Fragile memories: indigenous knowledge and development

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Abstract

This paper examines the nature of knowledge with particular reference to so-called "indigenous knowledge" and its treatment within development interventions. It highlights some of the theoretical arguments and different sides of the debate concerning hierarchies of knowledge with development narratives and discourse. Much indigenous knowledge is contained in oral knowledge traditions passed from generation to generation and with the effects of globalisation and modernisation these systems are increasingly under threat. The ultimate goal of the paper is to explore how initiatives can address the inherently ephemeral nature of what is often a key knowledge system within the cultures "being developed" and to suggest that such initiatives are vital in ensuring the developing hordes do not wipe out these fragile memories forever.

Introduction

History has taught us that survival of civilisations is based on the passing on of knowledge and skills which enable the betterment of humanity or individuals. Whether through our parents' teachings or those we gain through educational establishments, literature, media or science, we understand that it is vital that we both learn from previous generations and pass on our knowledge to the next generation.

Knowledge, both oral and written, can be lost or destroyed; the former probably more easily than the latter, where one or two generations are all that is needed for it to disappear, or to be fatally corrupted. One dramatic illustration of this was the destruction of the vast and powerful Roman Empire by invading "barbaric hordes" and with that the people of Western Europe's ability to read, write, build roads, irrigate - to lead a "civilised life". Were it not for a few isolated areas in the far west of Europe, such as Ireland, where written knowledge was zealously protected in a few fragile repositories by Irish nuns and monks, and from where it could be spread as a result of missionary effort, *that* knowledge would have been lost forever. The history of Europe and indeed the world, would have been very different. (Cahill: 1995) This is but one (certainly biased) version of history but the message is clear: knowledge is fragile.

Perversely, today, the preservation and communication of knowledge *seems* easy. It is an abundant resource – accessible through books, television, internet, radio and so on. There are categories of knowledge – science, philosophy, literature … and vast resources available to us in relation to those disciplines. This paper examines the nature of knowledge with particular reference to so-called "indigenous knowledge"¹ and its treatment within development interventions. It will not be an exhaustive review of the literature on this subject but I will attempt to highlight some of the theoretical arguments and different sides of the debate concerning hierarchies of knowledge with development narratives and discourse. Much indigenous knowledge is contained in oral knowledge traditions passed from generation to generation and with the effects of globalisation and

¹ My use of quotation marks is intended to indicate that many terms used in this paper derive their meanings from particular discourses. I shall only use quotation marks for the first instance of the term as I believe that their occurrence throughout would become tiresome for the reader.

modernisation these systems are increasingly under threat. My ultimate goal is to explore how initiatives can address the inherently ephemeral nature of what is often a key knowledge system within the cultures "being developed" and to suggest that such initiatives are vital in ensuring the developing hordes do not wipe out these fragile memories forever.

The notion of discourse

In the post-Second World War period, "development" has emerged as a central preoccupation of governments, nongovernmental organisations (NGOs), activists and academics who work on the so-called "problems" of the "Third World". As Gustavo Esteva suggests in Sach's *Development Dictionary*, "[D]evelopment occupies the center of an incredibly powerful semantic constellation. There is nothing in modern mentality comparable to it as a force guiding thought and behaviour" (1992: 8 cited in Agrawal 1996: 468). A key observer of the development phenomenon, Arturo Escobar, claims that the "Third World" has been produced by the discourses and practices of development (1994). His argument is that the emergence of the development regime resulted in concrete practices of thinking and acting aimed at improving the lives of the "underdeveloped" and encouraged a discursive formation that designated certain peoples and nations as 'undeveloped'.

The notion of discourse is founded in the work of the French philosopher, Michel Foucault. Foucault's analysis of the "history of thought" (in *The Archaeology of Knowledge* (1972)) led him to suggest that there are "rules of formation for constituting areas of knowledge" (or "archaeologies of thought") through which groups of statements achieve a unity as a science, a theory, or text. (1972: 12-13). Foucault argues that through analysis of this unity we can find the discontinuities, displacements, and transformations inherent in all discourses and thus question the apparent connections that link coherence and progress within our conceptions of reality – in the languages of the sciences, philosophy and the like. (1972: 22). Discourse for Foucault is a determining factor of how we see reality and therefore how we act in the world.

The objects of knowledge are constructed and transformed in the discourse, rather than existing independently and simply being referred to or talked about. This provides a basis for the idea that knowledge - what is considered to be true or false, or a "fact" - is a construction.

Based on this deconstructionist approach, Escobar and other post-structuralist academics (for example, Ferguson, 1994), consider that Western discourses about development have successfully created the Third World as an "object of development" (Agrawal 1996: 468). It was not a natural process of knowledge that gradually uncovered Third World problems and dealt with them, but a historical construct that provides a space in which poor countries are known, specified and intervened upon (Escobar 1996). Development institutions generate their own form of discourse, creating an extremely efficient apparatus for producing knowledge about, and the exercise of power over the Third World. Experts discover an "order" or system that is no more than the order they have been trained to perceive or discover. They have relied on one knowledge system, the modern Western scientific one - a system of documentary and conceptual forms that can be recognised in institutions – hence the project oriented, documentary bias of development interventions (1991: 667).

In his research in Lesotho, Ferguson found that interventions were organised on the basis of this structure of knowledge, which, while 'failing' on their own terms, led to the creation of a larger bureaucracy and entrenchment of state presence. He referred to the "development" apparatus in Lesotho as an "anti-politics machine" depoliticising everything it touches and performing, almost unnoticed, its own operation of expanding bureaucratic state power (1990: xii-21). He sees

development as planned interventions which may produce unintended outcomes that end up incorporated into anonymous constellations of power.

This link between knowledge and power also derives from the Foucaultian notion of discourse: "the criteria of what constitutes knowledge, what is to be excluded and who is designated as qualified to know, involves acts of power" (1972 61-4, cited in Scoones & Thompson 1994). He labels this "discursive subjection" and proposes that the author of a statement is a function of the statement itself. For example, a "peasant" and a "development expert" exist within the discourse of development and have identities within such discourse. The Foucaultian conception of power centres on the practices of assessment and examination prevalent in discipline. This discipline implements 'power relations that make it possible to extract and constitute knowledge' (1979:185). So, a discourse identifies appropriate and legitimate ways of practising a certain discipline – in this case, development.

Since the mid-1990s anthropologists have been unpicking some of the "narratives of development" within development institutions, which define development problems and justify interventions (for example Fairhead and Leach, 1995, 1996; Hoben 1995; Roe 1995 cited in Grillo & Stirrat 1997). They have highlighted the difficulties caused by these specific 'fields of knowledge' that have been produced within the development discourse. An example is the narrative of "environmental destruction", which is based on a number of assumptions about current and historical land management in the "target country". These assumptions fit a specific narrative of environmental change and support the decisions made in relation to development interventions (Roe, 1995: 1065). They are based on observation by environmental experts and certain "acceptable" scientific analyses and pay little regard for locally experienced realities (Grillo & Stirrat 1997:53). These narratives also fit well with other narratives such "the deeply rooted Western image of Africa as a spoilt Eden" (Hoben 1995: 1013) and "man's destructive impact on the environment" (Grillo & Stirrat 1997: 43).

The dominance of these narratives and discourse has marginalised and subjugated non-Western knowledge systems to the Western science-based knowledge system. Rather like the destructive barbarian hordes, this overwhelming development regime has swept through those countries identified as "underdeveloped" with devastating effects on their existing "indigenous" systems of knowledge.

Writers such as Escobar and Ferguson suggest that the apparatuses, institutions and mechanisms that create the discourse of development must be dismantled and discredited (Agrawal 1996: 471). This view does have its limits. I would agree with Grillo and Stirrat in their reluctance to see development as a "monolithic enterprise, heavily controlled from the top, convinced of the superiority of its own wisdom and impervious to local knowledge, or indeed, common-sense experience" (Grillo & Stirrat 1997: 20). This not only ignores the diversity of the ideologies and goals of the developers but also removes agency from the local people themselves (Gardner as cited in 1997: 117). Adherence to the notion of an over-powering Western development discourse in itself, smacks of continuing the discourse of the victimised "Third World" which has been subjected to the "toxic words" of the "development discourse" (Escobar 1995: 227). However, these poststructuralist critiques are productive in that they point to the unintended consequences of development projects (Agrawal 1996: 471). They indicate that certain knowledge systems have tended to dominate development interventions and in recognition of this, in recent years there has been a drive towards considering the needs and contributions of indigenous populations and thus a focus on taking into account indigenous knowledge.

Indigenous Knowledge – participatory approach

Every system of knowledge has its own epistemology, "its own theory of what constitutes and what counts as knowledge" (Scoones and Thompson 1994: 24). As discussed above, historically, western scientific knowledge has tended to be the basis for development interventions. These knowledge systems are largely foreign to local cultural traditions, which customarily have few if any ideas equivalent to those prevalent in western science (Sillitoe: 1998: 226). The knowledges of the "undeveloped" were considered 'primitive', 'unscientific' or 'wrong', the assumption being that 'they' are ignorant and providing a perceived need for technology transfers (Crewe and Harrison 1998: 33). In agricultural development, for example, this promoted the superiority of 'rational science' and the pursuit of change almost exclusively from the findings of western experts who transmitted their knowledge to farmers through hierarchical, technically oriented extension services (Scoones & Thompson 1996). Farmers were seen as adopters or rejectors of technologies and not as originators of knowledge or practices.

There has been an increasing recognition, however, that development research in "less-developed" countries is not just a question of coming up with technological fixes to others' problems. It is increasingly acknowledged that local people have their own effective "science" and resource-use practices and that to assist them we need to understand something about their knowledge and management systems (Sillitoe 1998: 223). Escobar suggests that to escape the hegemony of the development discourse, we must move away from "Western modes of knowing" to make room for other types of knowledge and experience" (Agrawal 1996: 474). This is the foundation of the more 'populist' approach to indigenous knowledge which regards indigenous knowledge is a 'valuable and underutilised resource'. Founded in the work of Robert Chambers' group at IDS in 1979, development interventions which set out to make connections between local peoples' understandings and practices and those of the developers prevail - such as Rapid Rural Appraisal (RRA), Participatory Rural Appraisal (PRA), and Gender Analysis (e.g. Chambers, Pacey & Thrupp. 1989). Outsiders are primarily catalysts and facilitators of the open exchange of ideas and information between various stakeholders. There is an emphasis on the rational nature and sophistication of rural people's knowledge and the belief that indigenous knowledge can be blended with or incorporated into scientific knowledge systems. The argument is that if local knowledge and capacities are granted legitimacy within scientific and development communities, existing interventions will pay greater attention to the priorities and needs of local people and achieve more lasting and effective results.

A more recent approach is the 'actor-oriented approach pioneered by Norman Long (also known as the Wageningen approach) (Long, 1989, Long & Long, 1992, Arce & Long, 2000). This centres on the 'interfaces' between different social worlds and has been enthusiastically taken up in agricultural and communication studies, participatory rural appraisal and stakeholder analysis. The emphasis being on the discontinuities and discrepancies – it provides a more nuanced dialogue than the earlier RRA and PRA methodologies.

The ephemeral nature of oral traditions of knowledge

There are many instances now of projects following these methodologies and acknowledge the value of indigenous knowledge and the importance both of its preservation and the need to integrate it within local development initiatives.

By nature, many types of indigenous knowledge are not recorded or written down. They are passed from generation to generation in the form of songs, stories, plays, and rituals - oral traditions. Oral

tradition refers to stories, fables and legends that have been transmitted across generations, and go beyond the confines of living memory (Field: 2004: 1, 2). It can be vital to some communities in transmitting information. In Mario Varga's *The Storyteller*, he tells of how, for a scattered group of Peruvian forest dwellers, the travelling *hablabor* was the lifeline of a non-literate community on the edge of extinction. Always on the move, he conveyed information of every type (cited in Slim & Thompson 1993:16). Oral tradition can also be vital in literate societies, where many communities have specialist narrators of local tradition. There are still many societies today who rely on this form of communication for the dissemination of information and for socialisation.

One problem for consideration is that the collection of knowledge through oral testimony analysis involves recollecting, remembering, re-discovering: memorialising. "Life memories are nested and enveloped in their habitus – their environment of assumptions and languages – through which they make sense and can be told (Bourdieu, 1984; Tonkin, 1992: 106 – 7 as cited in Plummer 2001: 233). Oral history in particular may be seen as a 'powerful tool for discovering, exploring and evaluating the nature of the historical memory – how people make sense of their past, how they connect individual experience and its social context, how the past becomes part of the present and how people use it to interpret their lives and the world around them" (Frisch 1990: 188 as cited in Plummer 2001: 234). Yet once an oral history is written down it is set and fixed. Written memory may reify life into something it is not. This is particular pertinent to the interaction between knowledge which is inherently oral and development knowledge due to the latter's documentary bias.

Plummer speaks of three kinds of memory: "personal reflexive memory" where the focus is on what the person can recall; "narrative memory" which is told through highly selective stories – "the best stories"; and "collective memory" where the focus moves from individuals and is placed on the 'social frameworks of memory' (2001: 235). With the latter, as a memory is claimed for a particular group or community, it may become 'hardened', solidified, the 'true memory' (when it is usually one of several possibilities – the others becoming lost) (2001: 236). What becomes clear from this is that memory (and thus oral history) does not stand alone; it is shaped by society, its context and culture. Memories may become essentialised – forcing a way of remembering on a community and actually making it harder to see what is going on.

In researching and recording oral history, therefore, we should be aware of the context and culture of the words being recorded and the conventions of the particular genre or the oral artistry we are recording. In many cultures, special artists are responsible for recounting oral histories. Oral traditions often continue to be developed and adapted in performance: "Traditional songs often accrue new meanings or come to refer to several similar events in history, and past events are usually given a present gloss, laced with contemporary references for today's audience. Thus while it is difficult to speak of oral artistry as "objective" history, because of its organic nature, it nevertheless yields valuable information about social change, archetypal events and community responses past and present" (Slim & Thompson, 1993: 70).

Integration of oral and western scientific knowledge systems is particularly difficult, some say impossible. The means of communication of oral history is fundamental to its understanding. Although there is a documentary bias in development institutions; with the ever-increasing variety of oral and visual communication forms available to us through new technologies, I see no reason why such knowledges have to be "written down". Tape recordings of Navaho Creation Songs were first made thirty years ago, we have made enormous technological advances since then. Preserving original languages, intonations and nuances provides us with a more authentic record.

A case study: The Tropical Savannas Project in Australia

In this next section I will examine a biodiversity project paper which focuses on the preservation of oral indigenous knowledge and provide some examples of policy initiatives through the IIED biodiversity paper *Integrating global and local values: A review of biodiversity assessment* (2002).

Within conservation institutions there is a bewildering array of tried and suggested techniques for assessing biodiversity - IUCN Red data books which categorise species according to risk of extinction; Checklists; "Hotspots"; Endemic Bird Areas; Star System GIS (Geographic information systems); Indicator-based assessment (IIED 2002: 20-29).

These empirical methods do not acknowledge that environmental knowledge of indigenous peoples (traditional ecological knowledge (TEK)) has enabled them to utilise the natural resources of their local environment in an ecologically sustainable manner for thousands of years. Recent initiatives have recognised the value in discovering and preserving the evolution of such techniques and of uncovering people's expertise and experience. They have also recognised the need to consider TEK as "cultural knowledge", which produces and reproduces mutual understanding and identity among the members of a community (Scoones & Thompson 1994: 18).

The Tropical Savannas Project, run by the Cooperative Research Centre in Australia (TSPCRC), recognises the need to acknowledge and conserve Aboriginal knowledges of species and ecological processes in their land management programme. Australia's tropical savannahs cover almost a quarter of the country. The project aims to manage the biodiversity and habitat endemic to these areas. The following is an analysis of the project proposal document.²

A large Aboriginal community lives in the region covered by the TSPCRC. Cooperation with the Aboriginal community is fundamental to the project, recognising that this peoples' knowledge of the environment spans back tens of thousands of years. They have a complex oral culture and spiritual values based on reverence for the land and a belief in Dreamtime.

Aboriginal people hold many different and diverse systems of knowledge about species, populations and ecosystems which consists of names, utilitarian and ceremonial uses, creation stories, and distribution patterns, behavioural, seasonal and ecological information. Aboriginal leaders see as the highest priority the preservation of knowledge and the development of mechanisms that perpetuate this knowledge. The TSPCRC aims to conserve Aboriginal knowledge of species and ecological processes including Aboriginal aspirations for future use and management of natural resources. TSPCRC acknowledges that TEK is the "bridge between the forces that formed this region and the managers who are now trying to maintain it."

Different Aboriginal language groups have different names and uses of plants, even though they may be using essentially the same plants and animals. Knowledge and conceptualisation of the interactions between plants, animals and the landscape also vary between cultural groups. Major changes in recent generations are threatening the preservation of this knowledge and there are large areas of the country for which little knowledge is recorded and existing processes for this knowledge to be passed from one generation to the next are inadequate. Aboriginal ways of recording this knowledge are often 'invisible' to outsiders' eyes – such as a hidden marking under a stone decipherable only to the Elders or those to whom they have passed on their knowledge.

² (http://savanna.ntu.edu.au/research/projects/kimberly_ecological_knowledge.html)

Traditionally this knowledge is passed on through oral traditions and so this is an excellent example of how fragile these knowledges are.

The TSPCRC project summary identifies several problematic issues which are summarised (in italics) and discussed in the following section.

- Many traditional experts are reluctant to pass on knowledge because they lack faith in younger generations to put that knowledge to good use and, due to migration, many of the younger generation are growing up without the opportunity to learn about their country from knowledgeable elders.
- Inter-generational language changes also limit the capacity of Elders to pass on complex conceptual frameworks to younger people.
- Previous attempts to conserve traditional knowledge have rarely involved sophisticated linguistic expertise that could enable the description and conceptualisation of complex areas of indigenous ecological concepts and interlinked cultural and spiritual beliefs.
- A barrier to previous efforts to capture this TEK has been that the "extraction" of this "indigenous knowledge" in the past has often been for the purposes of conservation interventions or for other outside groups such as pharmacologists rather than the in situ maintenance of knowledge within the Aboriginal cultural groups.

Without carefully considered directives, development interventions become an exercise in knowledge extraction – what Robert Chambers has called "the mining of indigenous knowledge". The role of the researcher comes with certain obligations. It must be a reciprocal exchange in which what is heard is both given back and carried forward. "By applying what is heard in partnership with those who voice it, collecting and communicating oral testimony can become a cooperative exercise …" (Slim & Thompson 1993: 2). The agenda must be clear and integral to the exercise.

As well as highlighting the ethical power relations element of such processes, this also raises issues of rights. Indigenous knowledge systems have fallen outside of international Intellectual Property rights protection and there have been numerous cases where the rights of indigenous peoples have been exploited. This situation has been the focus of activist and now political debate for some time and protection of these rights should be an integral element of any project.

• No significant effort has been directed to developing methodologies for developing coexistent management regimes based on dual knowledge systems.

An example of where such dual knowledge systems have been tried out is in the Biodiversity Conservation Prioritisation Project in India (IIED 20021: 44). Through joint assessments between development experts and local people a number of Peoples' Biodiversity Registers were instituted across seven states in India in the 1990s. This was one of the first formal approaches to integrating local knowledge about biodiversity with more standard techniques. The aims were to "transfer biodiversity knowledge into the public realm, to inform state and national conservation policy (in particular the Biodiversity and Strategy and Action Plans) of local views and natural resource management practice and to regenerate faith in local wisdom and local capacity for self-governance" (IIED 2002: 44).

Critics of attempts to integrate local knowledge into existing scientific procedures claim a dual knowledge system cannot work as it is based on the presumption that indigenous knowledge represents an easily-definable body or stock of knowledge ready for extraction and incorporation. They claim that such knowledge "is never fully unified or integrated in terms of a logical system of classification or categorisation" (Scoones & Thompson 1994: 19). I find this critique over-deterministic particularly as all knowledges can be seen to be dynamic. However, I agree that careful consideration of the "web of meaning and influence" in which knowledges arise is vital to any attempt of interpretation and application.

• The complex cultural bases of ecological knowledge are intrinsic to its integrity and unless collection systems support the cultural framework for knowing they erode the things that they aim to protect. Knowledge is entwined with customary law and people carry important legal and social obligations in sharing and maintaining knowledge. They assert that their methodologies must incorporate and support these requirements.

The project proposal stresses the need for use appropriate methodologies as identified by the local people. They point out that in the past Aboriginal people have said that "quick, highly extractive methodologies such as the participatory approaches of RRA and PRA are not appropriate." The concern is that such methods will be "high jacked" by inappropriate people and lead to bad decision-making.

This raises several important considerations which I will address in quick succession. First, in any society there are individuals and groups who tend to be spoken for and often misrepresented: "those who control the talk are also those who are able to control reality" (Spender cited in Slim & Thompson, 1993: 6). Like the official document, the community view will tend to concentrate on the concerns of the wealthy, the political elite, and social and religious leaders. Scott (1985, 1989, and 1990 as cited in Scoones & Thompson 1994: 27) refers to this as the "hidden transcript" which means that the subordinate will not speak freely. In group-work such as that used in PRA it is extremely difficult to reflect the multi-vocality of any knowledge system. Listening to individual testimonies counteracts this and provides important touchstones against which to review the collective narratives. It provides a more subtle appreciation of the competing voices and the divisions and alliances within societies. It does not necessarily provide a "correct" or "agreed" version of events and can only offer perceived versions. These can be useful complements to the received version but can also destabilise relations between groups (Slim & Thompson 1993: 43). The importance of assessing these perceptions is vital as acknowledged by this statement by the IIED:

"Understanding" refers to perceiving a complex and changing environment, but different stakeholders perceive reality according to their own world views. Perception of environmental degradation may vary even between individuals within a stakeholder group as a result of socio-economic, religious, gender or age group differences. ...Perception is also greatly influenced by the media used to capture and communicate it. (Abbot and Gujit cited in IIED: 16)

Second, this description of participatory methods as "quick" and "highly extractive" can be found in a number of critiques of these methodologies. Although RRA and PRA are the cornerstones of the "indigenous knowledge movement", these critiques problematise participatory methodologies within the development discourse and highlight the dangers of structured intervention. They point to the fact that they can still be directive and "extractive" and can be ritualised and perfunctory within the development processes (Cooke & Kothari, 2001; Gujit & Cornwall 1995).

The TSPCRC proposes the use of participant and non-participant observation as its principal methodology. This indicates the increasing prominence of the qualitative nature of anthropological research methods in such development initiatives. This is backed up by the IIED's paper where it too recommends that "Case studies by ecological anthropologists can provide much deeper understanding of local biodiversity values than any of the other methods described here." (IIED 2002: 34-5) It refers to the impact of research such as that of Fairhead and Leach (1996) which "refuted the popular concept of "virgin" rainforest and showed instead that human beings have practiced shifting cultivation over wide areas of forest for thousands of years." (IIED 2002: 35)

Concluding observations

The shortcomings of positivist, rationalist, western scientific epistemologies have been widely debated and discussed for many years. Scoones and Thompson have outlined this critique which they say undermines the assumption of a positivist view that sees knowledge as a "tangible stock or store to be tapped, extracted and documented" (Scoones & Thompson 1994: 24). The process of knowing should instead be seen as "engaged, value-bound and context driven." While we cannot escape from the strictures of our own language or our own ways of reasoning, we can acknowledge that these provide us with only partial views of our world and that a multiplicity of other equally valid ones also exist" (1994: 24). Research into indigenous knowledge and dialogue can challenge the meta narratives of the development discourse.

Scoones and Thompson refer to the power struggles over social meaning – the 'battlefields of knowledge' (Long & Long 1992 cited in Pottier 1994) – where "forms of discourse come into being, evolve and survive or decline because they are used by people in a dynamic interplay with one another and with their physical environment" (1994: 24). No knowledge system exists in a vacuum. Pottier highlights that the gathering of local knowledge in itself can perpetuate the power relations which exist in the development discourse. The treatment of certain kinds of knowledge as "indigenous" in itself derives from a judgment as to what is and is not "indigenous" and differentiates between the developer and the developed. Long suggests that "[T]he actor-oriented approach which acknowledges many 'interfaces' of knowledge allows us to focus on how, "knowledge is generated and transformed not in abstract but in relation to the everyday contingencies and struggles that constitute social life" (Long 2001 as cited in Pottier 2003: 16).

Local knowledge must be considered in its broadest sense – the interweaving constructions and representations of local knowledge and outside knowledge. These external knowledges often strengthen and legitimise peoples' understanding of their own worlds. In the words of Akhil Gupta: "Hybridity rather than nostalgic indigenousness is a more empowering starting point for discussing the poor, the subaltern, the marginal – the hybridity between local and introduced technologies and understandings (Gupta 1998: Postcolonial Developments, Duke University Press as cited in Campbell 2000).

I have flagged some of the problematic area of interpreting indigenous knowledge and the problems of establishing an interface between development models and local knowledge systems. There can be a tendency to romanticise indigenous knowledge but more importantly any attempts to understand and integrate the differing systems must be aware of the potential to continue the discourse of 'us helping them' through interpreting what is and is not indigenous and by ignoring the interplay between tradition and modernity in every context. While urging the need to protect these fragile memories, we should recognise that local knowledge lies as much in its own methods, traditions and fluid nature. As James Fairhead cautions, "in describing it one ought to be very careful not to see it as – or worse, turn it into – stone" (Fairhead 1993: 193).

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