

From Models to Mechanisms: Multi-Disciplinary Perspectives on Literacy and Development*

Bryan Maddox
School of Development Studies,
University of East Anglia
Email: b.maddox@uea.ac.uk

Revised – November, 2007

*This paper was originally presented at the international seminar on '*Literacies, Identity and Social Change*', at University of East Anglia, April 2006. I would like to thank the seminar participants, particularly Subbu Subramanian and Kaushik Basu for their comments on the conference paper, and to Anna Robinson-Pant, Kunal Sen and Frank Ellis for further suggestions on this revised version.



INTRODUCTION

The development literature has consistently described illiteracy as a pervasive characteristic of poverty, and literacy as a necessary component in poverty reduction and wellbeing (Sen 1999, Nussbaum 2006). As Amartya Sen, for example, argues that illiteracy is a *'focal feature'* of social injustice and capability deprivation (1999:103). This argument is supported by numerous large-scale studies that observe a strong correlation between literacy and other determinants of wellbeing such as income, women's labour force participation and health (ibid, UNESCO 2006). The empirical evidence on illiteracy as a characteristic of poverty therefore appears compelling. There is a problem however, as the processes and mechanisms through which literacy and illiteracy operate as *'drivers of escape and descent'* (Sen, B. 2003) remain poorly understood. As a result, researchers find it difficult to distinguish between correlations attributable to causal mechanisms, and those that either suggest spurious statistical relationships, or those that are simply too complex to understand (Iversen and Palmer-Jones forthcoming). These problems of attribution undermine the policy case for literacy, and restrict our ability to explain and predict its role in processes of poverty reduction.

This paper attempts to extend multi-disciplinary dialogue and collaboration on literacy research in economics and anthropology, and to examine the opportunities and challenges that such collaboration involves. The paper is motivated by my own ethnographic research on literacy in Bangladesh, an interest in how ethnography can understand and describe the *'consequences'* of literacy (Maddox 2007a), and the scope for multi-disciplinary sharing and collaboration in this area (Maddox 2007b). Economic and anthropological research on literacy each involve certain strengths and limitations. Economics research on literacy provides insights into scale and distributive inequality, and enables rigorous inductive analysis of statistical data. However, studies of correlation provide notoriously weak explanations of causality and often require broader methodological insights to support their research hypotheses. Anthropologically informed studies of literacy provide an extensive theoretical literature on literacy as a social practice informed by rich ethnographic accounts (Street 1993, Barton and Hamilton

1998). But as I discuss below, they are generally reluctant to attribute causal capacityⁱ to literacy, and are acutely aware of the difficulties in extending their analysis beyond the particular to larger-scale phenomena. As a result, neither development economics nor anthropology provides an entirely satisfactory treatment of these problems.

This scenario seems to illustrate Green and Hulme's (2005) argument on the 'sociological thinness' of research that is able to accurately *describe* poverty, but is unable to adequately explain its causes and dynamics. As such, it provides a useful case-study on the scope and capacity of multi-disciplinary collaboration between economists and ethnographers to investigate complex and unresolved problems in development (Kanbur 2002, Bardhan and Ray 2004). The literature on multi-disciplinary collaboration is not new (see Bardhan 1989), and does not always produce effective collaboration. In some ways, multi-disciplinary dialogue operates as a proxy war for contestation over the status of competing methods and epistemologies in development thought (see Harriss 2002, Hulme 2004). Advocates of multi-disciplinarity recognise the challenges involved in qualitative-quantitative collaboration. These include problems of incompatible ontology, differences over quantification and comparison, and on the value of contextual embeddedness and abstraction (Appadurai 1989, Kanbur and Riles 2004, Bardhan and Ray 2006). They also note the opportunities and potential of inter-disciplinary dialogue, the sharing of theoretical and empirical insights, and the creative epistemological tensions that it often involves (Jackson 2002, Kanbur 2002, Kanbur and Riles 2004, Kanbur and Shaffer 2007). These challenges are typical of research in literacy. There are some well known examples of multi-disciplinary dialogue and collaboration in literacy research (see Scribner and Cole 1981, Wagner 1993), but such contact has often been marked by conflict and contestation (see Hamilton and Barton 2000). Indeed, the socio-cultural model of literacy developed within the 'New Literacy Studies', developed in conscious opposition to positivist ontology (see Street 1993, Brandt and Clinton 2003, Maddox 2007a). As such, it has usefully clarified debates and concepts, but not always provided ideal conditions for multi-disciplinary dialogue. Instead, ethnographers have frequently illustrated what Kanbur and Riles (2004) describe as the '*disciplinary urge to "critique" economic models, to expose their contingency or cultural specificity and to demonstrate*

again and again that the “realities on the ground” are far more “complex” than such models would suggest’ (ibid. p12).

How then, can we advance from disciplinary opposition, to more effective collaboration in literacy research? Kanbur (2002) describes two approaches to multi-disciplinarity, both of which seem viable in this case. Recognising the inherent difficulties in such collaboration he suggests a need to ‘*advance through the analysis of concrete issues and problems*’, and to demonstrate cases where ‘*two disciplines are better than one*’ (ibid, p484). This advice seems appropriate in the case of literacy as there are significant potential for collaboration on issues of development policy. He describes ‘*multi-disciplinarity*’ as collaboration involving a number of disciplines ‘*operating side by side*’ (Kanbur 2002:483). This is similar to the approach that Ravallion (2002) describes as ‘*sequential mixing*’. As Kanbur suggests, the approach enables each discipline to maintain its methodological and epistemological integrity, ‘*..to let each discipline do its best in its own terms and using its own methods in the first place, and then to use the results from each discipline to develop an overall analytical synthesis, and policy conclusions of that is the objective*’ (Kanbur 2002:483). This approach perhaps best describes current collaboration in the literacy field where there is occasional dialogue on shared areas of research interest (see Maddox 2007b). An example of such a situation is research on literacy networks and mediation, where parallel programmes of research have investigated shared themes (ibid, also Basu and Foster 1998, Gibson 2001, Basu, Narayan and Ravallion 2002, Malan 1996, Kell 1996, Barton and Hamilton 1998, Kalman 1999). There is also scope for collaboration and exchange of this kind in themes such gender-relations, agency, and capabilities.

Kanbur (2002) describes ‘*inter-disciplinary*’ research, as involving deep integration of disciplinary methods and perspectives (ibid. p483). This approach, implies what Ravallion (2002) calls ‘*simultaneous mixing*’, and requires sustained collaboration in multi-disciplinary research teams. This type of collaboration requires greater integration of models and theory, inter-disciplinary respect, and tolerance of epistemological plurality (Massey et al. 2006). However, it also implies some compatibility of theoretical

frameworks and a consensus on the model of literacy involved. Scribner and Cole's (1981) innovative study of Vai literacies in Liberia illustrates this process, as they describe a process of conceptual and methodological debate and exchange as they attempted to synthesise contrasting disciplinary positions. Perhaps as a result, the '*practice account*' of literacy they developed provided an unusually rich and explicit theoretical framework:

'By a practice we mean a recurrent, goal-directed sequence of activities using a particular technology and particular system of knowledge... Whether defined in broad or narrow terms, practice always refers to socially developed and patterned ways of using technology and knowledge to accomplish tasks... Literacy is not simply knowing how to read and write a particular script, but applying this knowledge for specific purposes in specific contexts of use' (Scribner and Cole 1981, p263).

It remains to be seen whether such consensus is possible in collaboration between economists and ethnographers in literacy research. There are however, a number of reasons (discussed below) to think that such collaboration is not only possible, but that it might help to resolve some of the long-standing problems of attribution and causality described above. In the next section of the paper I look at models of literacy in economics and anthropology. The paper focuses on literacy, rather than on wider analysis of schooling. These phenomena are of course related, though perhaps not as closely as some researcher may imagine (Scribner and Cole 1981, Street 1995).

MODELS OF LITERACY AND DEVELOPMENT

In a recent paper entitled '*Reflections on Literacy*', Amartya Sen (2003) suggests various ways that literacy contributes to poverty reduction and well-being. He describes illiteracy and innumeracy as a form of human insecurity '*in themselves*' and a '*tremendous deprivation*' (2003:22).ⁱⁱ In the paper he describes instrumental benefits of literacy in terms of women's well-being, access to employment, economic development, influencing people's legal rights and entitlements, and political participation. Sen's paper, though useful, does not go into these claims in depth, and indeed it is rare to find

explicit models of literacy in development economics, or sustained analysis of the relationship between literacy, poverty-reduction and wellbeing. In many cases, literacy statistics merely act as a weak proxy for achievement in basic education. Despite this absence of formal models of literacy, there has been considerable use of informal models and hypothesis in development economics (see Basu and Foster 1998, Basu, Foster and Subramanian 2000). These informal models in economics generally suggest a narrow list of hypothesis about the relationship between literacy and development, generally viewing literacy as: a) a pre-requisite for labour force participation and competitiveness; b) a proxy for cognitive development; or c) as a means to access and share information. The recent literature on capabilities has widened the scope of these discussions, to include aspects such as agency, access to entitlements, and political participation. These models, and their hypotheses, it must be said, are largely speculative, often theoretically naïve, and their propositions rarely draw on qualitative studies of literacy. In one of the more carefully presented discussions of literacy, Basu and Foster (1998) various scenarios are presented about how peoples ‘literacy skills’ may be of consequences for wellbeing:

‘... consider the following examples that involve the use of literacy skills:

- A. *A low-skilled job is available which requires the ability to read and write.*
- B. *Agricultural extension workers come with information on how to plant and take care of high-yielding varieties. They leave behind a brochure explaining these matters.*
- C. *A medical facility is set up in a neighbouring village. The staff distributes pamphlets on methods of preventing disease and infection, as well as information on the various services offered by the facility’ (Basu and Foster 1998:1734, underlining mine).*

Each of these scenarios presents a plausible hypotheses on the benefits of literacy in processes of poverty reduction (a similar list is presented by Basu, Foster and Subramanian 2000). In doing so, they move beyond abstract notions of literacy, to suggest specific mechanisms, and the social uses of literacy they involve. This approach to literacy practices suggests promising avenues for further research. It might for example, involve research on literacy based functionings that people either *choose to value* (see Nussbaum 2006), or that are *strategically important* for empowerment (see

Kabeer 1999). Despite its plausibility, the informal model above appears to be largely speculative, and by emphasising instrumental benefits, suggest only a partial account of literacy and development. Perhaps because of their informal status, models of literacy in economics (such as those above, and of Sen 2003), are rarely subject to critical scrutiny, or involve multi-disciplinary collaboration. One might ask therefore, how an ethnographically informed and contextually located account of literacy could inform and extend such analysis?

‘..reading and writing only make sense when studied in the context of social and cultural (and we can add historical, political and economic) practices of which they are but part’ (Gee 2000:180)

In contrast with the development economics literature, ethnographic accounts often involve explicit models of literacy and its relationship with development and change (see Street 1995, 2001, Robinson-Pant 2004). This self-conscious approach is supported by numerous ethnographic studies and is the result of extensive debate. In the early 1980’s a number of influential ethnographic studies questioned the received view of literacy in development (see Street 1995, Collins and Blot 2004). The socio-cultural model they developed informed a generation of researchers and informed what was to become the ‘New Literacy Studies’ (Street 1993, Barton, Hamilton and Ivanic 2000 , Collins and Blot 2003). The early advocates of the socio-cultural model emphasised the diverse nature of literacy practices, challenged the idea of a ‘great divide’ between oral and literate societies, and attributed any ‘implications’ of literacy to the wider socio-economic and cultural practices in which they were embedded (Finnegan 1973, Heath 1984, Scribner and Cole 1981, Street 1984). Many of these studies supported a broader sociological critique of education that questioned its unproblematic status as a social good, and highlighted the role of educational structures and processes in the reproduction of inequality (e.g. Bourdieu and Passeron 1977).ⁱⁱⁱ As such, the socio-cultural model developed in conscious opposition to the ‘*literacy thesis*’ of Goody and Watt (1968), that literacy development has particular consequences in terms of cognitive modernism and social organisation (Scribner and Cole 1981, Parry 1989, Halverson 1992). These differences in perspective were distilled in Street’s (1984) distinction between

'autonomous' and *'ideological'* models of literacy. The former being associated with technological determinism, and the latter with the emphasis on situated practice. These contrasting models have been extensively discussed and debated elsewhere (Goody 1986, Gee 2000, Collins and Blot 2004, Maddox 2007a). For the purposes of this paper, it is useful to note that the socio-cultural model of literacy adopted within the New Literacy Studies was paradigmatic in nature, and initially at least, operated as a model in the formal sense.

As Morgan and Morrison (1999) argue, models *'suggest hypotheses, aid in the construction of theories, and are a source of both explanatory and predictive power'* (ibid. p6). The socio-cultural model of literacy illustrates these characteristics. As a model it not only described literacy, but also promoted particular hypothesis, carefully specifying the relationship between literacy and processes of social change. Street's contrasting models of literacy, also involved a degree of idealisation and abstraction that one might readily associate with models in economics;^{iv}

'The writers I am discussing do not necessarily couch their arguments in the terms I am adopting. But nevertheless, I maintain that the use of the term 'model' to describe their perspectives is helpful since it draws attention to the underlying coherence of relationships of ideas which, on the surface might appear unconnected and haphazard. No one practitioner necessarily adopts all the characteristics of any one model, but the use of the concept helps us to see what is entailed by adopting particular positions, to fill in gaps left by untheorised statements about literacy, and to adopt a broader perspective than is apparent in any one writer on literacy' (Street 1984, p3).

Here, Street is clearly advocating a 'model', rather than a theory, and also recognised the idealised nature of the ideological and autonomous models:

'The models serve in a sense as 'ideal types' to help to clarify the lines of cleavage in the field of literacy studies and to provide a stimulus from which a more explicit theoretical foundation for descriptions of literacy practice and for cross-cultural comparison can be constructed' (Street 1984, p3).

Like many ethnographers, Street was sceptical of established views about the relationship between literacy and social change viewing them as overly deterministic, and he readily associated the 'autonomous' model with theories of modernisation theory.

'Social consequences are assumed to follow from literacy, such as 'modernisation', 'progress' and economic rationality to name a few. Recent research, however has challenged this 'autonomous' view' (Street 1996:2).

The opposition between ideological and autonomous models served to sharpen theoretical analysis, and supported the development of literacy theory. Over time this involved a partial synthesis between the approaches, and rehabilitation of themes once considered 'too autonomous' to handle. Themes such as instrumentality, technological characteristics, and the role of literacy in processes of social and personal change have been re-integrated into literacy theory under the situated, and practice based orientation of the New Literacy Studies (see Barton and Hamilton 1998, 2000, Brandt and Clinton 2004, Luke 2004, Ahearn 2004, Street 2005, Kalman 2005). Nevertheless, the opposition between 'ideological' and 'autonomous' models still resonates in literacy theory (Brandt and Clinton 2004), and many ethnographers remain deeply ambivalent about the role of literacy in progressive forms of social change. Despite its rich ethnographic insights and theoretical sophistication, the New Literacy Studies provides only limited explanations of the ways that illiteracy produces disadvantage, and how literacy impacts on processes of poverty reduction. In order to enable a better understanding of the ways that literacy impacts on poverty reduction and wellbeing, I would like to suggest two strategies. The first, as discussed above, is the scope to increase multi-disciplinary collaboration. The second strategy would be to move from general models of literacy, to research that is dedicated to investigating specific mechanisms linking illiteracy with disadvantage, and literacy with poverty reduction. In the final section of the paper I examine the scope for such an approach drawing on literacy theory, and capabilities theory.

FROM MODELS TO MECHANISMS

'...choosing a topic to investigate means not only that one runs the danger of inflating its importance but, worse, of being seen as believing that human affairs are determined by a single factor. Some writers even appear to assume that what is meant by 'causal relations' are those determined in this way – that is, situations that have one cause, everywhere, all the time' (Goody 1986:XV).

The ethnographic debate about 'consequences' of literacy established the contingent nature of literacy practices and their outcomes. However, Street's (1995) insistence on contextual contingency did not entirely preclude analysis of literacy as a contributory factor in causal processes. This view of causality is similar to Mackie's (1965) "INUS" condition, where a 'cause' is known to be an *'insufficient, but necessary part of a condition, which is itself unnecessary but sufficient for the result'* (J.L Mackie, cited in Hage and Meeker 1988: 7). This is a useful perspective because in contexts of chronic poverty, literacy alone may not be sufficient to produce significant improvements to wellbeing. This point is easily forgotten in the evaluation of literacy programmes where tangible results in terms of poverty reduction may be viewed as the key criteria of success. Economists are of course familiar with this type of scenario, and their concepts and techniques enable rigorous analysis of the impact of multiple and interacting variables. Despite these insights however, neither economists or anthropologists have dedicated much time to investigating these causal mechanisms. One explanation for this is that many social scientists are uncomfortable with the idea of causality, viewing the concept as an indication of 'weak science' (Pearl 2000). This paper takes a different stance and considers causal concepts and vocabulary and the ability to explain phenomena to be at the heart of social science endeavour (see Steel 2004, Hedstrom 2005). Jack Goody (1986) hints at the viability of such an approach in literacy research:

'In taking writing and the written tradition as my topic.. I do not imply for one moment that these are the only factors involved in any specific situation, only that they are significant ones. In these enquiries one would like to be able to assess the relevance of different elements and produce a path-diagram that weighted, in some more or less precise way, the factors involved. Unless of course one is content to leave the analysis at the functional level of showing that everything influences everything else' (Goody 1986:xv)

How might concepts of causal processes and mechanisms enable this kind of analysis? Hedstrom (2005) views mechanisms as '*a constellation of entities and activities that bring about a particular type of outcome*' (2005:11). This definition enables contrasting views of causality, as either a reflection of social patterns and regularities, or in terms of more specific and historically located explanations. In using the concept of mechanisms I am not suggesting scientific 'laws', but the established tradition in the social sciences of investigating social processes involving concepts of causal path, networks, processes, and interactions (Steel 2004, Hedstrom 2005). Those who advocate research into mechanisms argue that such knowledge informs understanding of statistical correlation, and helps to reduce problems of omitted variable bias and spurious correlation (Steel 2004, Hedstrom 2005). They also claim that such knowledge enables researcher to more accurately identify and appraise competing explanatory hypothesis. As Steel (2004) notes; '*the difficulty lies not in imagining hypothesis concerning the causes of social phenomena but in deciding which among a large number of such conceivable hypotheses is correct*' (p70). In the case of statistical data on literacy these arguments are clearly relevant, as well established statistical relationships are rarely supported by similarly robust explanation. This implies unpacking the so called 'black box' of mechanisms, interactions and processes that underlie such statistical relationships (Hedstrom 2005, Robinson-Pant 2004).

In analysing causal mechanisms we have to deal with contrasting disciplinary traditions. In science and economics, principles of parsimony inform causal models with the emphasis on '*minimality*' over complexity (Pearl 2000:45-47). The tendency in anthropology is in the other direction, with the emphasis on holistic, particularistic, and contextually rich accounts (Harriss 2002, Kanbur and Riles 2004, Carrier 2005). There are of course some benefits in striving for simplicity in analytical models (for example, in enabling clarity and comparison). As Hedstrom (2005) notes, even the more contextually rich forms of qualitative analysis require '*stopping rules*', beyond which data is not considered to be relevant (ibid. p27). Appadurai (1998) makes a similar point, noting that even the most 'holistic' anthropological accounts must limit the scope of their

analysis. In striving for analytical neatness and parsimony however, there is a risk that crucial aspects of literacy will be excluded from the analysis. From an ethnographic perspective for example, we know that identity matters (i.e. status, personhood, gender, caste, ethnicity), and that the types of literacy involved (i.e. practices, scripts and languages) are central to understanding the ways that literacy impacts on people's poverty and wellbeing. We know that agency (i.e. freedoms, aspirations) affect how people use and benefit from literacy, and that certain thresholds of ability impact on people's capacity to achieve literacy related functionings. This implies more theoretically rigorous analysis than is undertaken in most census or panel data.

It should of course be recognised, that many causal relationships cannot be 'observed' through qualitative research (see, for example Robinson-Pant 2001 on the links between literacy and health). They may be the product of complex forms of indirect, reciprocal, and conditional forms of causality (see Hage and Meeker 1988), and only be observed in large-scale quantitative data as the 'effects' of such interactions.

There are multiple theories of causality and causal mechanisms in use within the social sciences (Cartwright 2004, Hedstrom 2005). Indeed, Cartwright (2004) argues that to capture the variety of causal relations, multiple approaches to causality are required: '*There is a variety of different kinds of causal laws that operate in a variety of different ways and a variety of different causal questions that we can ask*' (2004:814), and that '*even causes of the same kind can operate in different ways*' (ibid. p805). Putting aside the notion of 'causal law', these seem to be particularly useful insights in terms of understanding the ways that literacy impacts on development and change. As we have seen above, ethnographers such as Street reject the reductionist view that literacy has particular implications derived from its intrinsic qualities as a technology. This view does not deny that literacy involves '*enabling*' qualities (Street 1984), '*potentials*' (Goody 1986), and '*affordances*' (Kress 2003), but implies that any causal capacity associated with literacy should be explained in terms of actual literacy practices and functionings. To extend Cartwright's insight on plurality, it is useful to build on this

perspective to distinguish some of the different ways that literacy might impact on poverty reduction and wellbeing.

The exploratory framework below (*diagram 1*) identifies three themes in literacy theory that can inform an analysis of literacy mechanisms: the instrumental uses of literacy; literacy in the production of agency and the formation of identity; and institutional and material cultures of literacy. As Cartwright's argument suggests, each of these themes imply different types of causal mechanism. In practice however, they are likely to be inter-related (i.e. instrumental uses are dependent on socially legitimate role and practice, and are influenced by the existing literacy environment). To extend the analysis the diagram also indicates some correspondence between the three themes, and some of the salient themes in the Capability Approach (see Sen 1999, Nussbaum 2006, Maddox forthcoming). This implies impacts both in terms of people's achieved functionings, and their wider capabilities (potentials, substantive freedoms). Since capabilities refer to what people are '*able to do or be*' (see Sen 1999), the diagram makes an analytical distinction between '*doings*' (as literacy related practices), and '*beings*' (as the achievement of social identities). It also recognises the potential of literacy in processes of '*becoming*' (see Comim 2004), which implies both the acquisition of knowledge and skills, and the negotiation and embodiment of new social identities.

Diagram 1. Integrating Themes in Literacy Theory and the Capability Approach.

Literacy Theory	Capabilities Approach
<p>Theme 1: Instrumentality.</p> <p>The multiple forms of literacy use in every-day life, the ‘potentials’ of literacy for socio-economic, cultural, religious, and political participation, learning, communication and life management.</p>	<p>Capability and functionings (whether individual or collective) based on ‘doing’ things with literacy (i.e. social uses of literacy). The negative implications of illiteracy on human flourishing and wellbeing.</p>
<p>Theme 2: Agency and Identity.</p> <p>The role of literate practices and identities in negotiating and shaping social identities. The significance of new literacy practices and associated embodied identities in processes of social change. The significance of dominant forms of literacy and wider communication practices in the production of positional inequalities and disadvantage.</p>	<p>The role of literacy and illiteracy in people’s freedoms, agency and identity: what people are able to ‘be’ to ‘do’ with literacy, and the roles of literacy practices and identities in processes of ‘becoming’ (Comim 2004). The potential roles of literacy and illiteracy (practices and identities) in ‘adaptive preference’ (Sen 1999), processes of ‘co-operative conflict’ (Sen 1990), and people’s ‘capacity to aspire’ (Appadurai 2004).</p>
<p>Theme 3: Institutional and Material cultures of literacy.</p> <p>The socio-economic and cultural significance of written texts. The role of literacy in institutionalised domains, practices and events (including and beyond education). Textually (and linguistically) mediated access to resources, information, and socio-economic participation. The significance of networks (and institutions) for engagement and mediation.</p>	<p>The role of illiteracy (and exclusionary literacy and language practices) in capability deprivation. Potential impacts on people’s access to active citizenship, entitlements, agency, social, political and economic participation.</p>

Theme 1: Instrumentality

The first theme of instrumentality highlights what people ‘do’ with literacy. It draws our attention to the multiple ways that literacy is used across cultural and institutional contexts (see for example Prinsloo and Breier (eds) 1996), and highlights what people ‘do’ with literacy. These include, but extend well beyond educational encounters. Describing the social uses of literacy, ethnographic studies highlight two distinct characteristics. They note the diverse ways that people ‘*take hold*’ of literacy (Kulick and Stroud 1993) and integrate it into their own beliefs and practice. This challenges the view that literacy is a peculiarly Western tradition, or one associated with particular forms of rationality. At the same time, ethnographic studies suggest broad patterns of utility that are observed across cultures. Goody (1986) describes patterns of literacy use across the institutional domains of commerce, law, state bureaucracy and religion. Barton and Hamilton (1986) describe literacy as a ‘*transformative tool*’ (p 250), describing its uses in: i) *organising life* (e.g. lists, diaries record-keeping, financial management), ii) *personal communication* (such as letters), iii) *private leisure*, iv) *documenting life*, v) *sense making* (including reading booklets about legal entitlements, health and religion), and vi) *social participation* (including group membership, political organisation, activisms, and making demands from government) (adapted from Barton and Hamilton pp 249-51). These types of literacy use have been observed across diverse socio-economic and cultural contexts.

Theme 2: The Production of Agency and Identity

The second theme highlighted in the framework relates to the role of literacy in the production of agency and identity. This involves what people are able to ‘be’ with literacy, and suggests different types of causal mechanism that those one would associate with instrumental perspectives. Even the most benign forms of literacy use (such as writing one’s name) may have symbolic implications, or be subject to culturally defined

norms and constraints. They relate to the symbolic roles of literate identities, and forms of personhood, status and identity associated with particular forms of literacy practice. In understanding such mechanisms, it is therefore necessary to locate instrumental uses of literacy within cultural spheres, and understand how ‘categories of person’ shape and constrain such literacy practice (Ahearn 2001, Bartlett and Holland 2002).

Literacy inequalities with a strong gender dimension, and those associated with caste, class or ethnicity can therefore be understood in terms of legitimate forms of social practice associated with personhood, rather than simply a lack of ‘skill’, or the result of inequalities in educational access (Puchner 2003). Ethnographic studies of adult literacy learning (particularly those focusing on women’s literacy), describe how processes of becoming literate, and developing new forms of literacy practice often required significant changes to social relations, and the embodiment of new social identities (Zubair 2001, Bartlett and Holland 2002, Kalman 2005). These often involve processes of negotiation and resistance (Rockhill 1993, Puchner 2003, Maddox 2005), combining individual and collective forms of agency, and activity in public and private spheres (Ahearn 2001, Robinson-Pant (ed) 2004). This implies not only ‘being’ with literacy, but also processes of ‘becoming’ as people change their notions of self, their hopes, and aspirations (see Rockhill 1993, Kalman 2005, and Comim 2004). These perspectives on literacy, personhood and change provide a link between what Sen (1999) describes as ‘*adaptive preference*’, and what Appadurai (2004) calls ‘*the capacity to aspire*’.

Theme 3: Institutional and Material Cultures

The final theme examines the role of institutional and material cultures of literacy, and implies a sociological orientation to what is sometimes rather passively described as the “literacy environment”. Ethnographic studies suggest a more critical perspective on the ways in which literacy and language environments shape people’s freedoms and capabilities (see Kell 1996, Kalman 1999, Papen 2005). These studies show how access to resources, information and entitlements are mediated through textually mediated encounters which can disadvantage non-literate people, making them dependent on

brokers and mediators (see Malan 1996, Kalman 1999). This supports Dreze and Sen (2000) in their assertion that '*Literacy is an essential tool of self defence in a society where social interaction include the written media*'. It draws our attention to the role of functional illiteracy (and exclusionary literacy and language practices) in capability deprivation, requirements for active citizenship, political and socio-economic participation (Sen 2003). This implies a shift in focus from the local to larger-scale mechanisms, since many institutional practices operate at a societal or global level (Barton and Hamilton 1998, Brandt and Clinton 2003, Luke 2004). It also draws our attention to the status and function of written texts in different institutional regimes, and how they impact (positively and negatively) on people's capabilities and wellbeing (Mignolo 1997, Kell 2005, Papen 2005). As such, it links to the wider anthropological literature on material cultures (see Appadurai (ed) 1986, Latour 1993, Miller 1998). The ways that illiteracy impacts on wellbeing are likely to vary according to these institutional cultures; on people's level of dependency on literacy based practices, their access to mediation (networks, institutional forms of mediation), attitudes toward inclusion/exclusion of illiterate people (Subramanian forthcoming), and the status of minority literacies and languages.

CONCLUSIONS

Despite the widely held view that literacy plays a vital role in poverty reduction and wellbeing, researchers in economics and anthropology have found it difficult to identify and explain the causal processes and mechanisms involved. The paper has suggested two ways to improve this situation. The first is to embrace multi-disciplinary research on this theme, particularly in development economics and anthropology. This illustrates Kanbur's argument on the need to direct multi-disciplinary research in development to the '*analysis of concrete issues and problems*' (2002:484). Such collaboration requires theoretical, methodological and epistemological pluralism, in a field that has been traditionally structured around disciplinary opposition and difference.

The second suggestion made in the paper was for researchers to develop more rigorous understanding of causal processes and mechanisms that link literacy with poverty

reduction and wellbeing. The paper argued that such insights are possible despite the complexity of social phenomena and interactions. In doing so, it adopted Hedstrom's (2005) definition of social mechanisms as '*a constellation of entities and activities that bring about a particular type of outcome*' (p11). It argues that while the socio-cultural model of literacy provides a broad paradigm for understanding literacy as a social practice, it is too general to provide satisfactory understandings of how literacy impacts of development and change.

The paper therefore explores an alternative analysis, arguing that literacy has causal capacity, but that such capacity should be understood in terms of the social uses of literacy rather than in reductionist terms. These causal capacities need not be positive, and indeed may help to reproduce existing inequalities (as is clearly the case with many experiences of illiteracy). The paper discussed three themes (instrumentality; agency and identity, and; institutional and material cultures) drawn from literacy theory, which it linked to parallel themes in capability theory. Building on the insights of Cartwright (2004), the paper suggests that each of these themes imply different types of causal mechanism, and contrasting perspectives on how literacy might impact on poverty reduction and wellbeing.

The paper has argued that multi-disciplinary collaboration can lead to more rigorous analytical models, and research into causal processes and mechanism. The paper attempted to capture some of the salient themes in both anthropological theories of literacy and in development economics. It may be tempting to think of contrasting themes identified in the exploratory framework (above) as merely indicating different disciplinary perspectives on the same similar phenomena which simply require further integration and synthesis. As such, the differences can be viewed as another chapter in debates over structure and agency, and between substantivism and formalism. There may be some truth to this. The economic literature does emphasise instrumentality and the freedoms of individual actors, while anthropological accounts highlight difference, contextual embeddedness, and culturally contingent notions of agency. However, the paper has taken an alternative view, and suggests that the three themes described in the framework illustrate multiple types of causal mechanism that link literacy with poverty

reduction and wellbeing. As such, they represent shared themes for research collaboration, rather than points of disciplinary demarcation.

NOTES

- ⁱ The phrase '*causal capacity*' is borrowed from Nancy Cartwright (1979) cited in Chatterjee and Gelbman (2004).
- ⁱⁱ Sen (2004) discusses both literacy and numeracy. In this paper I assume that discussions of literacy include written forms of numeracy (such as in calculation and record keeping). Following Sen, and the tradition established within the New Literacy Studies, this paper does not equate literacy with schooling, though 'schooled' literacies are clearly and important social phenomenon (Street 1995).
- ⁱⁱⁱ On this wider sociological literature on education see Jeffery and Basu (1996), Longwe (1998). For a more recent application of this sociological approach Jeffry, Jeffery and Jeffery (2005).
- ^{iv} Morgan and Morrison (1999: 38) note that idealisation and abstraction are typical features of models. They note that idealisation involves deliberate distortion in order to provide greater insights, while abstraction necessarily involves certain aspects of 'reality' being omitted.

BIBLIOGRAPHY

Ahearn, L. (2001) *Invitations to Love: Literacy, Love Letters and Social Change in Nepal*. Ann Arbor MI: University of Michigan Press.

Ahearn, L (2004) 'Literacy, Power and Agency: Love Letters and Development in Nepal'. *Language and Education*. Vol. 18, No 4, pp 305-316.

Alderman, H. Hentschel, J. & Sabates, R. (2003) With the help of one's neighbours: externalities in the production of nutrition in Peru. *Social Science and Medicine*, 56 (3) 2019-2031.

Appadurai, A. ed) (1986). *The Social Life of Things: Commodities in Cultural Perspective*. Cambridge University Press, Cambridge.

Appadurai, A. (1989) 'Small-Scale Techniques and Large-Scale Objectives', in Pranab Bardhan (ed) *Conversations Between Economists and Anthropologists: Methodological Issues in Measuring Economic Change in Rural India*. Oxford University Press, Delhi.

Appadurai, A. (2004) 'The Capacity to Aspire: Culture and the Terms of Recognition', in V. Rao and M. Walton (eds) *Culture and Public Action*. Stanford University Press, Stanford.

Bardhan, P. (1989) 'Introduction', *Conversations Between Economists and Anthropologists: Methodological Issues in Measuring Economic Change in Rural India*. Oxford University Press, Delhi.

Bardhan, P. and Ray, I. (2006) 'Methodological Approaches in Economics and Anthropology' Q-Squared Working Paper No. 17, February 2006.

Barton, D and Hamilton, M (1998) *Local Literacies: Reading and writing in one community*, London, Routledge.

Barton, D., Hamilton, M., and Ivanic, R (eds) (2000) *Situated Literacies: Reading and Writing in Context*, Routledge, London.

Basu, K & Foster, J. (1988) On Measuring Literacy. *Economic Journal*, 108: 1733-1749

Basu, K., Narayan, A., & Ravallion, M. (2002) Is literacy shared within households? Theory and evidence from Bangladesh. *Labour Economics*, 8 (2002) 649-665.

Bartlett, L. & Holland, D. (2002) Theorizing the Space of Literacy Practices. *Ways of Knowing*, 2 (1), 10-22.

Bourdieu, P. and Passeron, J-C. (1977) *Reproduction in Education, Societies and Culture*. Trans. R.Nice. London, Sage.

Brandt, D. and Clinton, K. (2002) "Limits of the local: Expanding perspectives on literacy as a social practice", *Journal of Literacy Research*, 34(3) pp. 337-356

Carrier, J (ed) (2005) *A Handbook of Economic Anthropology*, Edward Elgar, London.

Carrier, J. and Miller, D. (2005) 'From Private Virtue to Public Vice', in H. Moore (ed) *Anthropological Theory Today*. Polity Press, Cambridge.

Carnea, M (1995) 'Social Organisation and Development Anthropology', *Human Organisation*, 54, (3). Pp 340-352.

Cartwright, N (2004) 'Causation: One word, many things', *Philosophy of Science*, Vol. 71, pp 805-819.

Chatterjee, A. and Gelbman, S. (2004) 'Triangulation Reconsidered: The Hazards of Multi-Method Research'. Paper delivered at the 2004 Annual Meeting of the American Political Science Association.

Collins, J. & Blot, R. (2003) *Literacy and Literacies: Texts, Power and Identity*, Cambridge, Cambridge University Press.

Comim, F (2004) 'Time and Adaptation in the Capability Approach' Paper presented at the Conference of the Human Development and Capability Association, Italy 2004.

Dreze, J. and Sen, A. K. (2000) *India: Social Participation and Development*, Oxford University Press, Delhi and Oxford.

Finnegan, R (1973) *Literacy verses non-literacy: the Great Divide*. In *Modes of Thought* . R. Finnegan, & R. Horton (Eds), London, Faber & Faber.

Gibson, J. (2001) *Literacy and Intrahousehold externalities*. *World Development*, 29 (1), 155-166.

Goody, J. and Watt, I. (1968) 'The Consequences of Literacy', in *Literacy in Traditional Societies*. J. Goody (ed). Cambridge, Cambridge University Press.

Goody, J (1986) *The Logic of Writing and the Organisation of Society*, Cambridge, Cambridge University Press.

Goody, J (2000) *The Power of the Written Tradition*, Washington, Smithsonian.

Green, M. and Hulme, D. (2005) 'From Correlates and Characteristics to Causes: Thinking About Poverty from a Chronic Poverty Perspective'. *World Development*, Vol. 33, No.6, pp867-879.

Hage, J. and Meeker, B. F. (1988) *Social Causality*. Allen and Unwin, London.

Hamilton, M. and Barton, D. (2000) 'The International Adult Literacy Survey: What does it really measure?' *International Journal of Education*, Vol.46, No.5, pp377-389. UNESCO, Hamburg.

Harriss, J. (2002) 'The Case for Cross-Disciplinary Approaches in International Development', *World Development*, Vol. 30, No. 3, pp 487-496.

Halverston, J. (1992) 'Goody and the Implosion of the Literacy Thesis'. *Man*, 27, 301-317.

Hedstrom, P (2005) *Dissecting the Social*, Cambridge, Cambridge University Press.

Heath, S (1983) *Ways with Words*, Cambridge, Cambridge University Press.

Hulme, D (2004) 'Thinking 'Small' and Understanding of Poverty: Maymana and Mofizul's Story', *Journal of Human Development*, Vo. 5. No. 2, pp161-176.

Iversen, V. and Palmer-Jones, R. (forthcoming) 'Literacy sharing, assortative mating, or what? Labour market advantages and proximate illiteracy revisited' *Journal of Development Studies*.

Jackson, C. (2002) 'Disciplining gender?' *World Development*, Vol. 30, No.3.

Jeffery, R., and Basu, A. (Eds) (1996) *Girl's schooling, women's autonomy and fertility change in South Asia*. London and New Delhi, Sage.

Kabeer, N. (1999) 'Resources, Agency, Achievements: Reflections on the Measurement of Women's Empowerment', *Development and Change*, Vol. 30. pp435-464.

Kanbur, R. (2002) 'Economics, Social Sciences and Development', *World Development*, Vol. 30, No 3. pp477-486.

Kanbur, R. and Shaffer, P. (2007) 'Epistemology, Normative Theory and Poverty Analysis: Implications for Q-Squared in Practice', *World Development*, Vol. 35, No. 2, pp183-196.

Kalman, J. (1999) *Writing on the Plaza: Mediated Literacy Practices among Scribes and Clients in Mexico City*. Cresskill, Hampton Press.

Kalman, J. (2005) Mothers to Daughters, Pueblo and Ciudad: Women's identity shifts in the construction of a literate self. Rogers, A (ed) Urban Literacy: Communication, Identity and Learning in Development Contexts. Hamburg, UNESCO.

Kanbur, R. and Riles, A. (2004) 'And Never the Twain Shall Meet? An Exchange on the Strengths and Weaknesses of Anthropology and Economics in Analyzing the Commons'. Working Paper for the project on 'Conversations between Anthropologists and Economists' Cornell University.

Kanbur, R (ed) (2002) Q-Squared: Qualitative and Quantitative Methods of Poverty Appraisal. Permanent Black, Delhi.

Kell, C. (1996) Literacy practices in an informal settlement in the Cape Peninsula. In The Social Uses of Literacy. M. PRINSLOO & BREIER, M. (eds.). Amsterdam, John Benjamins.

Kell, C (1999) 'Teaching Letters: The recontextualisation of Letter-Writing Practices in Literacy Classes for Unschooled Adults in South Africa'. In Barton and Hall (eds) Letter Writing as a Social Practice. John Benjamins, Amsterdam.

Kell, C (2004) 'Moment by Moment', in Rogers, A (ed). Urban Literacy: Communication and Learning in Development Contexts. Hamburg, UNESCO.

Kress, G. (2003) Literacy in the New Media Age. Routledge, London.

Latour, B (1993) We Have Never Been Modern, Harvester Wheatsheaf, Hemel Hempstead.

Longwe, S. H. (1998) 'Education for women's empowerment or schooling for women's subordination?' Gender and Development, Vol. 6. No.2, pp19-26.

Luke, A. (2004) 'On the Material Consequences of Literacy', *Language and Education*, Vol. 18, No. 4, pp331-335.

Malan, L. (1996) Literacy mediation and social identity in Newtown, Eastern Cape. In *The Social Uses of Literacy*. M. Prinsloo & M. Breier (eds.). Amsterdam, John Benjamins.

Maddox, B. (2005) Assessing the impact of Women's literacy in Bangladesh: An ethnographic inquiry. *International Journal of Educational Development*. 25 (2) 123-132.

Maddox, B (2007a) 'What can ethnographic approaches tell us about the consequences of literacy?' *Comparative Education*. Vol. 43. No. 2, pp 253-272.

Maddox, B (2007b) 'Worlds Apart? Ethnographic Reflections on 'effective literacy' and intrahousehold externalities'. *World Development*. Vol. 35. No. 3, pp 532-541.

Maddox, B. (forthcoming) 'What good is literacy? Insights and Implications of the Capability Approach' *Journal of Human Development* (2008).

Massey, C. Alpass, F. Flett, R., Lewis., Morriss, S. and Sligo, F. (2006) 'Crossing fields: a case of a multi-disciplinary research team. 'Qualitative Research', Volume 6. No. 2. pp131-149.

Mignolo, W. (1995). *The darker side of the renaissance: Literacy, territoriality and colonization*. University of Michigan Press, Michigan.

Miller, D. (1998) *Material Cultures: Why Some Things Matter*. University of Chicago Press. Chicago.

Morgan, M. and Morrison, M. (1999) *Models as Mediators: Perspectives on Natural and Social Science*, Cambridge University Press, Cambridge.

Parry, J (1989) 'The Brahmanical tradition and the technology of the intellect', in K. Schousboe, and M.T Larsen (eds) *Literacy and Society*, Copenhagen, Akademisk Forlag

Papen, U. (2005) 'Reading the bible and shopping on credit: Literacy practices and literacy learning in a township of Windhoek, Namibia. In A. Rogers (ed) *Urban Literacy: Communication, Identity and Learning in Development Contexts*. UIE, Hamburg.

Pearl, J (2000) *Causality: Models, Reasoning and Inference*, Cambridge, Cambridge University Press.

Prinsloo, M. and Breier, M. (eds) (1996) *The Social Uses of Literacy*. (eds.). Amsterdam, and Cape Town, John Benjamins, and Sached Books.

Puchner, L. (2003) *Women and literacy in rural Mali: a study of the socioeconomic impact of participating in literacy programs in four villages*. *International Journal of Educational Development*. 23 pp439-458.

Ravallion, M (2002) 'Can qualitative methods help quantitative poverty measurement?' in R.Kanbur (ed), *Q-Squared: Qualitative and Quantitative Methods of Poverty Appraisal*. Permanent Black, Delhi.

Robinson-Pant, A. (2001) *Women's literacy and health: Can an ethnographic researcher find the links?* Street, B (ed) *Literacy and Development: Ethnographic Perspectives*. London, Routledge.

Robinson-Pant, A (2004) 'The "illiterate woman": Challenging approaches to researching women's literacy', in Robinson-Pant (ed) *Women, Literacy and Development: Alternative Perspectives*, London, Routledge.

Saith, R. and Harriss-White, B. (1999) 'The Gender Sensitivity of Well-being Indicators', *Development and Change*, Vol. 30, pp465-497.

Scribner, S and Cole, M (1981) *The Psychology of Literacy*, Cambridge and Massachusetts, Harvard University Press

Sen, A. (1990) *Gender and Cooperative Conflicts*. In I.Tinker (ed) *Persistent Inequalities: Women and World Development*. Oxford University Press, Oxford.

Sen, A (1999) *Development as Freedom*, New Delhi, Oxford University Press.

Sen (2003) 'Reflections on Literacy' in C. Robinson (ed) *Literacy as Freedom*. Unesco, Paris.

Sen, B. (2003) *Drivers of escape and descent: changing household fortunes in rural Bangladesh*. *World Development*, Vol. 31, No. 3. pp513-534.

Steel, D. (2003) 'Social Mechanisms and Causal Inference', *Philosophy of the Social Sciences*, Vol. 34. No. 1, pp44-78.

Street, B. (1984) *Literacy in Theory and Practice*. Cambridge, Cambridge University Press.

Street, B (ed.). (1993) *Cross-Cultural Approaches to Literacy*. Cambridge, Cambridge University Press.

Street, B. (1995) *Social Literacies: Critical Perspectives on Development, Ethnography and Education*. London, Longman.

Subramanian, S. (forthcoming) 'Externality and Literacy: A Note', forthcoming in *Journal of Development Studies*.

UNESCO (2005) *Literacy for Life: The Education for All Global Monitoring Report*. UNESCO, Paris.

Wagner, D (1993) *Literacy, Culture and Development: Becoming Literate in Morocco*. Cambridge University Press, Cambridge.

Zubair, S. (2001) 'Literacies, Gender and Power in Rural Pakistan' in B.Street (ed) *Literacy and Development: Ethnographic Perspectives*. Routledge, London.