

# ESRC Inter-programme workshop: Theoretical approaches to policy change and human behaviour

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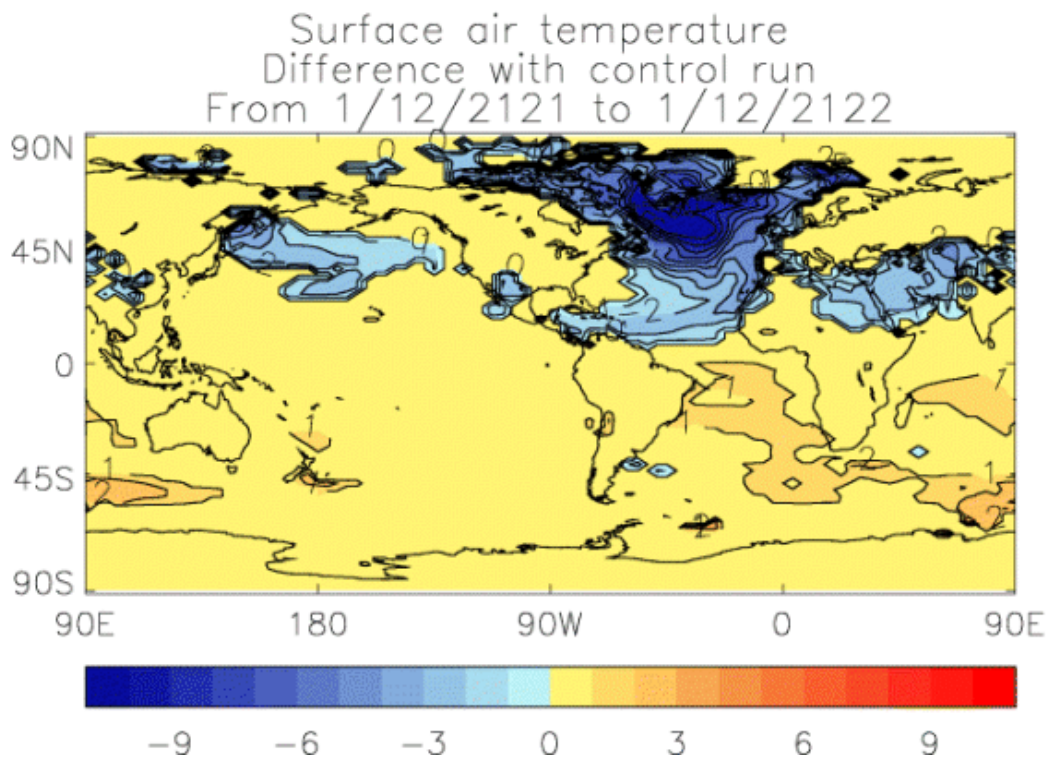
## Institutional theory and societal adaptation

Discussion paper: Chris High, Mark Pelling, University of Liverpool

### Research Context:

#### 1. Rapid Climate Change.

Rapid Climate Change is a counterintuitive shift in climate. An example would be if the Gulf Stream stopped transporting warm water from the tropics and removing cold water from Northern Europe. Thought to be unlikely this century, but of concern because would result in cooling for the UK rather than warming.



*Question:* To the extent the rural sector in the UK is gearing up for climate change, this based on warming scenarios. Has that reduced flexibility if THC collapse or other low probability scenario occurs (e.g. extreme warming)?

#### 2. Adaptation

Adaptation to climate change refers to the changes in a system (e.g. an agro-ecosystem, or a society) which arise in response to shifts in the climate. It is usually used in the sense of changes which enable conservation or improvement in respect of quality indicators (e.g. production, sustainable human/environment interaction, or quality of life), in contrast to mere degradation. Adaptive capacity refers to the ability of a given system to respond to known or unknown stressors. It can be thought of in

terms resistance – the ‘*coping range of a system*’ (Yohe & Tol, 2002), which Adger (2000) calls resilience - ‘*the disturbance which can be absorbed before {a} state change.*’ However Pelling (2003) distinguishes between resistance and resilience, seeing the latter as much more dynamic and accepting of change – thus one can distinguish between conserved (or improved) state variables and those the alteration of which constitute an adaptive response. For example, for an individual farmer an adaptation could mean changing crops but remaining a farmer (adaptation of a farming system), or changing profession, but remaining a productive member of the rural economy (adaptation of a rural livelihoods system).

*Question:* Need one concentrate on adaptive capacity to specific stressors, or are there more generic capacities that enable adaptation across a range of interacting stressors?

### **Theoretical Development:**

The project is essentially theory driven – consisting of the development of a theoretical framework, followed by empirical testing by comparing with the experience of a range of rural stakeholders at different policy scales. The framework is being built from a synthesis of New Institutional theory, Social Capital and Organisational Learning. As such theory is central to the project, although the aim is to develop practical tools which can be used in practice.

#### *1. Institutions*

Following North (1990) and Ostrom (1999), we distinguish between organisations and institutions as the players and the rules of the game respectively. Under this distinction the fundamental difference between organisations and institutions is that the former are ceded agency, while the latter are not. That is, organisations (formal and informal) exist to the extent that they comprise constellations of individuals organised in pursuit of particular purposes. Institutions provide the field in which these purposes are played out, and have no agency or indeed membership of their own. They are often constructed purely in terms of constraints, but as Nelson & Nelson (2002) point out, they enable as well as constrain – for these authors, institutions are the points of reference when human co-operation is needed.

Treating institutions as fundamentally different to organisations loses nothing, because the category “organisations” is still available. Both Kiser & Ostrom (1982, pg 193) and North (1990, §1) put forward arguments for the conceptual clarity that distinguishing between the two provides. Kiser & Ostrom on account of the problems of confusion between ideal types and given instances of organisations, which the distinction circumvents, and North because of the analytical power it provides for understanding why non-optimal (from the neo-classical economists point of view) institutional regimes endure. The two concepts are anyway linked, because organisations are organised through formal and informal institutions, and because the operation of institutions is made visible through the behaviour of organisations.

Although this discussion of institutions treats them in isolation, in practice they are systemically interrelated. That is they have different relevancy to given decisions by given actors, and act to modify one another in particular situations (cf Mershon, 1994 on the development of informal institutions which modify the operation of formal institutions in coalition politics). Therefore it makes sense to speak of institutional frameworks, constellations or systems (according to preference), in order to recognise that different types and levels of institutions may be active in any given situation. In order to highlight that institutions provide a background field, against which social

actions take place, we prefer the term institutional environments. A focus on collectives of institutions in this manner is implicit in several frameworks for institutional analysis (Ostrom, 1999; Turner et al, 2003), and is vital for understanding and working with multi-level, iterated structures such as the distributed climate change assessment systems which interest Cash (2000).

The table below gives a range of distinctions about institutions drawn from the literature. This provides a highly textured tool for exploring institutional contexts, and it is expected that in any given situation some axes will give more analytical power than others will.

Table 1 – Axes of difference amongst institutions.

Axis	Explanation	References
Formal/informal	Institutions can be formally constituted or informally constructed through the interaction of some social group.	(Kiser & Ostrom, 1982; North, 1990, 2001; Williamson, 2000)
Conscious/unconscious	Subjects of an institution may or may not be aware of the influence of a particular institution on their decision making	(Argyris & Schön, 1996; Goleman, 1998; Hulsén, 1998)
Action/Collective choice/Constitutional Choice	Institutions operate at different levels. Constitutional choices configure a space within which collective choices are made, which in turn shape how individual (or group) actions are decided upon.	(Kiser & Ostrom, 1982)
Designed/Emergent	Institutions can be considered the products of design, or the emergent, contingent result of ongoing social interaction.	(Jordan & O'Riordan, 1997; Nelson & Sampat, 2001; Ostrom, 1999)
Internalised/Enforced	An actor may perceive an institution as an internal value, arising from their identity, or an external force, imposed from without.	(Hulsén, 1998; Nelson & Nelson, 2002)
Stable/dynamic	At a given point in time, institutions can be perceived of as stable and unchanging, or fluid and evolving.	(Aoki, 1998; North, 1990)
Continuous/1-10 yrs/10-100 yrs/100-1000 years	Institutions can persist and operate over different time scales.	(Shaw, 2002; Williamson, 2000)
Interorganisational/ Intraorganisational/ Interpersonal	Institutions can mediate different kinds of relationships.	(Vandenberg, 2002)

*Question* Can analytical tools of this form contribute to a praxis oriented towards increasing adaptive capacity?

## 2. Social capital

Social capital is a slippery concept with the obligatory multiplicity of definitions. We are interested in it in the sense of the language which it provides to describe the association between the quality of interpersonal relationships within a social system and the operation and evolution of institutions. If we look at the metaphorical entailments of social *capital*, the focus is on the stream of benefits that arise from social interaction and the degree to which this can be sustained over time (High, 2002). In our case, we're particularly interested in the adaptive capacity that arises from different forms of social capital.

Putnam (1993, pg 167) described social capital as '*features of social life – networks, norms and trust – that enable participants to act together more effectively to pursue shared objectives*' (1993: 167). Thus social capital is founded in the ties that bind society together and give it structure. Although some criticise the concept of social capital for neglecting the issue of power (e.g. Fine, 2001), or as a cure-all lacking any distinct meaning (Portes, 1998), most analysts recognise the potential offered by work which seeks to uncover the role of interpersonal relationships, trust and reciprocity. Indeed, the variety of theoretical approaches reflects the context-dependent nature of social capital. However, the breadth of application that social capital has enjoyed means that individual projects have to be careful in the definition, operationalization and measurement of the concept (Adam and Rončević, 2003).

There remain challenges that limit the explanatory power of social capital. Perhaps most important is the lack of clarity over whether social capital is a dependent, independent or intermediary variable. Is social capital a product or an organising principle behind social structures and individual acts of agency? This is an important concern in using social capital as an indicator of vulnerability and as a focus for policy attention to enhance adaptive capacity. For policy makers who seek to build or utilise social capital, questions remain on the relative efficiency and equity outcomes of top-down and bottom-up strategies (Williams, 2003). Top-down strategies suggest social capital is primarily an outcome of society-state relations and existing civic associations (e.g. Fox, 1996), while bottom-up strategies stress the importance of social norms.

Following Fukuyama (2001, pg 7), we are interested in the '*informal norm{s} that promote co-operation between two or more individuals*'. In development studies, the focus has been on the relationship between such informal networks and the potential for mobilising formal grassroots organisations. It is supposed that institutional capacity-building and the formation of organisations and networks depends on a critical thickness of social capital, motivating pressure(s) and a supportive enabling environment. However, where formal institutions hold sway with participants playing roles with more clearly bounded responsibilities and social interaction and exchange of information or resources, the milieu is quite different to the informality and flexibility that characterises social capital exchanges. Attention is inevitably directed towards formal institutions, because this is where it is thought there is opportunity for conscious design and improvement (North, 2001; Ostrom, 1999). Informal institutions are either seen as too abstruse to tackle or worse, a source of corruption. We're interested in the extent to which social capital allows one to understand informal institutions and the lessons for policy and practice that a balanced appreciation of informal institutions suggests.

*Question:* What sort of analytical traction on informal institutions does social capital provide?

### 3. Organisational learning

Organisational learning is an important part of the management literature, and has attracted much attention from both academics and the business community over several decades (cf Argyris & Schön, 1978). It is seen as a core strategic capacity of an organisation in terms of both competitive advantage (Stewart, 2001, pg 141) and bare survival (Senge, 1990). It has been applied to not only commercial organisations, but also government agencies, and non-profit making associations (Flood, 1999b, pg 1). In the sense that organisational learning is concerned with the social conditioning of increasing the capacity to respond to events, it is directly relevant to institutions and adaptation to climate change. Nevertheless the language used is often quite different and the focus is on organisations rather than institutions, at least on the surface.

An important dimension on which theories of organisational learning differ is the extent to which learning is situated within the individual. Mainstream theorists such as Senge (1990) and Argyris & Schön (1996) tend to recognise that learning is at least socially conditioned, while still situating the process within individual actors. Other theorists are more radical, arguing that learning cannot be separated from the social situation in which it takes place (Luckett & Luckett, 1999; Stacey, 2000; Wenger, 1999), or that social groups themselves can be said to learn in their own right (Morgan, 1986, 1989). In any case, like social capital organisational learning is concerned with the benefits (and disbenefits) which result from social interaction, constructing learning as an emergent property of social systems.

An early focus was understanding different kinds of learning. Argyris & Schön (1978; 1996), drawing on the work of Bateson (2000), differentiate between single and double loop learning. The former is about efficiency, learning to undertake activities and achieve goals with increased skill. The latter is concerned with changes in the governing values of an organisation, in strategies and assumptions. Double loop learning is seen as harder, frustrated by inhibition and defensive routines and requiring cultural and personal discipline to achieve. We suggest that theories of different orders of learning illuminate the qualitatively different kinds of adaptation open to a social system and perhaps outline some of the social qualities that correspond to increased adaptive capacity.

We also draw on two more recent strands of thought on organisational learning – communities of practice (Brown & Duguid, 1991; Wenger, 1999) and an application of complex adaptive systems theory to organisational learning, developed at the University of Hertford (Stacey et al, 2000). Wenger, building on work on situated learning (Ison et al, 2000, pp 38-39), has developed a theoretically rich framework relating learning to social theory. He links the social formation of identity with loci of practice – ‘*doing in a historical and social context that gives structure and meaning to what we do*’ (Wenger, 1999, pg 47). The change and development of both individuals and groups operates through both participation and reification, as do the opportunities for different communities of practice to learn from one another. Like social capital, there has been a tendency to attempt to implement communities of practice in an instrumental way (cf Lesser et al, 2000 for examples), even though the perspective explicitly questions the value of viewing learning in terms of intentionally designed organisations and formal boundaries.

This is reinforced by the work of the ‘Hertfordshire School’ on adaptive systems. They posit that an ideal adaptive state exists at the ‘*edge of chaos*’ (Shaw, 1997), in a space between formal rigidity and informal anarchy. The result is a bounded flexibility, where the future is continually constructed. Instead of the dominant approach to governance, where the orientation is towards the refinement of formal regulatory structures to control behaviour, the call is to manage within the unmanageable (Flood, 1999a, b). This perspective opens a space for bottom-up/adaptiveness-in-action in addition to top-down/anticipatory adaptation. Stacey, Shaw and their colleagues, just like Wenger and Argyris & Schön, are interested in the experience of the individual in relation to the social system of interest and the role of informal relationships and tacit knowledge in enabling adaptation and learning.

*Question:* How can OL theory contribute to a better understanding of the relationship between institutional regimes and adaptive capacity?

### **Conclusion:**

In conclusion, the project is making progress in tying together several strands of theoretical development, although there is still groundwork to be done to ensure that the emerging framework has a coherent basis. The key variables we are interested in are the nature and quality of inter-personal relationships, qualitative characterisations of institutional regimes and indicators of adaptive capacity. It is expected that the resulting framework will shed light on both the tacit and explicit aspects of adaptive capacity and open up new avenues of praxis for policymakers and academics with an interest in securing improved adaptive capacity and reduced vulnerability to climate change.

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