Knowledge, learning and development: a post-rationalist approach

Colin McFarlane

Department of Geography

The Open University

Milton Keynes

MK7 6AA

Tel: 01908-654-505

Fax: 01908-654-488

Email: c.mcfarlane@open.ac.uk

Abstract

The relations between knowledge, learning and development are of growing importance in development, but despite the growth of interest in this area since the mid-1990s, key issues have yet to be explored. This review argues the need to attend to how knowledge and learning are conceived in development and how they are produced through organisations. Drawing on mainstream development literature, the review argues that there is a pervasive rationalist conception of knowledge and knowledge transfer as objective and universal, which has political implications. By contrast, the review argues for a post-rationalist approach that conceives development knowledge and learning as partial, social, produced through practices, and both spatially and materially relational.

Keywords

Knowledge, learning, rationalism, post-rationalism, World Bank, Slum / Shack Dwellers International.

Introduction

The relations between knowledge, learning and development are of growing importance in development (see special issue of *Development in Practice*, 2002; DFID, 2000; Hovland, 2003; K. King, 2001; Wilson, 2002; World Bank, 1999). Mainstream development institutions are increasingly arguing for the role of knowledge and learning in the development of 'poor' countries. The 1998/9 World Bank World Development Report (WDR) entitled Knowledge for Development, for example, argues that knowledge must be used to alleviate poverty and contribute to economic growth. Numerous statements have been made by the Bank claiming that "Knowledge has become the most important factor in economic development" (World Bank, 2002: 7). However, despite the growth of interest in this area since the mid-1990s, key issues have yet to be explored. Most of the recent literature is concerned with how organisations can and should manage knowledge (BOND 2002, 2003; Edwards, 1994), what organisations can do to enhance innovation and knowledge creation (DFID, 2000), how organisations can become 'learning organisations' (Hailey and James, 2002; Roper and Pettit, 2002), and how knowledge can be made more available to people for development purposes (King, 2001)¹. The focus, then, has been on how knowledge is managed, created and shared. While this review explores questions of knowledge creation and sharing, it does so with a critical perspective on the nature of knowledge and learning in development. This includes attention to how

¹ Often through Information Communication Technologies (ICTs) – see Chapman and Slaymaker (2002), Wilson (2002), and World Bank (1999).

knowledge and learning are conceived in development and how they are produced through organisations.

Literature on mainstream development² has tended to avoid a rigorous consideration of knowledge and learning. Even the large literature on technologies of participation, such as Participatory Rural Appraisal (PRA), often fails to consider how knowledge and learning are and should be conceptualised, despite concerns with involving the knowledge of marginalised people in development policy and practices (Chambers, 1997; Holland and Blackburn, 1998; and see cautionary comments from Mohan, 2002, and Mosse, 1994; 2001). I will argue that there is a need to closely consider knowledge, learning, and related concepts because the ways in which they are conceived and practised plays a role in shaping development interventions and analysis. The review will explore mainstream development scholarship and practice before considering examples from Slum / Shack Dwellers International (SDI), a transnational civil society network working with urban development issues. There are many ways to explore questions of knowledge and learning in development, from detailed surveys of participatory technologies to considerations of postcolonial perspectives (see, for instance, Briggs and Sharp, 2004, on conceiving indigenous knowledge). There is not the space in this review to explore these diverse literatures; instead, I hope to show how a productive dialogue can take place around development literature and organisational theory.

[,]

² By 'mainstream development' I am referring to international development agencies, including (and not withstanding the differences between) multilaterals and bilaterals.

The review will begin with a discussion of how knowledge and learning are conceived in development policy and practice, arguing that there is a pervasive rationalist conception of knowledge as objective, universal and instrumental. Any discussion of knowledge and learning in development cannot ignore the ways in which the *movement* of knowledge is conceived, and I will argue that knowledge transfer is often conceived as a linear process whereby untransformed knowledge acts as a technical solution to a given development 'problem'. I will then contrast this approach to knowledge and learning by exploring the utility of, broadly cast, a post-rationalist perspective. This is an approach that conceives knowledge and learning as partial, social, produced through practices, and both spatially and materially relational. In this reading, knowledge-in-travel is conceived as caught in translation, as always open to invention and change, and as multiple in form and effect. I argue that work in organisational theory offers a range of post-rationalist perspectives that are useful for considering knowledge and learning in development, offering one productive means for advancing these debates in development studies. I will use the SDI analysis as a means for illustrating the use of a post-rationalist approach to knowledge and learning in development.

SDI is a network of nongovernmental (NGO) and community-based organisations (CBOs) working with urban poverty, spanning 12 countries throughout Asia and Africa. It is a learning network based around a structure of 'horizontal exchanges'. These exchanges involve small groups of the urban poor travelling from one urban settlement to another to share knowledge in what amounts to an informal learning process. With echoes of mainstream knowledge for development strategies, SDI leaders argue for the central importance of knowledge (of the urban poor) for

development. SDI seek to place the knowledge and capacities of the poor at the centre of development initiatives, and espouse a range of techniques that its leaders describe as indispensable to a development process driven by the knowledge of the urban poor. These include a training programme of exchanges, daily savings schemes, model house building, the enumeration of poor people's settlements, and a variety of other tactics, some of which will be expanded on below. SDI concurs with, for instance, the World Bank that knowledge is central to development. However, SDI politicises knowledge for development by contesting the ways in which knowledge is conceived, how it is created, how it is communicated, and how learning takes place.

I do not wish to suggest that SDI stands as a simple counter-point to the World Bank, with the former always 'post-rationalist' and the latter always 'rationalist'. The particular terrain of 'rationalist' and 'post-rationalist' perspectives explored in this review are not opposite, but different, and individuals at the World Bank and SDI are, of course, capable of simultaneously holding versions of both sets of perspectives. There is no straightforward binary between 'rationalist' and 'post-rationalist'. On a similar register, the paper does not intend to romanticise SDI's work – indeed, there are certainly critics of the politics of its knowledge initiatives (McFarlane, 2004). My intention is to highlight a set of positions that actively work against a view of development knowledge as an objective and universal 'solution' that can be conceived unproblematically as separate from context and politics, and to use SDI to illustrate some of these positions.

Creating and conceiving knowledge and learning

Conceptions of knowledge and learning are often taken-for-granted in accounts in development studies and mainstream development (Hovland 2003). While there has been some problematising of different types of knowledge, and of the relationship between knowledge and information in development studies, there has been little attention to the ontological and epistemological basis of knowledge³. These questions are important because they contain assumptions that effect the politics of development interventions and analyses. Among mainstream development policy-makers, knowledge creation is often viewed as taking place in a political vacuum (see Mehta, 2001 on the World Bank; Stone, 2003; Wilks, 2001).

In much mainstream development literature, knowledge is conceived as travelling between bounded territories. This is premised on a double geography of two interrelated assumptions. First, that information and knowledge travel in a linear way. This view of knowledge transfer is reminiscent of the functionalist resource-based theory of the firm (Gherardi, 2000: 213) which claims that the transfer of knowledge may be accomplished without distortion: "to transfer is not to transform". The second assumption supports this belief with a spatial ontology informed by an imagination that information and knowledge circulate globally, and can be 'applied to' – with some alteration for local conditions – local places, or can work alongside 'local' knowledge. From discussions of delivering

³ In this review, 'ontology' refers to understandings of what constitutes reality and 'epistemology' refers to understandings of what and how we know.

'international best practices' to initiatives like the Global Development Network (Stone, 2003), knowledge is often conceived as a technical entity that can be delivered unchanged as a development 'solution'. This move is an ontological separation between space and place, an Euclidean imagination of the spatiality of globalisation that separates information/knowledge 'out there' from that 'in here'. This vision perpetuates a North-South divide: 'poor' countries are to draw on the knowledge of 'rich' countries in order to develop. As the World Bank has argued: "With communication costs plummeting, transferring knowledge is cheaper than ever...Given these advances, the stage appears to be set for a rapid narrowing of knowledge gaps and a surge in economic growth and well-being" (World Bank, 1999: 2). Knowledge transfer is conceived as instrumental, reducing knowledge itself to a technology that can be applied, that is, a static entity that can be shifted around to do the job of development: "[A] thing that can be produced or traded, exported or imported" (Power, 2003: 186). Below, I elaborate on this rationalist tendency before going on outline a broad post-rationalist approach to knowledge and learning, the latter of which will focus on translation as a key concept.

Rationalism

The traditional rationalist conception of knowledge has its resonances in contemporary conceptions of knowledge formation as a linear process, whereby unstructured data is converted to structured information, before being added to a stock of knowledge that can inform wiser beliefs or judgements (Nonaka *et al*, 2000; Amin and Cohendet, 2004: 18). This idealist conception envisions knowledge as something that can be sent, received, circulated, transferred,

accumulated, converted and stored (Gherardi and Nicolini, 2000). In mainstream development, knowledge and learning are commonly viewed through a rational lens that frames learning as a cumulative process of 'adding' new information to existing knowledge 'stacks' in a straightforward way in order to make them more effective. Often the assumption is that all development agencies, nongovernmental organisations, and think-tanks have to do is improve their knowledge management strategies, including knowledge capture and sharing.

The most relevant example in mainstream development is the World Bank's 'knowledge for development' initiative launched in the mid-1990s. The initiative is not an attempt to 'add-on' particular knowledge-sharing strategies to existing development initiatives. It is, in the Bank's terms, an effort to 'mainstream' knowledge as a development tool (World Bank, 2003), and has even been referred to by one senior staff member as a "shift in development paradigm" (Laporte, 2004). It is an attempt to reimagine development as knowledge and to encourage staff to think of themselves as 'knowledge brokers'. This means, for example, that Bank Country Assessment Strategies (CASs) should be written with a central focus on identifying 'knowledge gaps', detailing ways of delivering the right kinds of development knowledge, and building the institutional capacities of public, private and civil society organisations to get to the right kinds of knowledge and manage it effectively.

The World Bank perceives knowledge as a critical ingredient lacking in poor countries. The 1998-9 *Knowledge for Development* World Development Report claims (1999: 1): "Poor countries - and poor people - differ from rich ones not

only because they have less capital but because they have less knowledge. Knowledge is often costly to create, and that is why much of it is created in industrial countries". For the Bank, it is knowledge and not resources that "has become perhaps the most important factor determining the standard of living – more so than land, than tools, than labor" (World Bank, 1999: 16, cited in Power, 2003: 185). In the Bank's view, countries that fail to encourage knowledge for development strategies "are likely to fall behind those that succeed in encouraging it" (World Bank, 1999: 186, cited in Power, 2003: 186). From the outset, then, the Bank's spatial ontology of 'knowledge for development' makes a political move, despite the presentation of the initiative as a technical solution to a development problem (a 'knowledge gap'). Not only is there the problematic claim that 'knowledge' is the most important feature in development, it is also assumed that knowledge must originate in the 'North'. While there are no doubt individuals within the Bank who recognise flaws and limitations in this rationalist rubric, in practice the Bank's official position in its 'knowledge for development' documentation and initiatives has a significant influence internationally in framing how development 'problems' are constituted and how the 'solutions' take shape (see, for instance, Mawdsley and Rigg, 2003, on the WDRs).

There is little attempt to define knowledge. The *Knowledge for Development*WDR instead makes a distinction between 'knowledge about technology' and 'knowledge about attributes'. Knowledge about technology refers to "technical know-how" around "nutrition, birth control, software engineering, and accountancy", and "knowledge about attributes" refers to the "quality of a product, the diligence of a worker, or the creditworthiness of a firm – all crucial to effective

markets" (1999: 1). Incomplete knowledge about attributes results in market failure and problems for the poor. Knowledge is conceived as "light" capable of "enlightening" the "darkness of poverty" (World Bank, 1999: 1). As the 'Knowledge Bank' (Stiglitz, 1998; World Bank, 1999), Mehta (1999: 154) suggests, the Bank attributes to itself "a major role in dispelling this darkness of ignorance" (see World Bank, 1999: 6-7). As Power (2003: 72-77) points out, there are obvious legacies here with Enlightenment ideals and modernist thought – of 'learned' moderns guiding the progress of distant others, of knowledge as a technology rooted in reason and rationality. The ordering of knowledge along a North-South divide not only risks marginalising alternative voices, then, it risks "typecasting and recreating images of the poor as ignorant or deprayed, in urgent need of knowledge and enlightenment" (Mehta, 1999: 154).

'Knowledge about technology' and 'knowledge about attributes' represent knowledge 'gaps' between the North and the South, and the Bank highlights ways of reducing these gaps. Rather than "re-creating existing knowledge" (World Bank, 1999: 2), poor countries are encouraged to acquire knowledge from the North through open trade regimes and foreign investment, as well as to build on indigenous knowledge. Countries should "acquire, absorb and communicate knowledge" by expanding their research base and developing secondary education, particularly in science and engineering (World Bank, 1999: 2). The WDR argues that while orthodox development models assume perfect information, poor countries suffer more from imperfect information than rich countries. As imperfect information deleteriously affects institutions and their structures, environmental policies, and the broader economy, international

institutions and states have a duty to help bridge knowledge gaps. A central feature of the Bank's rationalism is the conception of knowledge as 'stacks' that can be shifted North to South to create near-perfect information. The Bank and the North are framed as 'senders'; the South as 'receivers' (Power, 2003: 186), and the process of travel is incidental and direct, as occurring without deformation. Knowledge is conceived as universally applicable; wherever it goes it can have similar effects. There is an assumption in the WDR that "knowledge can easily be decontextualised from its original source" (Mehta, 1999: 154). In the WDR, 'knowledge for development', Mehta (1999: 154) contends, is defined as separate from the "socio-political world within which it is located". The WDR posits knowledge as a 'commodity' without geography.

The view of knowledge as a commodity is underpinned by the Bank's conception of knowledge and knowledge transfer as a technical process. In the Bank's knowledge initiatives, knowledge is generally conceived of as technical: "[T]he examples highlighted [in the WDR] largely concern technical know-how, software technology, information technology" (Mehta, 1999: 156). The key means for knowledge transfer are, correspondingly, Information Communication

Technologies (ICTs). ICTs are viewed as both essential means to create knowledge – "even greater than the knowledge gap is the gap in the capacity to create knowledge" (World Bank, 1999: 2, cited in Power, 2003: 186) - and technologies the poor need to know how to use in order to gain information to better develop. 'Communicating knowledge' in the Bank's espousal of knowledge for development refers specifically to what the Bank perceives as opportunities for "vast amounts of information" to travel in seconds at an "ever-decreasing cost"

through the "convergence of computing and telecommunications" (World Bank, 1999: 9). Technologies such as mobile telephones and the internet allow for a greater acquisition and absorption of knowledge, argues the WDR. The WDR, as Mehta (1999: 156) points out, cites examples such as email being used by small business enterprises in Vietnam, and Panamanian women who post pictures of their handicraft on their websites.

ICTs are viewed as a key part of the Bank's three main global knowledge initiatives: the Development Gateway, the Global Development and Learning Network, and the Global Development Network, internet-based networks which cost the Bank \$60 million between 1997 and 2002 (World Bank, 2003). The Development Gateway, launched in 1999, is an internet portal that gives access to studies, information and trends, allows for groups and individuals to exchange ideas, and enables collaboration. It is aimed at governments, private organisations, civil society groups, and donors, and through it the Bank has supported the launch of 44 country-based gateways. In July 2002, the Bank estimated that the Gateway provided information on 300,000 donor supported activities world-wide (World Bank, 2002). The Gateway aims to use ICTs to "increase knowledge sharing; enable aid effectiveness; improve public sector transparency; and build local capacity to empower communities" (Development Gateway, 2003). However, while internet use is in rapid increase in many 'poorer' countries, it remains sporadic and unreliable. When less than 30% of visitors to the site come from outside the United States (World Bank, 2003), there is a need to question how effective the Gateway is in meeting the Bank's objective of 'sharing knowledge' with 'poorer' countries and communities.

The Bank argues that inequities in internet access illustrate the need to make such technologies more widely available, and that the rate at which internet use is spreading indicates that many countries will be able to participate in ICT-based knowledge strategies in the near future. However, even if that were the case - and as Mehta (1999: 156) argues there is no guarantee that many people in rural Africa, for instance, will get access to the internet in the foreseeable future - the internet is likely to remain secondary to the needs of the poor when compared with "tenure rights, food security, water security and their access to institutions and credit", even if it is a vehicle to a greater variety of information about these same issues. Others have commented that an ICT focus often entails a "neglect of local initiative in the design of development efforts and a threat of the erosion of indigenous and informal systems due to the influence of formal, ICT-based, western-oriented information systems" (Madon, 2000: 11). Moreover, the content of networks like the Gateway is far from politically neutral, despite Bank pretensions. Content is contributed by some 130 organisations and a group of content editors within and outside the Bank manage different topic areas (World Bank, 2003: 25). Although the Bank's responsibility for the Gateway was passed to a non-profit independent governing body - the Development Gateway Foundation - in 2001, the Bank's role in the Gateway has been a source of criticism.

Wilks (2001) has argued that the Bank's 'Tower of Babel' on the internet risks presenting 'success stories' as possible solutions to development problems, or determining what constitutes a development problem. A World Bank evaluation

of the Gateway has noted that a number of groups and academics object to what they view as an effective "filtering" of knowledge by the Bank, and has called on the Bank to be more "inclusive" of perspectives beyond those that are narrowly pro-market (World Bank, 2003: 25-26). In addition to being a major financial contributor to the Gateway, the Bank controls decisions over who becomes President, Treasurer, and has three seats of an 18 member board - all of which has "fuelled criticisms of undue influence" (ibid: 26). In sum, the rationalist approach to knowledge and knowledge transfer evidenced in Bank literatures conceives of knowledge as objective and universal, as a technical entity that can be moved in a linear way unchanged from place to place, and in so doing separates the conception of knowledge from politics and context.

Post-rationalism

While there is a wide-ranging literature criticising the rationalist approach to knowledge in development, most notably in post-development and anthropological scholarship (see, for example, Escobar, 1995; Ferguson, 1994; Hobart, 1993; Moore, 1996), this literature often stops short of developing alternative ways of conceiving knowledge and learning. In this review, I attempt this by exploring literature emphasising the social and constructive character of knowing and learning. In the field of organisational learning, for instance, some have referred to a 'quiet revolution' in organisational theory (Bruner and Haste, 1987, cited in Gherardi and Nicolini, 2000: 330). These alternatives propose that knowledge has the following characteristics (Gherardi and Nicolini, 2000): it is situated in systems of ongoing practices; it is relational and mediated by artifacts; it is always

rooted in a context of interaction and acquired through some form of participation in a community of practice; and it is continually reproduced and negotiated, hence always dynamic and provisional.

For Gherardi and Nicolini (2000: 332), this approach to knowledge prompts new questions - or new approaches to old and often taken-for-granted questions - which both echo the concerns of this review and indicate the relevancy of literature on organisational theory to debates about knowledge and learning in development: How do different forms of knowledge 'travel' in space and time? How is knowledge transformed by the process of its circulation? What form does this circulation take? Who are the agents who circulate knowledge and appropriate it? How are local practices shaped by the interaction between situated knowledge and formalized knowledge? How is knowing constructed and sustained in practice? My argument is that one effective route into these and other questions is to conceive knowledge and learning as produced through translation.

This review builds on work that offers alternatives to a rationalist approach that we might broadly refer to as post-rationalist. 'Post' does not refer to a specific period of time but to perspectives critical of rationalist approaches over time. My intention here is not to suggest that there is a simple binary between 'rationalism' and 'post-rationalism'. There are overlaps between the two different sets of positions that I explore in this review, and it is, of course, possible to hold views that are both 'rationalist' and otherwise. What I want to do is highlight a set of positions that actively work against a view of development knowledge as an objective and universal 'solution' that can be conceived unproblematically as

separate from context and politics. Here, 'post-rationalist' emphasises the sociomaterial construction of knowledge, the spatial relationality of knowledge, and the importance of practices.

Translation comes originally from the work of Michel Serres (1974) and "involves creating convergences and homologies by relating things that were previously different" (Gherardi and Nicolini, 2000: 333). Latour uses translation to refer not to "a shift from one vocabulary to another, from one French word to one English word, for instance", but "to mean displacement, drift, invention, mediation, the creation of a link that did not exist before and that to some degree modifies the original two" (1999: 179). A "chain of translation" refers to the many steps through which knowledge is produced (Latour, 1999: 311). The process of translation changes to varying extents not just the forms of knowledge but the people and places that come into relation with knowledge. Rather than focussing simply on the question of whether knowledge remains the same or not, it focuses attention on the multiple forms and effects of knowledge.

Translation challenges the diffusion model (of epidemiological origin) that traces movement as innovation⁴ (Alter, 2002; Brown, 2002; Latour, 1986). While the diffusion model focuses on travel as the product of the action of an authoritative centre transmitting knowledge, translation focuses on travel as the product of what different actors do with objects (statements, orders, artefacts, products, goods,

⁴ See, for example, Hagerstand's (1968) influential formal and instrumental model of innovation diffusion (Agnew, 1979).

etc.) (Gherardi and Nicolini, 2000: 335). This draws attention to the importance of various forms of 'intermediaries', and promotes two relational ontologies: one, the importance of relationships between the 'near' and 'far' in producing knowledge; two, the importance of materials in producing knowledge (Amin and Cohendet, 2004). Translation is open to the possibility of varying degrees of stability and flux: it is not the case that every encounter must always involve change, nor is it the case that every encounter must always involve the recreation of a periphery in the image of a centre. Taking translation as a central concept, the next section will clarify where a post-rationalist approach to knowledge and learning in development leaves concepts like information, knowledge and learning. This will then pave the way for a discussion of learning in development, focussing on the World Bank and SDI. I outline a broadly cast post-rationalist perspective to knowledge and learning that insists from the start that knowledge is situated, socio-material, formed through practices, and often political. I use SDI's learning initiatives as an example because this network marks a generally distinct conception of knowledge and learning that offers an often different set of learning practices from those of the World Bank.

Information, knowledge and learning: the role of translation

While there is significant and necessary overlap between concepts like information, knowledge and learning, elucidation is important because they point to different processes. I will draw mainly but not exclusively on literature exploring situated knowledges and social learning in organisations as well as recent development literature and practice.

Information and knowledge

In the 1999 World Development Report, 'knowledge' and 'information' are often used interchangeably. "Incomplete knowledge" is posed as an "information problem" (World Bank, 1999: 1). Ostensibly, information is distinguished from knowledge in terms of 'knowledge gaps' and 'information problems'. A knowledge gap is the unequal distribution of 'know-how', about, for instance, nutrition or software, within and between countries. An information problem is incomplete knowledge of attributes - for instance, the quality of a product or creditworthiness of a firm (World Bank, 1999). Knowledge gaps and information problems blur into one another (Power, 2003: 186). There is little reflection on how information is converted into knowledge or vice-versa, or how learning occurs in practice. Key questions go unexamined. What happens when information becomes knowledge? How does information get used? How does learning occur?

Some rudimentary insights begin to problematise the Bank's rationalist approach to information and knowledge. Information refers to data or facts that can be readily communicated. Knowledge can be distinguished from information as "the sense that people make of information" (Hovland, 2003: 20). Information is interpreted in multiple ways and has multiple effects. Given that the places information moves through are generally different, it is likely that the knowledge that results and what it does will be to some extent different. For instance, Power (2003: 187) asks: "How is the same information viewed differently by, say, a

government official as opposed to a community activist?" Mehta (1999: 151; see also 2001) argues that the Bank's conception "operates with a very narrow and reductionist notion of knowledge which ignores the dynamic and plural aspects shaping knowledge production and generation".

A post-rationalist approach to the conversion of information to knowledge begins from three starting points: that knowledge is formed through *interaction*, that knowledge is *situated*, and that knowledge has two broad forms – *tacit and* codified (or explicit). First, knowledge is socially produced. Various forms of interaction amongst individuals and organisations, from formal meetings to chats over coffee and through emails, contribute to making sense of information. For SDI, for example, knowledge is a product of social, cultural, economic and political conditions. Knowledge is conceived as embedded in the lives and experiences of the poor themselves. For instance, knowledge about potential housing in the construction of model houses is conceived as emerging from people's shared experiences of constructing, reconstructing and adapting informal shacks (Patel and Mitlin, 2001: 18; 2002). Second, knowledge is situated. For Nonaka et al (2000: 7), this means knowledge is context-specific. It is always dependent on particular times and spaces. It is, then, associated with identity and belief: "Information becomes knowledge when it is interpreted by individuals and given a context and anchored in the beliefs and commitments of individuals" (Nonaka et al, 2000: 7). That development knowledges are imbued with values and context is, of course, part of the reason they are so frequently politicised. If knowledge is 'justified belief' (Nonaka, et al 2000: 7), then particular development discourses are ways of thinking and doing that provide that

justification. Discourses legislate what kind of knowledge and information is valuable. We can talk of knowledge as 'justified belief' because of the regulation of information and knowledge through enrolment into particular ways of seeing and doing, or *regimes of truth*. Regimes of truth have the effects of framing 'problems', which involves defining what are problems and what are not.

Development issues are constructed, regulated and interpreted through discourses (Escobar, 1995; Ferguson, 1994), from those on 'good governance' (Masujima, 2004) to those on 'self-help'. Given that discourses render knowledge, events and institutions in a particular way, they militate against alterity to some extent.

Discourses hold stability and flux in a constant tension, which can create a paradox for those committed to learning initiatives in development. For example, there is a discourse in SDI emphasising poor people's knowledge, whereby poor people's knowledge is framed as a more valuable form of development knowledge than other forms.

The situatedness of knowledge draws attention to the spatialities of knowledge: knowledge is always situated and because of this partiality it is always multiple. It is also territorialized through various forms of inclusion and exclusion, meaning that it can be to varying intensities in or out of the 'proper' spaces (Law, 2000). The notion of 'situated knowledge' has been developed most notably by Haraway (1991). She underlined partiality by focusing on the embodied nature and contingencies of knowledge production. Thrift (1998: 303) writes of the need for an irreducible ontology that thinks not of 'Knowledge' but of "an archipelago of situated knowledges". While situated, this knowledge is also mobile: it is formed not simply *in* place but through multiple knowledges and informations that run

through various spaces and pathways. For example, discourses of 'social capital' may be framed by the World Bank (Harriss, 2002; Fine, 2000; McNeill, 2004), but the ways in which social capital is conceived and practised 'on the ground' is not simply the product of the Bank as an authoritative centre. Rather, it is a relation between Bank discourses, local agencies, local circumstances and priorities, and so on.

Third, knowledge is of two broad forms: tacit and codified. Codified or explicit knowledge "can be expressed in formal and systemic language and shared in the form of data, scientific formulae, specifications, manuals and such like", (Nonaka et al, 2000: 7). This includes development statistics, reports, and recommendations in the form of, for example, 'international best practices' (Tomlinson, 2002). Tacit knowledge "is deeply rooted in action, procedures, routines, commitment, ideals, values and emotions": it is difficult to communicate and does not travel well (Nonaka et al, 2000: 7). Just as information can be converted into knowledge, so tacit knowledge can be converted to explicit knowledge, "although [tacit] knowledge sometimes resists" (Gherardi, 2000: 213) and becomes "sticky" (von Hippel, 1994). Knowledge is primarily tacit, as often 'unknown' and pre-cognitive competence-to-act. Both forms are complementary and essential in knowledge creation (Nonaka et al, 2000: 8; Amin and Cohendet, 1999, 2000, 2004). However, the tacit-codified distinction, while useful, does not exhaust the range of knowledges that play a role in the constitution, operations and impacts of development. It tends to ignore, for instance, symbolic and expressive knowledge (Allen, 2002). A different set of development knowledges, those based on senses, emotions, and feelings, play a role in the formation and

communication of knowledge (see Allen, 2002, writing about economic knowledges). For example, in SDI, solidarity plays a role in the formation and movement of knowledge, and in what particular forms of knowledge come to represent.

Knowledge as practice

Gherardi (2000: 212) argues that "among the manifold conversations [from Marxist inspired perspectives to actor network theory] now in progress on the theme of knowing and organizing, there is one that has an emergent identity centering on the *idea* of practice". The attention to practice collapses traditional dichotomies that separate, for example, knowing from acting, mental from manual, and abstract from concrete, that continue to contour ontologies of knowledge (Wenger, 1998: 48).

Practice connects 'knowledge' with 'doing', pointing to the work, or fabrication, involved in knowing (Gherardi, 2000). If we reject the functionalist view of knowledge as static, bounded and fixed, and argue instead for a view of knowledge as social, then the practices through which knowledge is formed are brought into view. This fabrication is not 'social' in the sense of just consisting of people, but always already social *and* material. Knowledge production is a process of heterogeneous engineering (Law and Hassard, 1999; Thrift, 2000) and requires an ontological relational materialism. A whole range of materials, from documents to infrastructures, make a difference in the production and movement of development knowledge.

A focus on practice facilitates the bringing together of ostensibly different modes of knowledge production. One example here is the attempt by Nonaka *et al* (2000: 6-7) to bring the ontological and epistemological dimensions together in a 'spiral model' of knowledge creation which insists that the process is dialectic. The spiral goes through seemingly antithetical concepts such as order and chaos, micro and macro, part and whole, mind and body, tacit and explicit, self and other, deduction and induction, creativity and control, body and mind, emotion and logic, and action and cognition. Attention to the practices of knowledge production helps brings together these disparate notions, and involves collapsing modernist ontological and epistemological divisions of knowledge.

For SDI, knowledge is based on practice (Asian Coalition for Housing Rights, 2000: 4). 'Practice' in SDI refers both to participation in regular activities, such as daily savings, and participation in less regular activities, such as house modelling and enumerations, that create knowledge. The emphasis on experience and practice positions knowledge as produced through the everyday interactions between people and objects (housing materials, documents, maps, savings books, and so on), and stands in contrast to the disembedded and abstracted conceptualisation of knowledge deployed by the World Bank. The next section will explore the notion of learning through participation in practice more fully. A discussion of learning as it is conceived in the Bank and SDI then follows.

Learning as participation in practices

Learning at the organisational level is often portrayed using three feedback loops known as single-, double- and triple-loop learning. Wilson (2002: 220), writing in reference to mainstream development, elaborates:

In single-loop learning, only the practical tasks might be modified in light of knowledge capture. In double-loop learning the definition of what the practical tasks should be is challenged. In triple-loop learning, the knowledge captured is used to improve the effectiveness of how it might be captured in future, via the evaluation of the appraisal process. This last is often referred to as 'learning how to learn'.

While providing a useful overview, we might question the extent to which such instrumental accounts are able to adequately appreciate learning as situated and social, despite references to knowledge as 'interpreted through culture'. Wenger (1998: 4), in his influential study of firms, *Communities of Practice*, focuses on learning as social participation: "[A] process of being active participants in the practices of social communities and constituting identities in relation to these communities". For Wenger (1998), 'knowing' is the ability to competently participate in the practices of a community. Learning as a practice has two aspects for Wenger: *experience* and *regimes of competence*. New experiences can lead to new competences and vice-versa. Group members have to 'catch-up' to get to grips with new skills introduced by new members (competences driving experience), and changing events may require the development of new skills (experience driving competences). This view defines learning not as a linear addition of information or knowledge but as a "transformation of knowing" (1998: 139): learning "can be characterized as a change in the alignment between

experience and competence, whichever one of the two takes the lead in causing realignment at any given moment".

For Lave and Wenger (1991) and Wenger (1998, 2000) learning involves strengthening the practices of communities and the abilities of individuals to participate in those practices. Contu and Willmott (2000: 274) point to this focus as an important shift from the question 'what knowledge is objectively true?' to 'what understanding is intersubjectively valuable?' This brings into view the situatedness of particular kinds of knowledge and learning, and the ways in which the privileging of particular types of knowledge and learning is inflected by and produces certain types of politics. Participation in practices, then, is important in learning, and this process is mutually constitutive with the formation of social collectives.

Learning is influenced through the formation of a *constellation* of communities of practice (Wenger, 1998: 127). Using translation, Amin and Cohendet (2004) have described this process as a distanciated sociology of learning which asserts that relational or social proximity involves more than simply physically 'being there', and that indeed there are increasingly new ways of 'being there' (including through email or videoconferencing). For example, Allen (2000: 28) has written:

The translation of ideas and practices, as opposed to their transmission, are likely to involve people moving to and through 'local' contexts, to which they bring their own blend of tacit and codified knowledges, ways of doing and ways of judging things. There is no one spatial template through which associational understanding or active comprehension takes place. Rather, knowledge

translation involves mobile, distanciated forms of information as much as it does proximate relationships.

Rather than a single spatial template, what emerges is a "complex spatial ecology" that is alert to "the near and far, the possessed and practised, the role of competences and communities" (Amin and Cohendet, 2004: 110, 111). More broadly, and following (Urry, 2004), we need to be attentive to a whole range of mobilities in knowledge creation, including those that produce 'face-to-face' interaction – that most potent and powerful medium of communication – and other inter-related modes of communication including mail, phone calls, faxes, and the internet. For the urban poor, the spatial extent of these different modes of communication, while varied, is highly restricted. Membership of SDI, of constellations of communities of practice, offers possibilities for stretching and refiguring these spatialities, and for subverting in small ways the dominance of domains of national and transnational learning by development consultants. The image of an open constellation of learning, however, is restricted by a rationalising of the kinds of learning that are privileged.

All of the processes discussed under the particular umbrella of post-rationalism outlined in this section are driven by translation. Information is converted to knowledge though translation, as is knowledge to learning, and the discursive framing of development 'problems' and 'solutions' is a continual process of translation. The inclusions and exclusions of knowledge throw the politics of learning into sharp relief, as the example of how learning often occurs in World Bank projects reveals. In the next section, I will explore these projects and

contrast them with SDI's commitment to 'learning-by-doing', drawing on examples from exchanges, daily savings, and model house and toilet construction.

The 'learning organisation'?

In World Bank discourses, learning is assumed to be incidental – an inevitable byproduct of knowledge transmission. It is a view of learning "in terms of the
transmission, circulation and appropriation of information and knowledge"

(Gherardi and Nicolini, 2000: 329). Furthermore, the kinds of knowledge that can
contribute to learning about development are limited by an adherence in
institutions like the World Bank to 'Official Views'. For David Ellerman (2002:
286), Economic Advisor to the Chief Economist at the Bank, the Bank is a
"development Church" in which "new learning at the expense of established
Official Views is not encouraged". Writing about "branded knowledge as
dogma", Ellerman (*ibid*) argues:

The Church or party model fits perfectly with the standard 'dissemination' or transmission-belt methodology of knowledge-based development assistance. The agency believes it holds the best 'knowledge for development' and is to transmit it to the recipients in the developing world through various forms of aid-baited proselytisation.

Coyle (2001), in her study of the World Bank and the IMF, has similarly found that that multilaterals have a need to project an image of having the right answers and maintaining a consensual official line. The Church or party model that Ellerman describes reflects the particular ways in which the Bank frames development 'problems' and 'solutions'. Attention to how development

'problems' and 'solutions' are framed perhaps most starkly reveals the politics of translation, and underlines that the Bank's rationalist conception of knowledge and learning amounts to an attempt to remove politics from knowledge. Stone (2003) draws attention to how a broad post-Washington discursive consensus, advocating open trade regimes and various forms of pro-capitalist growth strategies to reduce poverty, frames the kinds of knowledge and information that should be used and promoted in the Global Development Network (GDN) because it acts as a regime of truth. For example, the GDN often highlights pro-market development examples and its 2003 Global Development Awards were given to research and policies that were pro-market (Global Development Network, 2003). Not only does this entail the exclusion of alternative knowledges and positions, it also entails the privileging of particular forms of indigenous knowledge that are deemed marketable. For instance, writing about Indian handicrafts and African music, Finger and Schuler (2004: 3), of the American Enterprise Institute and the World Bank respectively, suggest that indigenous knowledges that are deemed not commercially viable should not be valued on the same level as those that are. On a different but related register, Mehta (1999) argues that the Bank's espousal of an undifferentiated and unchanging knowledge is false and potentially dangerous. She argues that the Bank needs to "recognise the multiple and differentiated [gender, class, caste, etc] forms of knowledge and knowing and the socio-political contexts within which they are located, constantly contested and re-created" (Mehta, 1999: 160).

The tendency to 'apply' development solutions is bound up with the timescale of mainstream development projects, which puts pressure on strategies to be

completed in a hurried cycle of two or three years (Mawdsley, *et al*, 2002). Ellerman warns against the "self-reinforcing lock-in between development agencies and their client countries" (2002: 289), whereby learning about problems is prevented by advice and help from a powerful outsider and an eagerness by local policy-makers to jump to a ready-made solution. This "rage to conclude" (Ellerman, 2002: 289) often leads to an espousal of best practices – "a tendency based not on any methods resembling social science but on a bureaucratic need to maintain elite prestige by 'having an answer' for the client" (Ellerman, 2002: 289).

Moving towards a 'learning organisation' (Ellerman, 2002: 291) requires a recasting of international development agencies like the World Bank away from an adherence to set views and a "paternalistic model of 'teaching'", towards a 'two-way' learning process: "If the development agency can move beyond the Church or party model to an open learning model, then it can also move from standard knowledge dissemination or transmission-belt methodology towards knowledge-based capacity building". Ellerman echoes Freire (1970) in casting learning as a way of creating pedagogical and social transformations, rather than an attempt to create linear knowledge additions. This is rooted in a Socratic learning tradition of intellectual duelling in which development is an ongoing mutual engagement rather than preconceived and predetermined. Such an engagement, however, must counter the unequal power relations that contour Bank-client relations.

In contrast to the Bank's official position, SDI argues that knowledge necessarily changes as it moves. There is frequent comment by SDI leaders that knowledge cannot be disseminated in a linear and instrumental way, but that it always changes⁵. Knowledge and social conditions are perceived as changing through the interaction of different groups from different countries. The Asian Coalition for Housing Rights (ACHR), an SDI partner, (2000: 14) have commented on the mutually transforming relationship between knowledge and place: "Things which might start out looking alike – negotiating strategies, house designs, credit management systems, land-sharing models, community contracts – always get changed, adapted when they move around". Writing about horizontal exchanges, ACHR (2000: 14) assert that knowledge must change in travel: "[E]xchange is not a means for transferring specific solutions – solutions have to specific to conditions in a given place...[exchange involves] tools [for example, enumeration, exhibition, daily savings] for *finding* solutions". The discourse of 'best practice' that circulates mainstream development is treated with caution. ACHR (2000: 10) instead argue that the travelling of knowledge is 'messier' because it becomes caught up with the particularities of place: "Peer learning through exchange is about as far removed from this best practice thinking as you can get. It's perhaps a bit messier, a bit less photogenic." Similarly, the Patel, Burra and D'Cruz (2001: 51), members of the Indian chapter of the network, argue that SDI's activities are not about "projects and 'best practices'" but about "processes and evolving strategies" that extend far beyond the standardised three-year project cycle, and that prioritise local circumstances and struggles.

⁵ See SDI (2003), ACHR (2000), Patel and Mitlin (2001), Homeless International (2001), special issue of *Environment and Urbanization* (2001).

The most frequent way in which learning is referred to in SDI is in terms of 'learning-by-doing' in groups (Asian Coalition for Housing Rights, 2000; SDI, 2003; Patel and Mitlin, 2001). Learning is conceived as taking place "in situ" (Homeless International, 2000: 7). Learning occurs through an "immediate immersion in the ongoing projects of the host community" (Appadurai, 2002: 41). This immersion can be any of a whole range of activities, such as an enumeration, exhibition, or dialogue with local state officials. For instance, Appadurai (2002: 41) states that exchange activities "range from scavenging in the Philippines and sewer digging in Pakistan to women's savings activities in South Africa and housing exhibitions in India".

Learning-by-doing is an explicitly social affair in SDI: learning occurs through interaction with people and participating in the practices of a group. Wenger (1998: 45) defines communities of practice (COP) as "created over time by the sustained pursuit of a shared enterprise". Knowing (1998: 137), for Wenger, is the ability to participate in the practice of the community. COPs are autonomous groups that are self-organising and share a mutual commitment to a community, built around activities commonly understood and continually renegotiated by its members. Local SDI members contain COPs. COPs emerge not necessarily along organised group boundaries, but through interaction between particular people. Thus, within the Indian Alliance, there are sub-groups that form COPs, such as the group of four women who update the manual ledgers on daily savings, or the group that conducts daily savings rounds. SDI is not a single COP, but a

constellation of COPs with varying forms and strengths of relationship with one another. Learning in COPs is a function of the alignment between experiences and competences. This dialectic is helpful for understanding how learning about the practicalities of, for example, daily savings and housing construction occurs in SDI.

Exchanges are a means through which the poor can reflect on their own experiences, become involved in practices in a given place and develop competences. Exchanges are one of the ways in which, Patel, Bolnick and Mitlin (2000: 399) claim, the poor learn how to "participate in their own development". This is learning through constellations of COPs. For instance, in Bangalore, one member of the Indian member of SDI I spoke to said that exchanges had taught her how to 'do' savings. The kind of competences she was referring to included the daily practice of savings, such as getting individual passbooks to members, arranging groups of around 50 people into collection areas, and drawing up and compiling manual records. One practical example she gave was the use of colour coded money deposit boxes – for example, green for Rs. 1 or red for Rs. 2 – that helps organise the scheme and make it accessible to slum dwellers. In this instance of a stabilised translation, learning occurs through the experience of one group driving the competences of another. These competences are in turn altered through experience. This occurs, for example, through groups mediating knowledge for their own places. For example, groups may draw on the organisational form of daily savings but learn that in practice it is more fitting in their own place to have weekly or monthly savings than daily savings due to

earning patterns. This is the case in Hyderabad, India, and in SDI areas in South Africa and Thailand.

The driving of competence through experience – new and old - indicates that learning is uncertain. New experiences, such as participation in a model house exhibition, can lead to competences in construction. One example is the early experimentation with housing construction in South Africa following exchanges with the Indian Alliance. New experiences led to new competences, and groups were organised through social learning. Leaders of the South African NGO involved – People's Dialogue – wrote that during a house-modelling exhibition: "By the time it came to assembly the four of us [from People's Dialogue] were on the sidelines. The members of the community were in charge of the house modelling, giving advice, voicing disagreement, actively discussing the kind of houses they would like to live in" (People's Dialogue, no date: no pagination). House modelling is a form of learning that is at one social, practical and material. Modelling is an example of learning-by-doing, marked by the development of new competences through new experiences.

SDI's approach to learning is closer to the image of a 'learning organisation' than that the Bank would claim for itself. The Bank's insistence that 'global knowledge' can be applied to different contexts as 'a solution' militates against learning, while for SDI learning is an ongoing process of working in practice, through groups of people working with materials. This is not to say that SDI has an open-ended commitment to learning. Indeed, SDI frames its mode of learning through a discourse of self-management that reflects an entrepreneurial notion of

the poor and social change, in the process marginalising different modes of development intervention. However, SDI's approach to learning as, first, a process of transformation rather than transmission, and second, as a process of learning-by-doing in groups with materials, illustrates a post-rationalist perspective of learning. Comparing the different approaches of the Bank and SDI highlights the need to take seriously how learning is conceived and practised in development.

Conclusion

While there has been some problematising of different types of knowledge, and of the relationship between knowledge and information in development studies, there has been little attention to the ontological and epistemological basis of knowledge. SDI's conception of knowledge and learning represents an alternative politics of knowledge from that of mainstream development, which frames knowledge and learning through a neoliberal post-Washington consensus. In SDI, poor people's knowledge is placed at the centre of development, creating space for pedagogic learning. In doing so, SDI does not exclude knowledge from 'outside' the immediate settlement and city. Indeed, while 'local' knowledge, learning and struggle are the focus of energy for SDI members, knowledge, learning and struggle are all informed to varying extents by transnational engagement. For many SDI member groups, privileging the knowledge of the poor need not involve excluding knowledge from 'outside': indeed, they often actively seek to engage with 'outside' knowledge, while simultaneously arguing that this knowledge must be driven by other groups of the urban poor in other settlements rather than by

professional 'experts'. In SDI, learning has no single spatial template, and knowledge is not divorced from its social or political contexts.

None of this means that SDI stands as a simple counter-point to the World Bank, with the former always 'post-rationalist' and the latter always 'rationalist'. The two sets of perspectives explored in this review are not opposite, but different, and individuals at the Bank and SDI are, of course, capable of simultaneously holding versions of both sets of perspectives. On a similar register, none of this is to romanticise SDI's work – indeed, there are certainly critics of the politics of its knowledge initiatives (McFarlane, 2004). Rather, my concern here is to use the SDI analysis as a means for developing and demonstrating the use of a post-rationalist approach to knowledge and learning in development.

My intention has not been to suggest that there is a straightforward binary between 'rationalist' and 'post-rationalist'. Instead, I have sought to highlight a set of positions that actively work against a view of development knowledge as an objective and universal 'solution' that can be conceived unproblematically as separate from context and politics. Far from travelling in a linear way, knowledge always changes as it moves. Knowledge travels by always undergoing translation. Materials are important in the travelling of knowledge: for example, model houses travel through SDI, and daily savings materials influence the conception and form of savings in different places. The relationality of space is also important in the travelling of knowledge. The 'mixing' of different spaces creates new and shifting alignments of competence and experience in the learning process; learning occurs through a complex spatial ecology of 'near' and 'far'.

There is a need for greater sophistication in understanding the complexities of knowledge and learning and the relationship between travel, knowledge and place in development, because the ways in which these development rubrics are conceived has consequences for development practices. For instance, the tendency in knowledge for development conceptions to privilege knowledge in line with neoliberalism, and to marginalise the knowledge of local people, has implications for the ways in which development practice proceeds. It has implications, for example, for the types of knowledge for development projects that are funded by donors (Ellerman, 2002).

Instead, we might argue for a focus on the knowledge of local people and for local politics, and for geography as central rather than peripheral. This does not mean that, for instance, indigenous knowledge should necessarily be privileged over 'outside' or different knowledge. Rather, I would argue for an approach to knowledge for development that involves the often difficult task of negotiating different situated knowledges, such as indigenous knowledge, the position of a donor or state body on a given issue, and so on. This requires critical reflection on the power relations of different agents such as the World Bank relative to, for example, community-based organisations. It also requires us to reflect on the situatedness of 'Western' knowledge, often constructed as and assumed to be universally applicable, and to strive to recognise other ways of knowing.

Following Briggs and Sharp (2004), this requires more than a simple liberal recognition of the views of the poor; it requires a radical attention to the different ways in which the poor know, experience and understand development. This

approach to knowledge for development requires a critical perspective on some key questions, such as: how are knowledge and learning being conceptualised in a given situation? From where has knowledge 'originated'? Is knowledge relevant? Who decides whether it is relevant? How can it be used (without simply trying to follow the 'original')? How is it integrated with other forms of knowledge? How does it relate to questions of power and autonomy? How does learning take place in practice?

Through examination both of mainstream development and SDI as a development alternative, a post-rationalist perspective has hopefully been shown to be useful for analysing the conception and creation of knowledge and learning in development. One productive means for advancing these debates in development studies is through dialogue with perspectives emerging from organisational theory. A post-rationalist perspective emphasises: the crucial role of practices in knowledge creation and learning, the importance of conceiving learning as a social process; the need to recognise spatial relationality in knowledge creation rather than emphasising an 'in-here' (local) 'out-there' (global) ontology of knowledge creation; the need to recognise the inherent material nature of knowledge creation; and most importantly the need to recognise that conceptions of knowledge and learning are often highly political, whether from the World Bank or SDI.

Acknowledgements

The research for this paper was supported by an Economic and Social Research Council studentship (award number R42200034505). I am grateful to Harriet

Bulkeley, Emma Mawdsley, and Gordon MacLeod for valuable comments on an earlier version of this paper.

References

Agnew, J. (1979) Instrumentalism, realism and research on diffusion of innovation. *Professional Geographer* (31) 364-70

Allen, J. (2000). 'Power/economic knowledges: symbolic and spatial formations'. in J. Bryson, P. W. Daniels, N. Henry, and J. Pollard (eds.), *Knowledge, Space, Economy*. London: Routledge, 15-33.

Alter, N. (2002) Diffusion, Sociology of. *International Encyclopaedia of the Social & Behavioral Sciences*. http://www.sciencedirect.com, November 2003.

Amin, A. and Cohendet, P. (1999) Learning and adaptation in decentralised business networks *Environment and Planning D: Society and Space* (17) 87-104

Amin, A. and Cohendet, P. (2000) Organisational Learning and Governance
Through Embedded Practices. *Journal of Management and Governance* (4) 93116

Amin, A. and Cohendet, P. (2004) *Architectures of knowledge: firms, capabilities, and communities.* Oxford: Oxford University Press.

Appadurai, A. (2002) Deep democracy: urban governmentality and the horizon of politics. *Public Culture* 14(1): 21-47.

Asian Coalition for Housing Rights (ACHR) (2000) Face-to-Face: Notes from the Network on Community Exchange. Asian Coalition for Housing Rights. January 2000.

BOND (2002) *Knowledge Management* British Overseas NGOs for Development (BOND), www.bond.org.uk/pubs/guidance/5km.pdf, October 2003.

BOND (2003) Learning from Work: An opportunity missed or taken? BOND survey. British Overseas NGOs for Development (BOND): London, www.bond.org.uk/lte/think.htm, July 2003.

Briggs, J. and Sharp, J. (2004) Indigenous knowledge and development: a postcolonial caution *Third World Quarterly* 25, 4 661-676

Brown, L.A. (2002) Diffusion: Geographical Aspects. *International Encyclopaedia of the Social & Behavioral Sciences*, http://www.sciencedirect.com, November 2003.

Bruner, J. S. and Haste, H. (1987) *Making Sense*. London: Methyuen.

Chambers, R. (1997) *Whose Reality Counts? Putting the First Last.* London: IT Publications.

Chapman, R. and Slaymaker, T. (2002) ICTs and Rural Development: Review of the Literature, Current Interventions and Opportunities for Action. ODI Working

Paper 192. London: Overseas Development Institute, www.odi.org.uk/publications, July 2003.

Contu, A. and Willmott, H. (2000) Comment on Wenger and Yanow. Knowing in Practice: A 'Delicate Flower' in the Organizational Learning Field *Organization* (7)2. 269-276

Coyle, E. (2001) *Consensus and Dissent in Washington: Negotiating Change in the World Bank and IMF*. MPhil thesis. Cambridge: Centre of International Studies, University of Cambridge.

Development Gateway (2003) www.developmentgateway.org World Bank.

Development in Practice (2002) Special issue: Development and the Learning Organisation. (12) 3-4.

DFID (2000) Doing the Knowledge: How DFID Compares with Best practice in Knowledge Management London: Department for International Development (DFID), www.dfid.gov.uk, July 2003.

Edwards, M. (1994) NGOs in the Age of Information IDS Bulletin (25)2. 117-24

Ellerman, D. (2002) 'Should development agencies have Official Views?' Development in Practice (12)3&4. 285-297 Environment and Urbanization (2001) Special issue on Slum / Shack Dwellers International. 13(2).

Escobar, A. (1995) Encountering Development: the Making and Unmaking of the Third World. Princeton University Press.

Ferguson, J. (1994) *The Anti-Politics Machine: 'Development', Depoliticization, and Bureaucratic Power in Losotho*. Minneapolis: University of Minnesota Press.

Fine, B. (2000) Social Capital versus Social Theory: Political Economy and Social Science at the Turn of the Millennium. London: Routledge.

Finger, M. J. and Schuler, P. (eds) (2004) *Poor People's Knowledge: Promoting Intellectual Property Rights in Developing Countries*. Oxford: World Bank and Oxford University Press.

Freire, P. (1970) Pedagogy of the Oppressed. New York, NY: Continuum.

Gherardi S. and Nicolini, D. (2000) To Transfer is to Transform: The Circulation of Safety Knowledge. *Organization* (7)2 329-348

Gherardi, S. (2000) Practice-based Theorizing on Learning and Knowing in Organizations. *Organization* (7)2. 211-223

Global Development Network (2003) *Global Development Learning Network* http://www.gdln.org/, December 2003.

Hagerstrand, T. (1968) *Innovation diffusion as a spatial process*. Chicago: University of Chicago Press.

Hailey, John and Rick James (2002) 'Learning Leaders: The Key to Learning Organisations' *Development in Practice* 12(3&4). 398–408

Haraway, D. (1991) Simians, cyborgs and women: the reinvention of nature. London: Free Association Books.

Harriss, J. (2002) *Depoliticizing Development: the World Bank and Social Capital*. London: Anthem.

Holland, J. and Blackburn, J. (eds) (1998) *Whose Voice? Participatory research and policy change*. London: Intermediate Technology Publications, Ltd.

Homeless International (2001) *Istanbul* +5: *Creating a space for all voices? 25*slum dwellers go the UN. Homeless International: Coventry.

http://www.theinclusivecity.org/resources/publications/publications.htm, May 2002.

Hovland, I. (2003) Knowledge Management and Organisational Learning: An International Development Perspective. Working Paper 224. Overseas Development Institute: London,

http://www.odi.org.uk/publications/working_papers/index.html, September 2003.

King, K. (2001) 'Knowledge agencies': Making the Globalisation of Development Knowledge Work for the World's Poor? Learning to Make Policy Working Paper 9 Edinburgh: Centre of African Studies, University of Edinburgh, www.ed.ac.uk/centas/fgpapers.html, July 2003.

Laporte, B. (2002) Knowledge Management Profile of the World Bank: Interview with Bruno Laporte and Ron Kim. World Bank

www.worldbank.org/ks/km_profile_July2002.html. July, 2002.

Latour, B. (1986) The Power of Association. In J. Law (ed) *Power, Action and Belief: A New Sociology of Knowledge?* London: Routledge and Kegan Paul.

Latour, B. (1999) *Pandora's Hope: Essays on the Reality of Science Studies*. Harvard University Press: Cambridge, Massachusetts.

Lave, J. and Wenger, E. (1990). *Situated Learning: Legitimate Peripheral Participation*. New York: Cambridge University Press.

Law, J. (2000) Transitivities *Environment and Planning D: Society and Space* (18) 133-148

Law, J. and Hassard, J. (1999) *Actor-network theory and after*. Oxford: Blackwell / Sociological Review.

Madon, S. (2000, unpublished) *International NGOs: Networking, Information Flows and learning. Development Informatics: Working Paper Series, Paper Eight.* University of Manchester: Institute for Development Policy and Management. www.man.ac.uk/idpm/educdi.htm, July 2002.

Mawdsley, E. Townsend, J. G., Porter, G. and Oakley, P. (2002) *Knowledge, Power and Development Agendas: NGOs North and South.* Oxford: INTRAC.

Mawdsley, E. Rigg, J. (2003) The World Development Reports II: continuity and change in development orthodoxies. *Progress in Development Studies* 3, 4.

McFarlane, C. (2004) Geographical imaginations and spaces of political engagement: examples from the Indian Alliance. *Antipode* 36, 5 890-916

McNeill, D. Social Capital and the World Bank. In Boas, M. and McNeill, D. (eds) 2004 *Global Institutions and Development: Framing the World?* Routledge: London, pp. 108-123.

Mehta, L. (1999) Knowledge for development: World Development Report 1998/99. *Journal of Development Studies*. 36(1): 151-161.

Mehta, L. (2001) The World Bank and its Emerging Knowledge Empire. *Human Organization*, (60)2. 89–96

Mohan, G. (2002) Participatory development. In Desai, V. and Potter, R. (eds) *The Companion to Development Studies*. Arnold: London, 49-53.

Musujima, K. (2004) 'Good governance' and the Development Assistance

Committee: ideas and organisational constraints. In Boas, M. and McNeill, D.

(eds) 2004 *Global Institutions and Development: Framing the World?* Routledge:

London, pp. 151-163.

Nonaka, I. Toyama, R. and Konno, N. (2000) SECI, Ba and Leadership: a Unified Model of Dynamic Knowledge Creation. *Long Range Planning* (33) 5-34.

Patel, S. and Mitlin, D. (2001) *The work of SPARC, the National Slum Dwellers*Federation and Mahila Milan. International Institute for Environment and

Development (IIED): Poverty Reduction in Urban Areas Series, Working Paper 5.

IIED: London.

Patel, S., J. Bolnick and D. Mitlin (2000) Squatting on the Global Highway:

Community Exchanges for Urban Transformation. Edwards, M. and J. Gaventa

(eds) *Global Citizen Action*. Earthscan: London, 396-409.

Patel, S., S. Burra, and C. D'Cruz (2001) Slum/Shack Dwellers International (SDI) – foundations to treetops. *Environment and Urbanization*. 13(2): 45-59.

Power, M. (2003) Rethinking Development Geographies. London: Routledge.

Roper, L. and Pettit, J. (2002) Development and the Learning Organisation: an Introduction. *Development in Practice* (12)3&4: 258-271

SDI (2003) *Slum / Shack Dwellers International*. http://www.sdinet.org, August 2003.

Serres, M. (1974) La Traduction, Hermes III. Paris: Les Editions de Minuit.

Stiglitz, J. (1998) *Knowledge for Development: Economic Science, Economic Policy and Economic Advice.* Address to the World Bank's Annual Bank Conference on Development Economics. World Bank, Washington DC, 20th April.

Stone, D. (2003) The 'Knowledge Bank' and the Global Development Network Global Governance 9 43-61

Thrift, N. (1998) Steps to an ecology of place, in Massey, D., J. Allen and P. Sarre (eds.) *Human Geography Today*. Cambridge: Polity Press, 295-322.

Thrift, N. (2000) Afterwords. *Environment and Planning D: Society and Space*. 18(2): 213-255.

Tomlinson, R. (2002) International Best practice, Enabling Frameworks, and the Policy Process: A South African Case Study. *International Journal of Urban and Regional Research.* 26(2), 377-388.

Urry, J. (2004) Connections. *Environment and Planning D: Society and Space*. 22:1, 27-37.

von Hippel, E. (1994) Sticky Information and the Locus of Problem Solving: Implications for Innovation. *Management Science* (40)4. 429-39

Wenger, E. (1998). *Communities of Practice: Learning, Meaning, and Identity*Cambridge: Cambridge University Press.

Wilks, A. (2001) A Tower of Babel on the Internet? The World Bank's

Development Gateway. London: Bretton Woods Project.

http://www.brettonwoodsproject.org/topic/knowledgebank/k22gatewaybrief.pdf,
July 2002.

Wilson, G. (2002) Technology, knowledge and development. Desai, V. and Potter, R. (2002) *The Companion to Development Studies* Arnold: London, 219-223

World Bank (1999) World Development Report 1998/9: Knowledge for Development. Oxford: World Bank / Oxford University Press.

World Bank (2002) Knowledge Sharing. World Bank:

www.worldbank.org/ks/km_profile_July2002.html. July, 2002.

World Bank (2003) Sharing Knowledge: Innovations and Remaining Challenges:

An OED Evaluation. Washington: World Bank Operations Evaluation

Department, World Bank.