation of ostensible interest-motivation from the production and dissemination of information ascertained in analysing this independent reality. This concern surrounding the appearance of neutrality in the structuring and communication of knowledge claims has been termed 'stake inoculation' (Potter, 1996). Accordingly, those best able to produce an effect of apparent 'stake inoculation' in the evidence they presented were seen as the most trustworthy enunciators of GI knowledge claims. Documentary and interview research undertaken suggests that specific mechanisms were drawn upon to both explicitly and implicitly convey the inoculation of interests or 'stake' in the production of GI knowledge (evidence). Such research indicates the centrality of *cartography* in this process. Research similarity indicates that those advocating GI endeavoured to bolster the legitimacy of their proclamations by *comparison* with what they labelled as GI planning activities occurring in other countries. Also evident was the role played by *quantification* in facilitating the appearance of neutrality.

3.4   Cartographic Evidence

As discussed above, the form of reasoning inherent to GI's comprehension engenders associations of 'systems', 'mechanics' and the 'scientific' that elicit perceptions of the technical-rational model of planning activity associated with conventionally conceived 'infrastructure'. Resultant from such inferences is the assumption that a significant element of the 'evidence based' for GI planning rests in conducting analyses and presenting conclusions in a fashion similar to that for conventionally conceived 'grey infrastructure' (roads, sewage, drainage etc). For most of those interviewed this entailed a prioritisation of cartography. As noted by 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. Both interview and documentary data indicate that it was such suppositions of cartographic fidelity with an objective reality that gave weight to mapping as the means by which to furnish the 'evidence base' in GI policy formulation. As noted by one 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 the resource, the natural biodiversity, the amenity, the cultural aspects all of those things, now that's very important as the evidence base, surveying it, mapping it and capturing it and then on that basis you proceed forward and make decisions on that. So it shouldn't be policy or ideas that come basically shooting from the hip, it needs to be chased back into proper planning process.* (Interviewee A10)

Such condensation of 'scientific' legitimacy in cartography involves shaping that which is presented in the context of the map audience's epistemological assumptions and ontological expectations. 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, the focus on mapping in GI planning activities not only embodied presumptions on legitimate forms of evidence, it also structured perceptions of the reality it claimed to represent. Consequently, the 'will to truth' channelled through cartography enabled map authors to legitimately expound 'an' interpretation of GI as 'the' interpretation via reference to an apparent objective reality. In other words, it allowed 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 legitimated that which was enunciated.

For a map to convey a 'truth' relative to the suppositions of its audience, the activity of map making must be selective in content. Thus, *'to present a useful and truthful picture, an accurate map must tell white lies'* (Monmonier, 1991, 1).   Accordingly, 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. As such, maps are both instruments of communication and a means of persuasion. This capacity for maps to influence how reality is legitimately presented enables cartography to serve as a theory-constitutive and exegetical exercise by stipulating what elements of the world are open for interpretation and how these are to be deciphered.   However, the assumption of cartography's veracity and integrity masks such processes, and in doing so, inoculates their author's from accusations of interest-motivation.   Maps thereby provide a powerful mechanism in the presentation of potentially subjective knowledge claims as scientifically legitimated and objective 'evidence'.

The requirement to interpret GI's meaning via those connotations engendered by its metaphorical properties stimulated assumptions of GI planning as the mapping and provision of green spaces as 'infrastructure'. This reconceptualisation of green spaces transformed their perception from the *'left over space…the stuff you haven't* zoned' (Interviewee E4) to 'infrastructure' that services the development requirements of society while concurrently assisting the conservation of biodiversity.   In this sense it is assumed that,

> *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 prompted the apparent rational interpretation of anthropocentrically orientated green space development as concurrently facilitating environmental conservation. In this sense, such maps were employed as potent tools in the generation of appropriate and desired landuse functions wherein they 'effected actualization' (Corner, 1999, 225) of the objective facts constituting spatial realities. As such, maps acted productively in helping to engender green space ontologies and in furnishing the evidence for the rational planning of landuses. Consequent to this wide range of spatial functions, those who advocated GI as a planning approach frequently employed cartography as evidence in constructing a reality of functional coexistence within spaces by encompassing multiple landuses beneath the rubric of GI. Indeed, although originally conceived as a means by which to give weight to nature conservation issues in planning policy discussions (Tubridy and O Riain, 2002), GI had over the 2008-2011 period assumed a series of ever expanding multifunctional properties. No longer confined to biodiversity conservation, it progressively encompassed recreational, economic development, conventional infrastructural, aesthetic and agricultural functions. Paralleling this increasing multitude of interpretations was the disbanding of fixed conceptual categories defining what GI 'is', and by corollary, 'is not'. Ultimately, this involved the dissolution of unifunctional landuse categories (conservation, recreation, transport etc) and the legitimation of new spatial realities through the productive power of the 'evidence' supplied by cartography.

3.5   Comparative Evidence

Another prominent stake inoculating mechanism identified as employed by GI advocates was comparison. Central to this was the relationship between the identity of those referencing an evidence claim, those identified as producing such a claim, and that upon which the claim was made. The stake inoculating potentials and properties of such relationships were explored by Erving Goffman and elucidated in his theory of '*footing*' (1981). 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. 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. Considered together, these elements of reference, *'can be said to tell us about the "production format" of an utterance'* (ibid, 145). These distinctions between *principal, author* and *animator* 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'. The role played by footing in effecting stake inoculation can be observed in the prevalence of 'comparison' as evidence in discourses on GI planning in Ireland. This was postulated by a number of interviewees and expressed by one local authority officer when concluding,

> *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)

Indeed, the expanding variety of functions seen as delivered by GI (see section 3.4 above), was reflected in the diversity of identified and referenced GI activities promoted as offering models for green space planning (*principal*). In seeking the legitimacy bequeathed by perceptions of objectivity, those advocating the application of such exemplars (*animators*) cited particular examples (*authors*) detailing where such planning approaches have been applied. Interestingly, those advocating (*animators*) different interpretations of green space planning (*principal*), referenced different examples (*authors*) of GI activities dependant on the specific comprehension of GI that they were forwarding, be it for flood mitigation, recreation, mental health, biodiversity conservation etc. Therefore, a feature of Irish GI advocacy was 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 a scientific 'evidence based' discipline. In essence, advocates employed 'comparison' as a means to confer enunciative advantage on their particular aspirations for green space planning.

3.6   Quantifiable Evidence

Also evident in many policy documents and interviews regarding GI was reference to numerical data and the processes of quantification. Underpinning such references was the connotatively reasoned comparability of GI with conventionally conceived 'grey infrastructure' wherein quantitative methodologies were presumed as inherent to its

delivery. Furthermore, stake inoculation via quantification helped to conceal the normative impetus of counting activities by force of appeal to the perceived objective methodologies of scientific measurement. In this way, the act of counting served to veil a normative function by implying an unprejudiced imperative to do something. As noted by Deborah Stone, measuring frequently implies *'a need for action, because we do not measure things except when we want to change our behaviour in response to them'* (2002, 167). Accordingly, acts of quantification were employed in the production of forceful evidence to signal a requirement for action. Similar to cartography, such acts of quantification were also used to furnish the evidence that produced the realities for the policy activity sought by those involved in the counting process. 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)

Indeed, the legitimating and issue highlighting functions of counting were ardently forwarded by certain parties to the GI advocacy discourse and can be observed in the endeavours of the Irish Sustainable Development Council (SDC) 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 the SDC were frequently focused on the 'monetarisation' of natural 'assets' wherein a cost-benefit analysis of the value of ecosystems to national economic growth was foregrounded.

Expounding this perspective, the director of the SDC presented an economics centred argument for the introduction of multifunctional GI planning at the Irish Planning Institute's Annual Conference in April 2010 (Comhar, 2010c). The SDC's presentation at this event employed references to initiatives by the United National Environmental Programme, the New Economics Foundation, the Grantham Research Institute as well as its own 'Towards a Green New Deal' document (Comhar, 2009) to present GI as a multifaceted environmentally sensitive approach that can help reverse the costly loss of ecosystems services. This approach endorsement a cost-benefit argument for the adoption of GI planning and was sustained by the SDC in other presentations (Comhar, 2010d). In the same month, the SDC 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. Specific group discussions on the role of GI in enhancing the 'value' of ecosystems were organised. This numerical assessment of GI was reflected when in August 2010, the SDC published a detailed GI advocacy document (Comhar, 2010b). With a focus on an economic calculus of GI's value, the 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.* (Ibid, 23)

In such instances, quantifying the economic worth 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 was 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 attempt at stake inoculation of those 'facts' was made simultaneous to conveying the important story about which 'the facts speak for themselves'. 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.

4.0   Conclusion

This paper endeavours to demonstrate the importance of attending to the symbolic role of language, acts and objects as both constituting and carrying the meanings of 'evidence' in policy work. Extrapolating from a case study of the emergence of GI planning policy in Ireland, this paper attempts to illustrate how contextually contingent linguistic associations prompt ontological and epistemological assumptions subsequently consolidated through the symbolic attributes of certain acts (cartography, comparison, counting) and objects (maps).

Shown is that attention to the influence of language in constituting the reality of policy is a requisite for understanding how different forms of evidence are bestowed legitimacy within a specific context. Such attention demands that *'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 requires consideration of *'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). Specifically, by laying emphasis on the selective and abstractive functions of naming, this paper draws attention to how the process of labelling simultaneously abbreviates the complex while specifying the ontological status of that which is named. Through means of connotation, epistemological suppositions are subsequently provoked. A rhetorical effect of this process is that it creates the impression that what is named has always existed independent of its labelling and was waiting to be discovered as the logical conclusion of enquiry (Schiappa, 2003, 115). This paper demonstrates how the capacity of naming to engender such effects is dependent on an ability to resonate with the ontological and epistemological presuppositions of existing context contingent practices. Where the language used in naming is ambiguous, connotation rather than denotation is necessitated. Here, interpretation via association with familiar concepts is required. Nevertheless, through repeated citation and expanding actor ascription, the boundaries between connotation and denotation may become blurred over time as an apparent stability of meaning emerges. Consequently, those advocating a particular policy whose comprehension is founded on connotations reasoned from a label, are linguistically forming and communicating an interpretation of reality by offering a description that functions in defining or redefining something without necessarily acknowledging that a new perspective is being promoted. As such, reasoning by connotation evolves into denotation as a 'will to truth' (Foucault, 1976, 55) that defines reality and delineates what counts as evidence in respect of it. Thus,

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)

However, this form of reality making is not neutral. Rather, it specifies the positions from which legitimate enunciations can be issued. In particular, this paper demonstrates how conceiving GI as analogous to conventional infrastructure induces a presumption that those who can produce knowledge claims congruent with the methods normally applied in traditionally understood 'grey infrastructure' (roads, sewers, drainage etc), enjoy the ability to pronounce on the reality to which GI policy can and should apply. In this way, meaning making prompted by naming may be viewed as not only specifying what constitutes credible evidence but also who is legitimately positioned to produce it. As these forms of evidence operate in recursively consolidating the interpretation of the reality that gives force to the enunciations of those who pronounce upon it, labelling can be viewed as enhancing the positions of certain actors through engendering a knowledge-identity-power nexus.

References

ALLAN, K. D. 2005. *Explorations in Classical Sociological Theory: Seeing the Social World,* London, England, U.K., SAGE Publications Ltd.
BARTHES, R. 1974 (trans. 1974) (1990). *S/Z,* Oxford, England, U.K., Basil Blackwell Ltd.
BENTON, L. M. & RENNIE-SHORT, J. (eds.) 1999. *Environmental Discourse and Practice,* Oxford, England, U.K.: Blackwell Publishers Ltd.
BERGER, P. & LUCKMANN, T. 1966. *The Social Construction of Reality: A treatise on the sociology of knowledge,* London, U.K., Penguin Books.
BLACK, M. 1968. *Models and metaphors* Ithaca, New York, U.S.A., Cornell University Press.
BURKE, K. 1973. *The Philosophy of Literary Form,* Berkeley, California, U.S.A., University of California Press.
CHANDLER, D. 2002. *Semiotics: the basics,* London, England, U.K., Routledge.
COBB, R. W. & ELDER, C. D. 1983. *The Political Use of Symbols,* New York, U.S.A., Longman.
COMHAR 2009. Towards a Green New Deal. Dublin, Ireland: Comhar SDC.
COMHAR 2010a. *Workshop on The Economics of Ecosystems and Biodiversity.* Dublin, Ireland.
COMHAR 2010b. Creating Green Infrastructure for Ireland: enhancing natural capital for human well being. Dublin, Ireland: Comhar SDC.
COMHAR 2010c. Green New Deal & Green Infrastructure. *Irish Planning Institute Annual Conference.* Tullamore, Offaly, Ireland.
COMHAR 2010d. PPN Presentation: Green Infrastructure Enhancing Natural Capital for Human Wellbeing. *Parks Professional Network Seminar Day.* Dublin, Ireland.
CORNER, J. 1999. The agency of mapping: speculation, critique and invention. *In:* COSGROVE, D. (ed.) *Mappings.* London, England, U.K.: Reaktion Books.
DRYZEK, J. S. 2005. *The Politics of the Earth: environmental discourses,* Oxford, U.K., Oxford University Press.
EDELMAN, M. J. 1964. *The Symbolic Uses of Politics,* Chicago, Illinois, U.S.A., University of Illinois Press.
EDER, K. 1996. *The Social Construction of Nature,* London, England, U.K., SAGE Publications Ltd.
EPSTEIN, C. 2008. *The power of words in international relations: birth of an anti-whaling discourse,* London, U.K., The MIT Press.
FISCHER, F. 2003. *Reframing Public Policy: discursive politics and deliberative practices,* Oxford, U.K., Oxford University Press.
FISCHER, F. & FORRESTER, J. (eds.) 1993. *The arguementative turn in policy analysis and planning,* London, England, U.K.: Duke University Press.
FISKE, J. 1990. *Introduction to Communication Studies,* London, England, U.K., Routledge.
FLYVBJERG, B. 1998. *Rationality and power: democracy in practice,* London, UK., The University of Chicago Press Ltd.
FOUCAULT, M. 1976. *The Will to Knowledge: the history of sexuality: Volume 1,* London, England, U.K., Penguin Books Ltd.
FREIDSON, E. 1986. *Professional Powers: a study of the institutionalization of formal knowledge,* Chicago, Illinois, U.S.A., The University of Chicago Press
FRY, B. R. & RAADSCHELDERS, J. C. N. 2008. *Mastering Public Administration: from Max Weber to Dwight Waldo,* Washington D.C., U.S.A., CQ Press.

GLYNOS, J. & HOWARTH, D. 2007. *Logics of critical explanation in social and political theory,* Oxford, England, U.K., Routledge.

GOFFMAN, E. 1981. *Forms of Talk,* Oxford, England, U.K., Basil Blackwell.

GOLD, J. R. & REVILL, G. 2004. *Representing the Environment,* London, England, U.K., Routledge.

HAJER, M. 1995. *The Politics of Environmental Discourse: ecological modernisation and the policy process,* Oxford, U.K., Oxford University Press.

HAJER, M. 2011. *Authoritative Governance: Policy Making in the Age of Mediatization,* Oxford, England, U.K., Oxford University Press.

HAJER, M. & LAWS, D. 2006. Ordering through discourse. *In:* MORAN, M., REIN, M. & GOODIN, R. E. (eds.) *The Oxford Handbook of Public Policy.* Oxford, England, U.K.: Oxford University Press.

HOWARTH, D. & TORFING, J. (eds.) 2005. *Discourse Theory in European Politics: identity, policy and governance,* Basingstoke, England, U.K.: Palgrave MacMillan.

JOHNSTONE, B. 2007. *Discourse Analysis,* Oxford, England, U.K., Blackwell Publishing.

KITCHIN, R., PERKINS, C. & DODGE, M. (eds.) 2009. *Rethinking maps: new frontiers in cartography,* Oxford, England, U.K.: Routledge.

KNOWLES, M. & MOON, R. 2006. *Introducing Metaphor,* Oxford, England, U.K., Routledge.

KORNOV, L. & THISSEN, W. A. H. 2000. Rationality in decision- and policy-making: Implications for strategic environmental assessment. *Impact Assessment and Project Appraisal,* 18**,** 191-200.

LAKOFF, G. & JOHNSON, M. 2003. *Metaphors We Live By,* London, U.K., University of Chicago Press.

LEMKE, J. 1998. Multiplying meaning: visual and verbal semiotics in scientific text. *Reading Science: Critical and Functional Perspectives on Discourses of Science* New York City, New York, U.S.A.: Routledge.

LITFIN, K. 1994. *Ozone Discourse: Science and Politics in Global Environmental Cooperation,* New York City, New York, U.S.A., Columbia University Press.

MACEACHREN, A. M. 1995. *How Maps Work: representations, visulaizations and design,* New York, U.S.A., Guildford Press.

MONMONIER, M. 1991. *How To Lie Wth Maps,* Chicago, U.S.A., University of Chicago Press.

OCKWELL, D. & RYDIN, Y. 2006. Conflicting discourses of knowledge: understanding the policy adoption of pro-burning knowledge claims in Cape York Peninsula, Australia. *Environmental Politics,* 15**,** 379-398.

OWENS, S. 2005. Making a difference? Some perspectives on environmental research and policy. *Transactions of the institute of British Geographers,* 30**,** 287-292.

OWENS, S., RAYNER, T. & BINA, O. 2004. New agendas for appraisal: Reflections on theory, practice, and research. *Environment and Planning A,* 36**,** 1943-1959.

PETTS, J. & BROOKS, C. 2006. Expert conceptualisations of the role of lay knowledge in environmental decisionmaking: challenges for deliberative democracy. *Environment and Planning A,* 38**,** 1045-1059.

POTTER, J. 1996. *Representing Reality,* London, England, U.K., SAGE Publications Ltd.

RICHARDS, I. A. 1936 (1965). *The philosophy of rhetoric,* Oxford, England, U.K., Oxford University Press.

RICHARDSON, T. 1996. Foucauldian Discourse: Power and Truth in Urban and Regional Policy Making. *European Planning Studies,* 4**,** 279-292.

RICOEUR, P. 1975 (trans.1977)(2002)*. The rule of metaphor,* Oxford, England, U.K., Routledge.

ROE, E. 1994. *Narrative policy analysis: theory and practice,* London, England, U.K., Duke University Press.

RYDIN, Y. 2003. *Conflict, Consensus, and Rationality in Environmental Planning: An Institutional Discourse Approach,* Oxford, England, U.K., Oxford University Press.

RYDIN, Y. 2007. Re-Examining the Role of Knowledge Within Planning Theory. *Planning Theory,* 6**,** 52-68.

RYDIN, Y., AMJAD, U. & WHITAKER, M. 2007. Environmentally Sustainable Construction: Knowledge and Learning in London Planning Departments. *Planning Theory and Practice,* 8**,** 363–380,.

SCHIAPPA, E. 2003. *Defining Reality,* Edwardsville, Ilinois, U.S.A., Southern Illinois University Press.

SEMINO, E. 2008. *Metaphor in Discourse,* Cambridge, England, U.K., Cambridge University Press.

SHAPIRO, M. 1981. *Language and Political Understanding,* New Haven, Connecticut, U.S.A., Yale University Press.

SIMMONS, I. G. 1993. *Interpreting Nature: cultural constructions of the environment,* London, England, U.K., Routledge.

STEFFEK, J. 2003. The legitimation of international governance: a discourse approach. *European Journal of International Relations,* 9**,** 249-275.

STEFFEK, J. 2009. Discursive legitimation in environmental governance. *Forest Policy and Economics,* 11**,** 313-318.

STONE, D. 1997. *Policy paradox: the art of political decision making,* New York, USA, W.W. Norton.

STONE, D. 2002. *Policy Paradox: the art of political decision making* New York City, New York, U.S.A . W.W. Norton.

SWAFFIELD, S. 1998. Contextual meanings in policy discourse: a case study of language use concerning resource policy in the New Zealand high country. *Policy Sciences,* 31**,** 199-224.

TUBRIDY, M. & O RIAIN, G. 2002. Preliminary study of the needs associated with a National Ecological Network. Wexford, Ireland: Environmental Protection Agency.

UCD, DLRCC, FCC & NATURA 2008. Green City Guidelines. Dublin, Ireland: UCD Urban Institute.

UF & IEEM 2010. Green Infrastructure: a quality of life issue. Dublin, Ireland: Urban Forum and the Institute of Ecology and Environmental Management.

WAGENAAR, H. 2011. *Meaning in Action: interpretation and dialogue in policy analysis,* Armonk, New York, U.S.A., M.E. Sharpe.

YANOW, D. 2000. *Conducting Interpretive Policy Analysis,* London, England, U.K., Sage Publications.

YANOW, D. & SCHWARTZ-SHEA, P. (eds.) 2006. *Interpretation and Method: Empirical Research Methods and the Interpretive Turn,* London, England, UK: M.E. Sharpe Inc.