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Methodological and Ideological Options

Towards systemic and adaptive governance: Exploring the revealing and concealing aspects of contemporary social-learning metaphors

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ABSTRACT

This paper uses metaphor theory and analysis to explore competing and sometimes contested claims about the nature and utility of social learning. Seven metaphor clusters — performance metaphors, action metaphors, communication metaphors, governance mechanism metaphors, social learning as a paradigm, social learning as a form of cognition and social learning as a wheelbarrow full of frogs, were identified from the sustainability and natural resource management (NRM) literature. Rather than seeking to define social learning rigidly, and thus limiting its potential utility to open up spaces for innovation in NR governance, social learning can be positioned in future discourse so that it holds a cluster of revealing and concealing features. This position shifts responsibility for clarity and rigour away from the concept, useful because of its fluidity, to the user of the concept who must then articulate the way(s) in which they choose to use it. This shift is consistent with reflexive, systems practice for systemic and adaptive governance and invites practitioner responsibility rather than conceptual reification.

1. Introduction

The search for more effective environmental governance arrangements has involved the development of new frameworks for analysis and understanding such as socio-ecological systems (Ostrom, 2007, 2010; Yang and Wu, 2009), deliberative processes (e.g. Fiskhin and Laslett, 2003; Hajer and Wagenaar, 2003) and a turn towards governance arrangements that support collective action and reflection, particularly social learning (e.g. Garmendia and Stagl, 2010; HarmoniCOP, 2005; Keen et al., 2005; Pahl-Wostl et al., 2008). But despite being the subject of increased research effort social learning is yet to establish itself as a well understood "complementary" governance mechanism to those most commonly employed in environmental management, viz., regulation, market or fiscal mechanisms and education or information provision (Ison et al., 2011).

Concerns about the effective governance of situations such as river catchments, watersheds, climate change adaptation, biodiversity conservation and ecosystem service provision are widespread. A paucity of effective governance approaches in such situations seemingly exists despite the efforts made in the 40 years since Rittel and Webber (1973) coined the term 'wicked problems' to refer to situations that are contested, difficult to bound, involving many stakeholders with socio-technical features (APSC, 2007; Ison, 2008). There is clearly a need for governance innovation (Hajer and Wagenaar, 2003); fortunately recent research, as evidenced by Ostrom's body of work (see Ostrom, 2007, 2010) demonstrates that commons-type situations are no longer irrevocably committed to tragedy as posited by Hardin (1968). Social learning research is also an innovative response to commons-like, or 'wicked', situations (Wals, 2007) but the potential of 'social learning' to contribute to the governance of socio-ecological systems is not widely appreciated.

Social learning remains clearly contested as both a concept and as a set of practices. Various perspectives, many seemingly oppositional, exist on what social learning is, or could be (Armitage et al., 2008; Garmendia and Stagl, 2010; Reed et al., 2010; Rodela, 2011). This is not surprising as the growing literature on social learning has been applied in a variety of settings (Franz and Nunn, 2009; Jiggins et al., 2007; Leonard et al., 2009; Salva et al., 2009; Satake et al., 2007; Vanderelst et al., 2009; Whitehead and Richerson, 2009). As Beers et al. (2010) have questioned, is social learning about helping people to develop trust, commitment and a shared view of the situation to be resolved? Or is it really about collaborative learning, focusing on how people learn in groups? Such divergent applications and definitions of social learning have led Reed et al. (2010) to lament "there remains little consensus over its meaning or theoretical basis".

In this paper social learning is understood from an epistemological viewpoint that sees knowledge not as an object that can be transferred

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between people, but as an emergent, relational dynamic of social interactions (Ison et al., 2007). Within the SLIM (2004) tradition social learning can be understood as something to be invested in, i.e., a governance mechanism as well as a set of processes enacted in social dynamics. Drawing on systems theory social learning can thus be understood as a duality, a totality comprising entity and process, much as an orchestra is an entity as well as a social dynamic capable of creating performances that are effective over time. Investing in and/or engaging in social learning can transform complex situations when systemic and adaptive governance and praxis (theory informed practical action) persists over time (Collins and Ison, 2009; Ison et al., 2011).

How learning is understood and enacted is central to most, but not all, conceptions of social learning. Blackmore (2007) explained that social learning encompasses (but is not limited to) considerations of how people learn collectively and how the social context influences learning amongst individuals. For these reasons (and others) social learning is increasingly being applied to issues of resource and environmental management (Armitage et al., 2008) and sustainability (Luks and Siebenhuner, 2007). As outlined by Blackmore (2007) and Garmendia and Stagl (2010), Bandura (1963, 1977, 1986) is generally attributed with bringing the term social learning to prominence. He developed "what became known as a social cognitive theory that emphasized that much information people gain comes from interactions with others" (Blackmore, 2007, p. 516).

We are not concerned with learning theory per se, but with how social learning has come to be understood in the last decade and thus how these understandings inform research and governance praxis. We note however that many early learning theories, including Bandura's, that were based on narrow cognitive and behaviourist understandings have been subjected to increasing critique (e.g. Shackleton et al., 2009). More recent social learning theories are influenced by those studies that emphasize changes in appreciation of how knowledge is constructed or, how knowing happens (Fox, 1997; Jacobson, 1996; Lave and Wenger, 1991, cited in Muro and Jeffrey, 2008).

This paper attempts to open up spaces for innovation in systemic and adaptive governance, particularly of situations understood as socio-ecological systems, by engaging with the burgeoning literature on social learning through the lens of metaphor theory. The approach we take parallels that of Larson (2011) who seeks to 'provide a better understanding of how our environmental metaphors operate in context [and how] we need to reframe them so that they are more consistent with values rooted in sustainability' (p. xi). Our aim is to counter trends that attempt to sanitize the literature (and thus praxis) through reductionistic strategies which demand definitional clarity or seek to build hegemonic institutional capital around particular definitions. We will argue for an alternative trajectory in which social learning, understood as a duality — as an entity and process — is positioned more effectively as an alternative but complementary governance mechanism and appreciated in policy discourses. A case is made that the context-sensitive exploration of enabling and disabling or revealing and concealing features of social-learning metaphors and their theoretical entailments offers an expansion of opportunity because awareness of metaphors enhances understanding by increasing learning opportunities (McClintock et al., 2004). Our choice of metaphor analysis builds on our earlier research that links metaphors and human understanding with the hermeneutic circle that shows how metaphors can be used to explain, appreciate and create different understandings (Helme, 2002; Ison, 2010; McClintock, 1996).[1]

To achieve the purposes of this paper it is first necessary to provide a brief review of metaphor theory, explain how metaphors work, and reflect on the role and impact of definitions in doing what we (humans) do. We draw in particular on the understandings of metaphor theory of Lakoff and Johnson (1999, 1980) and research informed by their understandings (Helme, 2002; McClintock, 1996; McClintock et al., 2003, 2004). Our perspective on metaphor theory is consistent with our declared epistemological position which, as outlined earlier, is that knowledge is not an object that can be transferred between people, but an emergent relational dynamic of social interactions. We then provide a short review of the social learning literature focusing on theoretical contestations and criticisms followed by an outline of the methods adopted for conducting a metaphor analysis of social learning drawing on a sample of the available literature. A discussion and summary of conclusions follow drawing out the implications of our analysis for researchers and policy makers, as well as outlining how this preliminary research could be pursued.

2. How Metaphors Work

In describing interpretative approaches to policy analysis Yanow (2003) lists five analytic methods that are described in a category called 'language focused'; these are frame analysis, narrative and rhetorical analysis, semiotics, category analysis and metaphor analysis. However, depending on one's theoretical stance in the dynamic field of metaphor theory, it would be possible to claim that metaphors are central to each of Yanow's language focused analytical approaches, to which could be added discourse analysis (Hajer, 2003). This is because in their seminal work Lakoff and Johnson (1980, p. 3) claim that '…metaphor is pervasive in everyday life, not just in language but in thought and action. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature.' The essence of metaphor, they write, 'is understanding and experiencing one kind of thing in terms of another' (1980, p. 5). Metaphors may thus be said to 'structure our understandings because metaphors have entailments through which they highlight and make coherent certain aspects of our experience' (Lakoff and Johnson, 1980, p. 156).

It is not possible here to engage fully with metaphor theories and associated methods that can be brought to research practice. The most prominent theory is Contemporary Theory of Metaphor or CTM (formerly Conceptual Metaphor Theory). CTM is concerned with cognitive metaphors, that is, metaphors that are claimed to affect cognition pioneered by Lakoff and Johnson (1980). CTM does not concern itself with aesthetic, ornamental or decorative metaphors, a tradition that sees metaphor as optional extras or embellishments, a view commonly attributed to Aristotle (Cooper, 1986). McClintock (1996), Helme (2002), Ruiz de Mendoza Ibanez and Perez Hernandez (2011) along with Steen (2011) review metaphor theoretical developments and contestations; CTM is arguably the most popular theoretical framing with adherents, such as Ruiz de Mendoza Ibanez and Perez Hernandez (2011) arguing that many of the criticisms of CTM are based on misunderstandings.

For our purpose a metaphor can be seen as a description and recognised by the use of the words 'is' and 'as'; following Schön (1979) a metaphor can be understood as "seeing as", that is "seeing X as Y". In this construction a metaphor, such as 'countryside as a tapestry' is said to have a source domain (countryside) and a target domain (tapestry). Methodologically the search for metaphors is not as simple as using a word search for 'is' or 'as' because metaphors are often implicit in the constructions used within language; one has to become adept at 'spotting' metaphors or resort to recently developed analytical tools (Steen, 2007).

How do metaphors work? One claim is that a metaphor transfers, or 'projects upon the primary subject, a set of associated implications' (from Black, 1979, p. 28). Associated implications can be interpreted as "entailments". Schön (1979, p. 257–259) exemplifies how entailments work when he described the development of a new paintbrush with synthetic bristles that failed to apply an even coat of paint. Somebody

[1] The hermeneutic circle, as espoused by Gadamer (1975) and Heidegger (1962), gives an account of how understandings can emerge. Snodgrass and Coyne (1990, p. 7) describe the hermeneutic circle: '…(as) the circular relation of the whole and its parts in any event of interpretation'.