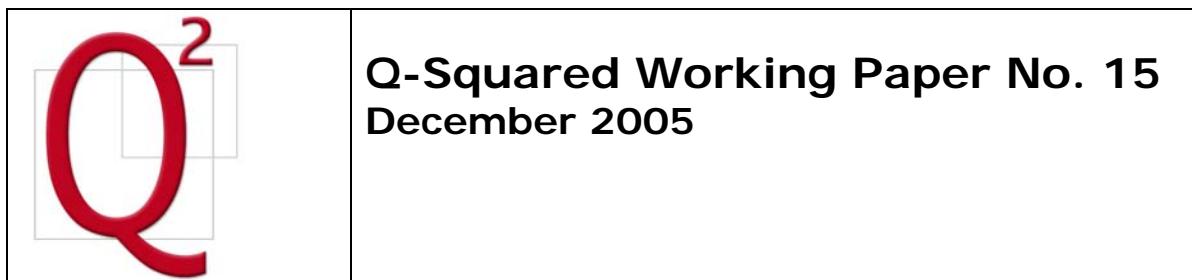


Studying Multi-Dimensional Poverty in Ethiopia: towards a Q-Integrated Approach

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I. Introduction

In the days before PRSPs, PRGFs and the twin 'Q-Squared'¹ traditions had been invented, Sandra Joireman and I wrote a paper on 'the perils of measuring poverty' with two main purposes (Bevan and Joireman, 1997). Our first aim was to problematize the conceptualization and measurement of 'poverty', which at the time was usually equated with 'consumption' and the three Thorbecke-Greer measures, particularly P0 which simply classifies households as 'poor' or 'not-poor'. We argued that poverty was multi-dimensional and that it could be defined in absolute, relative and/or subjective terms. We went on to apply four poverty measures² to the same households in three rural sites in Ethiopia using data collected through the Ethiopian Rural Household Survey³ and at community level, to establish the extent to which they identified the same households as poor. As social scientists with an interest in meaning as well as measurement⁴ we were keen to ascertain how valid and reliable the consumption measure of poverty was in the Ethiopian context, which is characterized by seasonal and annual variations in consumption and expenditure related to the weather, food aid and to local fasting/festival cycles. The correlations between the consumption poverty measure on the one hand, and the three more stable measures were generally low in magnitude and statistically insignificant.

The second aim of the 1997 paper was to draw attention to the complex and problematic relation that exists between academic research and the policy-messaging economics (Kanbur, 2001b) which elements in the World Bank are prone to. During the course of our research a World Bank Discussion Paper was published (Demery *et al*, 1995) which used statistics from a number of countries to argue that liberalization reduced poverty. Ethiopia was one of the countries cited on the basis of an academic economics paper making no such claims which used data from five of the original unrepresentative ERHS food-deficit sites to calculate consumption poverty measures and compared changes between 1989 and 1994.

Since 2002 I have been involved in a multi-disciplinary and cross-cultural research program on poverty, inequality and subjective quality of life⁵ which has Ethiopia as one of its four countries of study. In 2003 we revisited the rural sites researched in 1994/5⁶ adding five new rural sites, including two pastoralist communities, to make a total of twenty. Four of the sites have been selected for in-depth study starting in July 2004. In the 1997 paper Sandra and I identified a number of issues related

¹ 'Q-squared' has been used as a short-hand term to describe quantitative poverty appraisal [econometric analyses of household survey data] and qualitative poverty appraisal [analyses of data collected using participatory methods]. 'Q-integrated' is a short-hand term to describe cross-disciplinary research using a range of research instruments to produce various types of data, which can often be analyzed both quantitatively and qualitatively. It should be said that all quantitative approaches involve many qualitative judgments throughout the process of conceptual development, instrument design, data cleaning, analysis, and writing up.

² A measure of PO (absolute), two measures of relative poverty (from community wealth-ranking and household survey data), and one measure of subjective poverty.

³ The ERHS is a Panel survey with a first round of 6 purposively-selected food-deficit sites completed in 1989. Nine sites were added in 1994 to construct a purposive sample more representative of Ethiopia's livelihood systems. In 1994/5 community-level data were collected in the fifteen sites (Bevan and Pankhurst, 1996). Further rounds of the panel survey were completed in 1997, 2000 and 2004 (involving a collaboration between IFPRI, the CSAE, and WeD in four of the sites).

⁴ I am a sociologist and Sandra is a political scientist.

⁵ The ESRC Research Program on Wellbeing in Developing Countries (WeD) is a four-country program based at the University of Bath and also involving social scientists from Bangladesh, Ethiopia, Peru and Thailand. I am the Country Coordinator for the Ethiopia Program and am working with a multi-disciplinary team of Ethiopian researchers led by Alula Pankhurst, with whom I worked in 1994/5. The five-year program began in October 2002 with a phase of conceptual development (which continues throughout the program). A grounding and piloting phase began in February 2003, and this gave way to the main fieldwork phase in mid-2004, just as this paper is being written. I have learned much from conversations with WeD participants, particularly Laura Camfield, Ian Gough, Allister McGregor, Alula Pankhurst, Feleke Tadele, Sarah White, and Jorge Yamimoto.

⁶ There were 15 in all from which we chose three for the 1997 paper; we have added 3 rural, 2 pastoralist and 2 urban sites.

to poverty research. Three of these, described in Section II, are particularly germane to our current research in Ethiopia: the multi-dimensionality of *household* poverty; the emergence of a concept of *human* poverty; and the use of social science research by policymakers.

In 2004 methods and measurement are still the main focus of policy-related poverty research; 'quantitative' economists continue to work with data from household surveys using increasingly sophisticated statistical techniques. Since the mid-1990s there has been one major change, namely the institutionalization of 'qualitative research' based on the use of 'participatory techniques' at 'community level'. However, this qualitative approach is as theory-free as the mainstream economics approach. In Section 3 I critique the 'Q-Squared' approach on a number of grounds and argue that policymakers should be making greater use of the many relevant and potentially useful ideas and research approaches to be found in other social science areas.

In Section 4, in answer to the question 'what else might combined methods offer?' I describe a theoretically-grounded alternative to Q-squared with scope for the integrated use of a range of research instruments and qualitative and quantitative modes of analysis. In Section 5 I describe the emerging multi-level approach to multi-dimensional poverty informing the design of our research program in Ethiopia, while in Section 6 I describe how this is being implemented and some related issues and problems. Section 6 concludes that the political economy of policy-related poverty research has not changed much since 1997, but that there is now an opportunity for 'noneconomists' to challenge development microeconomists and PRA specialists on a whole range of intellectual grounds.

II. The perils of measuring poverty in 1994/5: three ending issues

In this paper I pick up on three key issues raised in the 1997 paper which are being taken forward in the Ethiopia WeD research. These are the multi-dimensionality of household poverty; the emergence of the concept of human poverty, and the (mis)use of social science research by policymakers.

1. The multi-dimensionality of household poverty

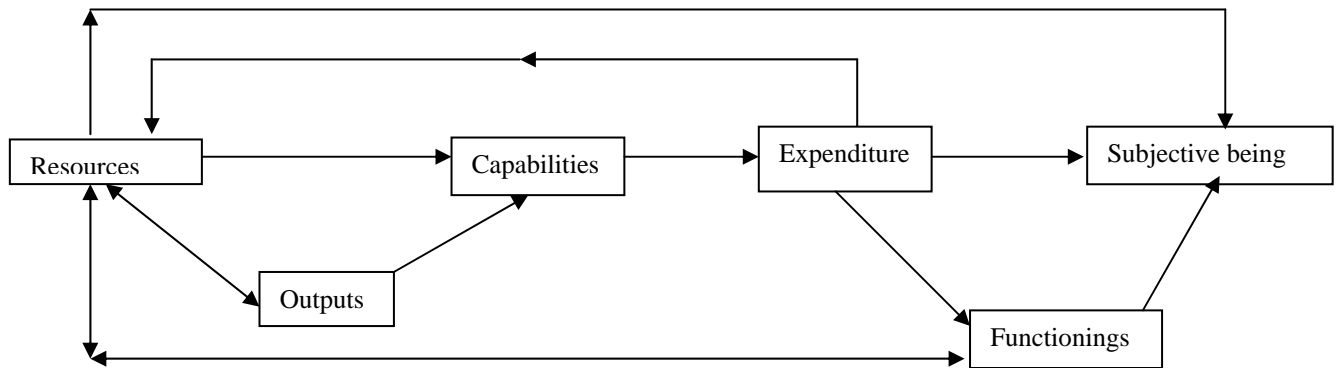
In the 1977 paper we argued that:

'(t)here is not a simple translation from the experience of poverty to its conceptualization, nor a simple translation from concept to measure. While poverty everywhere involves people experiencing very real material and other deprivations, the concept of poverty is used to cover a wide-ranging set of inter-related life-chances which vary and are valued differently in the diverse cultures and sub-cultures of the world. The fuzziness, complexity and potential relativity associated with the concept of "poverty" (and relatedly "the poor") arise from the fact that it is a socially constructed, "essentially contested", concept, with rhetorical power and political implications, and it includes within its embrace a range of variables which are often, but not always, correlated. This leads to ultimately irresolvable problems of analysis and measurement, unless the large concept is deconstructed into its constituent parts. There is not a reality called "poverty" (with associated groups of poor and non-poor) that we can measure if only we get our techniques right. The extent to which (and ways in which) disadvantages coincide in different situations are empirical questions.' (Bevan and Joireman, 1997: 316/7)

Figure 1 reproduces the household poverty model used in the 1997 paper⁷ to analyze the key components of advantage/deprivation. In this abstract model 'universal' aspects of poverty are identified. In a coordinated division of household labor household members act to use household **resources** to produce **outputs**. These, together with the resource set, provide the household with a set of **capabilities** from which to choose a set of **expenditures**. These generate varying experiences of **ill/wellbeing** for household members, either as a direct result of the expenditures, or as a result of the way in which they affect the **functionings** of each of the household members. The model identifies a number of feedback loops.

⁷ Here the concept of 'resources' replaces 'capital'.

Figure 1: The household advantage/deprivation complex - anatomy⁸



The resources used in the pursuit of household production and reproduction can be analytically distinguished as human, material social and cultural⁹. They are generated and used individually and collectively. Time is also an important resource. Outputs (commodities and services) may be accumulated as resources, or contribute to the capability set (directly or through exchange) which is the basis for household choices about expenditures. These expenditures (or lack of them) may affect the functionings of individual members which affect subjective being (wellbeing¹⁰/illbeing), or the process of expenditure itself may directly affect subjective being.

Table 1: Measurement of multi-dimensional poverty in 1997

Resources	Outputs	Capabilities	Expenditures	Functionings	Subjective Being
Land Labor Livestock Employment Housing Household Assets Health services Education services Infrastructure Credit	Food Commodities Services	In-kind Cash Access to collective goods:	Consumption Service use Investment Saving	Health status including death Educational achievements <i>these are also human resources</i>	

In the 1997 paper the model was used to identify the aspects of household deprivation which, for policy purposes, were being measured at that time. Items in bold are those most frequently used. In our WeD research we are highlighting analysis, interpretations and measures of **resources**, widely-defined to include material, human, social and cultural resources, **functionings** related to the human **needs** for competence, autonomy, relation and meaning and **subjective being**.

⁸ As explained below I have found it useful to identify four different modes of analysis of social phenomena: anatomy, physiology, dynamics and history.

⁹ In the 1997 paper we used the concept of 'capital', since made much more complex through the debates about 'social capital'. We also used a classification which confused resource structures and resource use.

¹⁰ The regular development studies use of terms which describe either 'good' or 'bad' aspects of variables is problematic for empirical research, especially when there is little agreement about the concept in question. 'Wellbeing', an increasingly popular concept in many disciplines, is a recent case in point.

2. The emergence of a concept of human poverty

In our advantage/deprivation model we identified variables important for both households and for different individual members (especially functionings and subjective being) without making very much of this. The 1990s focus on household poverty is rooted in the theoretical (i.e. mathematical) models espoused by neo-classical development economists. These models have more recently been criticized from within economics for ignoring intra-household distributions and individual experiences of poverty, and there is a growing interest among economists in human 'wellbeing' measured (badly from the perspective of other social sciences) in household surveys, both 'objectively' and 'subjectively'. In our WeD program we are interested in both household poverty and human poverty and the relationships between them. We are also interested in studying community poverty and country poverty.

3. The status and utilization of social science research by donors and policymakers¹¹

In our 1997 paper we questioned the validity and reliability of the consumption "poverty" measure in the Ethiopian context, given seasonal and annual fluctuations in food availability and the variable distribution of food aid, and we also argued that, given the extremely unrepresentative nature of the sample of households, the findings were not generalizable. Nevertheless some World Bank research economists (Demery *et al*, 1995) took academic economic research findings based on data from the Ethiopian Rural Household Survey and 'spun' them quite illegitimately to imply that 'liberalization' had reduced poverty in Ethiopia between 1989 and 1994. Donors with an ideological commitment to liberalization based more in ideology than social science research also commit sins of omission by excluding researchers and ignoring findings that do not fit their priors. This is likely to be a major problem for the WeD program.

III. Studying poverty in poor countries in 2004

1. Background

In the policy arena things have moved on since 1996 when we wrote the paper. Concerns about 'structural adjustment' have not gone away but they have been joined by arguments over debt, trade, financial liberalization, intellectual property rights particularly in relation to HIV/AIDS drugs and a plethora of 'initiatives' for Africa. The International Development Targets were invented in the mid-nineties and later updated into the Millennium Development Goals. Unfortunately the main response of the policy research community to these targets and goals has been to focus attention, resources and brainpower on how to measure whether they have been achieved, rather than how to achieve them. Poverty Reduction Strategy Papers and related Poverty Assessments for those wishing to access donor resources have been introduced and increasingly institutionalized.

Currently the typical Poverty Assessment is built on the approach described in our 1997 paper: statistical analyses of household survey data, including poverty and some 'capability' and 'functionings' measures, particularly primary education enrolment and mortality rates. The new feature is supplementation of various kinds from a Participatory Poverty Assessment. This is often produced as a separate document at a different time from the main Poverty Assessment, although it is sometimes integrated into the economics-driven document using a 'box approach'. In sum the information informing donor anti-poverty policy comes mainly from the consumption and participatory approaches to poverty which Kanbur has described as 'Q-squared' and which tend to be at the center of the qual/quant debate¹²

¹¹ This is one of the major concerns of the editors of this collection (Campbell and Holland: xxx)

¹² The consumption poverty measure has another life within the academic neoclassical economics context, while participatory approaches have another life at community project level.

2. A Critique of the Q-Squared Approach

In our paper we described our approach as 'a "constructionist" approach to the study of poverty (in Africa) which assumes that relationships between empirical reality, research funding, conceptual analysis, theoretical reasoning, measurement, data analysis, texts reporting research findings, and their use by a range of political actors, are problematic, and that any claim to scientific rigor demands critical reflection on the connecting processes.' (Bevan and Joireman, 1997: 316). Following up on this in 2002 I obtained eight months finance from the ESRC¹³ to research or 'deconstruct' poverty research. In this project I developed and used a model which identifies nine 'knowledge foundations':

1. Domain or focus of study: what exactly are we interested in?
2. Values/ideology: why are we interested?
3. Ontology: what is the 'reality' of what we are interested in?
4. Epistemology: how can we 'know' about that reality?
5. Theory: how can we explain/understand our object of study?
6. Research strategies: how can we establish what is 'really' happening?
7. Empirical conclusions: what (kinds of) conclusions are we drawing from our research?
8. Rhetoric: how do we inform (which) others about our conclusions?
9. Praxis: what to do? who should do it?

The model is used here to assess the two approaches in the Q-Squared tradition. Table 1 constructs ideal-type models of each of the traditions derived from the report on the Q-Squared Conference held at Cornell in 2001 (Kanbur, 2003).

Table 1: The Knowledge Foundations of the Q-Squared Approaches

Constituents of social science knowledge	Dominant development policy research models: Q-squared	
	'Quantitative'	'Qualitative'
Domain or focus of study <i>What are we interested in?</i>	Poverty = what is measured in <i>household</i> surveys	Poverty = what some <i>people</i> in some <i>communities</i> say it is
Values / ideology <i>Why are we interested?</i>	To reduce it	To reduce it
Ontology <i>What is the 'reality' of what we are interested in?</i>	One reality exists independent of our thoughts. People are rational and pursue self-interest, they have preferences revealed in what they do.	There are many 'realities' depending on the perspective of the person experiencing and interpreting 'it'
Epistemology <i>How can we 'know' about that 'reality'?</i>	'Deductive': use logic to develop models and observe reality using 'scientific methods'. Using these together it is possible to establish truths / laws.	'Abductive': <u>social</u> science requires the interpretation of meaning and 'inductive': generalize from experience.
Theory <i>How can we explain / understand poverty?</i>	Identify the variables which correlate with consumption / income	Establish local meanings and explanations and then generalize about them
Research strategies <i>How can we establish what is 'really' happening?</i>	Statistical analysis of household surveys	'Participatory' methods
Empirical conclusions <i>What conclusions can be drawn about what is really happening?</i>	Descriptive statistical conclusions. Analytical statistical conclusions	Descriptions/interpretations: what poor people say about their poverty
Rhetoric	Equations, regression analyses,	Translations and interpretations

¹³ ESRC Research Project R000223987: 'Towards a Post-Disciplinary Approach to Global Poverty'

<i>How can we inform 'others' about our conclusions?</i>	interpretations in words	from local languages
Praxis <i>What to do? Who should do it?</i>	Various modernizations; 'sound' economic policies. Donors and poor country governments.	Participatory researchers/practitioners to empower poor people to demand changes

The first point to make about this table is that it describes a set of oppositions rather than the 'dimensions' Ravi Kanbur identifies. For most of these categories it is not a question of more or less and there are no positions somewhere in the middle. As seems to be the consensus which emerged during the Q-Squared workshop it is hard to see how these two research approaches can be brought together in any meaningful social scientific way, though at a basic empirical level a country's household survey questionnaires could be designed to include questions about issues raised in the country's PPA.

The 'Foundations of Knowledge' model can also be used to identify the strengths and weaknesses of each approach to poverty appraisal (see Table 2). Some of these were identified by participants in the Cornell Workshop, some by contributors to the World Development collection on multi-disciplinarity, some by other authors, and some (unreferenced) by me.

Table 2 describes a Q-Squared tradition that is extremely narrowly focused and full of flaws. The Kanbur rhetoric which posits two sorts of social science, neo-classical economics and 'broad social science' and equates the latter with participatory methodologies at community level, can be seen as one element of the strategy through which 'development economics' has come to stand 'in beleaguered ascendancy 'atop development studies and development policy' (Kanbur, 2002: 477). One important reason for the success of the strategy, which appeals to the donor policy community, is the way in which household-survey-based economic analysis depoliticizes issues around poverty and inequality. The same is true of most participatory poverty exercises.

Table 2: Selected Strengths and Weaknesses of the Q-Squared Approaches

Quantitative	Qualitative
Strengths	
Policymakers can estimate prevalences and distributions within populations and areas, put numbers on trends and make comparisons (Chambers, Cornell Workshop: 22).	Can identify particular local issues and problems (which may be more widespread) (Moser, Cornell Workshop).
Correlations identify associations raising questions of causality and covariant changes (Carvalho & White, 1996)	Can build up a picture of key features of the locality.
Provides results whose reliability is measurable. (<i>ibid</i>)	Focus on localities / communities and people's experiences.
Allows simulation of different policy options (<i>ibid</i>)	Introduces the idea that poverty involves suffering (Petesch, Cornell Workshop)
Weaknesses	
The assumption that numbers are objective, intersubjective, conclusive (McCloskey, 1985: 141)	Researchers do not face a set of poor people waiting to be 'empowered' but an unequal social structure ... (Bevan, 2000).
The assumption that the same question means the same thing in different cultural contexts.	Most PRAs do not take context seriously (it has social, economic, political, cultural and historical dimensions).
Misses what is not easily quantifiable (Carvalho and White, 1997) and only poverty that has been measured exists: not everyone has a house; in insecure contexts household surveys are impossible.	The arrival of a PRA team disrupts 'the everyday social world'; people do not behave as they do every day.
The narrow focus on households and assumption of	The view taken of 'people' is often disembodied and

Quantitative	Qualitative
disembodied individuals.	gender blind (Bevan, 2000)
Usually starting from scratch.	Usually starting from scratch.
An inadequate treatment of 'time' (Abbott, 2001b; Bevan, 2004d)	An inadequate treatment of 'time'
A perfunctory approach to 'policy': the leap from regression coefficients to policy advice; a definition of policy-making circles as donor circles rather than local political circles.	A perfunctory approach to 'policy'; a definition of policy-making circles as NGO or donor circle rather than local political circles.
The assumption that poor people's actions reflect their preferences.	The assumption that what (some) people tell you is how things are
'Quantitative' should not equate with regression analyses of household surveys.	'Qualitative' should not equate with participatory methods.
De-politicization of issues around poverty and inequality	De-politicization of issues around poverty and inequality

A second important reason for the success of the strategy relates to the late 20th century travails of the disciplines of development sociology, social anthropology, and development political science which resulted from the failure of socialism, the 'impasse' that Marxist approaches fell into, the conceptual problems related to 'globalization', and the impact of the post-modernist / post-structuralist turn. Nevertheless, in diverse ways social scientists have been pursuing numerous approaches to poverty in poor countries, involving qualitative and quantitative analyses which may be excluded from the official Q-Squared approach, but which have something of value to say about poverty in poor countries. Furthermore, there have been theoretical and methodological developments within the mainstreams of sociology, social anthropology, political science, psychology, geography, history and various topic-focused study areas, for example social policy, development studies and area studies, which could usefully be adapted for the empirical study of poverty in poor countries. In particular, there has been a growing interest in middle-range theorizing linked to empirical research.

Middle-range theorizing guides and emerges from empirical work in a process of interaction between ideas and evidence and focuses on causes, mechanisms, and/or processes. In relation to poverty examples might include the theorizing of poverty correlates through household surveys¹⁴, social exclusion analysis (Rodgers *et al*, 1995), analysis focused on mechanisms such as adverse incorporation (Davis 2001, Wood 2003), empirical identification of vicious and virtuous circles, ratchets and spirals, and in/security regime analysis (Bevan, 2004a/b). This kind of research needs to be done rigorously to develop understanding of the ways in which poverty is produced, reproduced and/or reduced. The Q-integrated approach to multi-dimensional poverty described in the next section is driven by the search for an integrated set of useful middle-range theories grounded in empirical exploration.

IV. A Q-integrated approach: what else might combined methods offer?

In answer to the question 'what else might combined methods offer?' there are a range of possible ways of combining different research instruments and various qualitative and quantitative modes of data analysis to study poverty. Q-squared is one approach while the Q-integrated approach described below is another. A key insight is that there is no necessary link between research instrument and mode of analysis. Household survey data, currently predominantly analyzed using regression models, can be used (simultaneously) in a number of other ways, for example: to identify and describe typologies of households or individuals; to analyze a particularly interesting household or individual as a case; to compare individuals of different gendered ages; to begin to construct a social map of the community.

¹⁴ Although such theorizing often relies on assumptions that are too unrealistic to be practically useful.

Table 3: A Q-Integrated Approach to the Study of Poverty

Constituents of social science knowledge	WeD multi-disciplinary research approach: Q-integrated
Domain or focus of study <i>What are we interested in?</i>	Multi-dimensional poverty, inequality, suffering and wellbeing
Values / ideology <i>Why are we interested?</i>	To reduce it
Ontology <i>What is the 'reality' of what we are interested in?</i>	Reality exists independent of our thoughts and is complexly constituted of things, people, relationships, structures, energy, time.
Epistemology <i>How can we 'know' about that 'reality'?</i>	We can only intellectually know what reality is like through discourse. Truth should be understood as practical adequacy. Induction, deduction, abduction and retrodution ¹⁵ can all be useful ways of increasing knowledge, and we should be exploring ways of using these strategies interactively ('interduction')
Theory <i>How can we explain / understand poverty?</i>	Develop middle-range theories through iterative interaction between ideas and evidence.
Research strategies <i>How can we establish what is 'really' happening?</i>	An integrated methodological strategy involving surveys, participant observation, and a range of especially designed qualitative instruments. Secondary sources.
Empirical conclusions <i>What conclusions can be drawn about what is really happening?</i>	Universal: common mechanisms and processes Local: how they work in different contexts
Rhetoric <i>How can we inform 'others' about our conclusions?</i>	Suit the message and the language to the particular type of 'other'.
Praxis <i>What to do? Who should do it?</i>	Good research will help the different types of anti-poverty actor to act more effectively.

The Q-integrated approach is rooted in sociology but has spaces for expertises found in other disciplines, including economics, political science, social anthropology and psychology. It can accommodate and use the strengths identified in the two Q-squared traditions; from the 'quantitative' the focus on households, on abstracting and quantifying in order to compare, and on generalizing from random representative samples, and from the 'qualitative' the focus on communities, and on people's experiences and suffering. Table 3 uses the Foundations of Knowledge model to describe the main characteristics of the Q-Integrated approach. This is not the place to examine the constituents in depth but a number of points are worth making.

1. Ontology and Epistemology

The predominant 'philosophical' discussion in the Q-Squared circle relates to epistemology, with ontology either not recognized as an issue, or regarded as unproblematic. In epistemological terms a simple division is assumed between 'deduction', which is what economists do, and 'induction', which is what participatory researchers do (Kanbur, 2003). To my mind this is not totally correct: many (though not all) economists analyzing household survey data using statistical techniques are engaged in an inductive¹⁶ process often bearing little relation to the deductive¹⁷ mathematical model which rhetorical tradition requires them to begin with. Similarly the framing of participatory poverty research exercises involve implicit models and theories as to what matters to people. One reason for emphasising epistemological differences, is that in the later 20th century it became politically

¹⁵ '...the process of building models of structures and mechanisms' (Blaikie, 1993: 168)

¹⁶ 'An *inductive argument* begins with singular or particular statements and concludes with a general or universal statement' (Blaikie, 1993: 132) – for example 'growth is good for the poor'.

¹⁷ 'Rather than scientists waiting for nature to reveal its regularities, they must impose regularities (deductive theories) on the world and, by a process of trial and error, use observation to try to reject false theories' (*ibid*: 95)

advantageous for each side of the qual-quant divide to exaggerate it and to use their epistemological positions as status symbols or 'cultural capital'. Kanbur's 'dimensions' are neither analytically nor empirically convincing but they do a good rhetorical job – in favor of the rigorous economists and against the unrigorous 'broad social scientists' or noneconomists¹⁸.

Implicit in the **deductive** and **inductive** strategies involved in both Q-squared approaches to poverty is the notion that social science is about generalizing. The Q-integrated approach recognizes that it is good to generalize about that which really is universal, but that it is also important to study diversity, and particularly, in the context of poverty research, the diverse interpretations and understandings of the many people involved in the production, reproduction and reduction of poverty. This requires an **abductive**¹⁹ strategy. Most importantly the Q-integrated approach is concerned to identify and understand the mechanisms and processes involved in the poverty dynamics operating at individual, household, community and country levels. This requires a **retroductive**²⁰ strategy. To facilitate intellectual progress it is assumed that we can only intellectually know what reality is like through discourse. Truth should be understood as practical adequacy. Induction, deduction, abduction and retroduction can all be useful ways of increasing knowledge, and we should be exploring ways of using them interactively, a process I am describing as 'interduction'. The challenge for a multi-disciplinary Q-integrated approach is to use these four strategies together in a manner that is appropriate to the identified research objects.

This raises the question of ontology or the imagining of the reality which we are studying, an area which has remained implicit in the Q-squared tradition. The Q-integrated approach adopts a critical realist ontology (Sayer, 2000: Bevan 2004c). Reality exists independent of our thoughts and is complexly constituted of things, people, relationships, structures, energy, and time.

2. Theorizing

What constitutes a 'theory' and 'theoretical work' varies between, and within, disciplines in ways which link to particular epistemologies. Given the current status of knowledge and understanding of poverty in poor countries research driven chiefly by theory and research driven chiefly by methods are both likely to lead to erroneous conclusions. The current aim for poverty research should be the transparent development of middle-range theories using iterative research processes 'in which there (is) a constant interplay between interpretation, theorizing and additional data collection.' (Campbell, 2005, p?).

Within sociology two types of theory have been identified as important for empirical research: conceptual frameworks to guide exploratory research when not much is known about the particular topic and sets of substantive propositions (Mouzelis, 1995). One aim of the WeD program is to develop a conceptual framework and a related suite of research methods that can be used by others. A second aim is to use the framework in a range of empirical contexts to produce country case studies and to develop theories of the second kind. In the framework poverty is conceptualized as identifiable at four nested levels, each of which can be imagined as a structured and dynamic open social system, corresponding to the person (human poverty), the 'household' (household poverty), the 'community' (community poverty) and the 'country'²¹ (country poverty).

5. Research strategies and empirical conclusions

Any social phenomenon, be it a 'variable' or a 'case', can be studied synchronically (abstracting from time) and diachronically (taking account of time). Two important synchronic approaches to social

¹⁸ What a strange identity to allocate to others.

¹⁹ 'The Abductive strategy research strategy is based on the Hermeneutic tradition ..Abduction is the process used to produce social scientific accounts of social life by drawing on the concepts and meanings used by social actors, and the activities in which they engage.' (Blaikie, 1993: 176).

²⁰ '..the process of building models of structures and mechanisms' (Blaikie, 1993: 168)

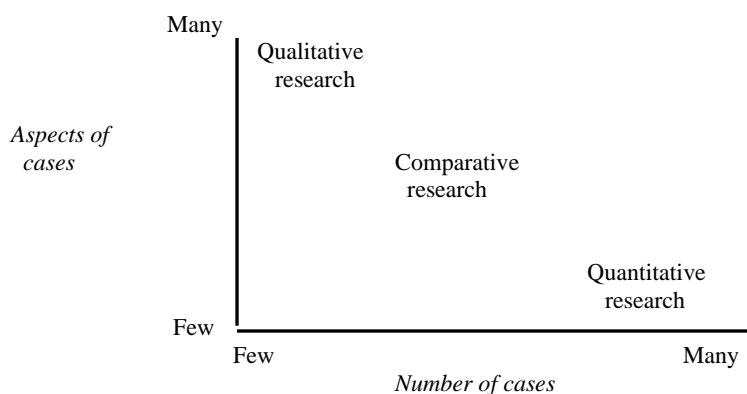
²¹ Recognizing that these English social science categories might have to be adapted to the local realities.

phenomena can be characterized as **anatomy** and **physiology**, both of which involve a type of qualitative analysis. An anatomy identifies the components of the phenomenon and the structural relationships between them. The qualitative 'physiological' question is: what are the relationships, processes and activities, which, other things being equal, maintain this open system? Earlier in the paper the advantage/deprivation complex was figured in anatomical terms; in Section 5 it is figured in physiological terms. The first diachronic approach relates to social **dynamics** or stability and change processes. Here the interest is in equilibria, shocks, rhythms, spirals, vicious and virtuous circles, ratchets, bifurcations, etc. The second approach involves **histories**: what actually happened in this specific instance as a result of context, path dependence, the actions and interactions of protagonists, and the mechanisms and processes at work and their consequences (for examples of such an approach see McAdam *et al*, 2001).

The next question is how to approach cases and variables empirically. It is useful here to combine some of the ideas of two American sociologists: Charles Ragin and Charles Tilly.

Using Figure 3 Ragin (1994: 49) described three major types of empirical research which he characterized as follows: the use of qualitative methods to analyze very few cases in depth, the use of comparative methods on a moderate number of cases with less information on each case, and the use of quantitative methods to study relationships among variables involving many cases but few aspects. All involve a dialogue between ideas and evidence but each goes about it in a different way. 'It is possible to gain a detailed, in-depth knowledge of a small number of cases, to learn a moderate amount about an intermediate number of cases, or to focus on limited information from a large number of cases' (5).. All three approaches can be used to identify commonalities or diversities, or both. His current interest on how to develop quantitative methods that focus on the case rather than on variables is being taken forward in an ESRC-financed series of workshops which will inform analysis of the Ethiopia WeD data.

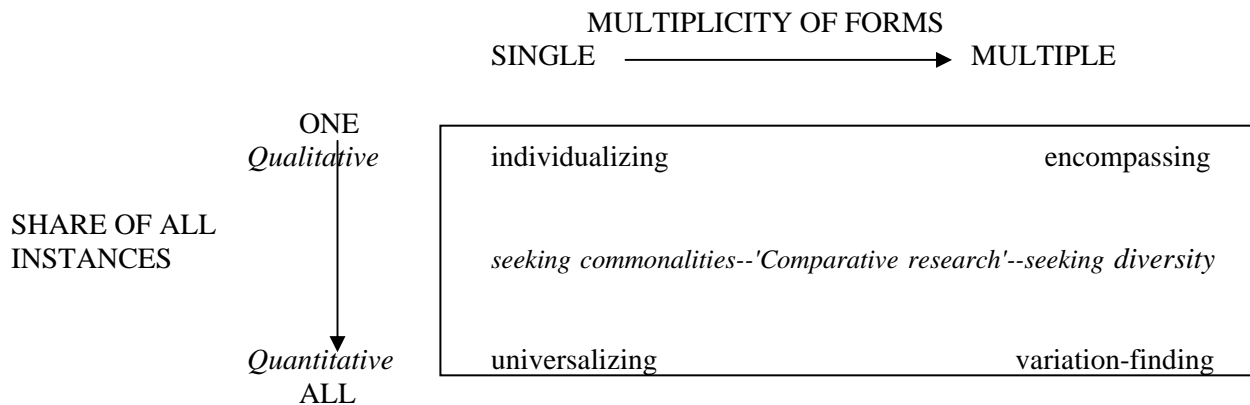
Figure 3: Cases, Aspects of Cases, and Research Strategies



Tilly (1984), assuming that all empirical research, including the single case study, involves 'comparison' offered four ways of making comparisons. Figure 4, taken from Tilly but adapted to include Ragin's three types of research, depicts four polar ideal-types, which can be used in combination. A purely individualising comparison treats each case as unique, while a purely universalising comparison identifies common properties among all instances of a phenomenon. Variation-finding comparisons examine systematic differences among instances, while the encompassing approach 'places different instances at various locations within the same system, on the

way to explaining their characteristics as a function of their varying relationships to the whole system.' (Tilly, 1984: 83).

Figure 4: Ways of Seeing and Making Comparisons



The encompassing approach is particularly relevant for a project designed to locate (poor) individuals in households located in communities which are encompassed by a country, in turn located globally, which is a key feature of the WeD research program. In such a research design the different units, or cases (people, households, communities, countries), can also usefully be analyzed using the other three approaches.

V. An emerging multi-level approach to multi-dimensional poverty

The Ethiopia WeD Research program is designed to enable an analysis of the production, reproduction and reduction of poverty. Initially four levels of study are identified: country, community, household and individual, although it is recognized that these social science categories may not match the social realities under study.

i. Country poverty

Each poor country occupies a unique position within the unequal and potentially dynamic global political economy and global socio-cultural structures with consequences for the production, reproduction and reduction of its poverty. Internally poverty is structured spatially and socially. A poor country is made up of a series of rural and urban 'communities' whose poverty/wealth is likely to vary from extreme destitution to extreme wealth with most communities definable as poor

Country poverty is constructed out of inter-linked locality poverties which are embedded in wider unequal economic, social, political and cultural structures and histories. An 'alternative' Country Poverty Assessment would map these structures spatially and socially and investigate the relationships and processes underlying the mapping. A useful conceptual model for this purpose is the in/security regime model (Bevan 2004a/b) which researches spatially and socially (1) in/security distributions, (2) the underlying structures which generate insecurity, (3) mobilisation to maintain or change current structures by internal elites, poor people and external actors such as donors and NGOs, (4) the 'welfare mix' or mobilisation by the same set of actors to reduce suffering and poverty, and (5) the consequences of both kind of mobilisation for social dis/continuity and in/stability.

ii. Community poverty

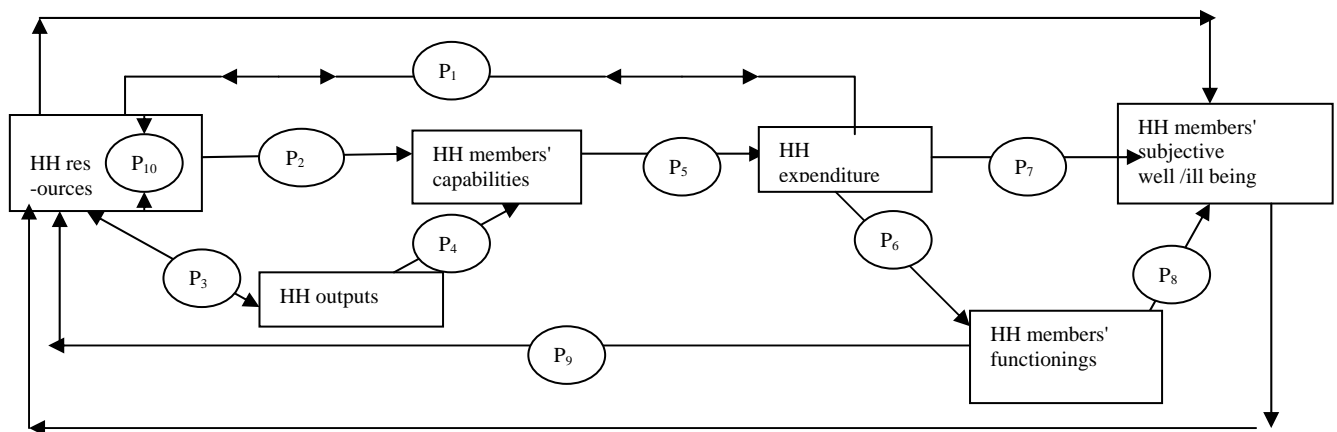
Localities are characterized by inter-penetrating and unequally structured local economies or livelihood systems, polities, social relationships and cultural repertoires with varying levels of linkage

to other localities within and beyond the country. The human, material, social and cultural resources which individuals and households access and use are elements in the unequally structured societies, economies, polities, and cultures which constitute a community. In this context it is clear that 'actions' are actually 'inter-actions'; people do not act alone and what each does has consequences for other people. Emerging out of, and contributing to, individual and household poverties are community-level aspects including geographical location, ecology and environment, population size and structure, the location of the local economy in national and global economies, the location of the local polity in the regional and national polity, the location of local cultures (including ethnicity, religion, caste, class etc) in the larger cultural structures. Again these can be usefully analyzed using the in/security regime model.

iii. Household poverty

Households are organizations involved in production and reproduction on the basis of a coordinated division of labor. In the terms of the advantage/deprivation complex poor households (1) lack access to material, human, social, and/or cultural resources; and/or (2) produce insufficient outputs; and/or (3) lack income and access to services leading to (4) inadequate consumption of goods and services and consequent (5) functionings failures for household members leading to (6) personal suffering or illbeing. There are external dangers or risks which may result from material, human, social and/or cultural events/actions. The human poverty of each household member contributes to household poverty and there may also be internal structural poverty dimensions such as relationships of exclusion and/or exploitation, conflict, organizational inefficiencies, and norms and values which are harmful for some or all members. Figure 2 reproduces the advantage/deprivation complex identifying linkages between the different elements.

Figure 2: The advantage/deprivation complex - physiology



Local political economy and socio-cultural structures underpin the distribution of human, material, social, and cultural resources and liabilities among households and govern the way the different advantage elements are linked. P₁ to P₁₀ refer to **processes** through which the different advantage elements are related. These are constructed at community level and beyond and might include the prices which govern different exchanges, technology, local beliefs, norms and rules, and government regulations. Another way to use the model is to replace the Ps with As for **activities**. What do people do, for themselves, to themselves and to others, while converting one kind of advantage/deprivation into another? How do activities relate to processes? It is also possible to look for relationships

between the different processes and to identify exogenous events or actions which affect each process or activity.

iv. *Human poverty*

In a recent theoretical paper (Bevan, 2004c), following an analysis of human structures, dynamics and histories, I argued that human poverty should be seen as involving (1) resource failures and positive liabilities including harmful false beliefs (material, human²², social and cultural); (2) currently unmet human needs (for competence, autonomy, relation and meaning) – an expansion of 'functionings'; (3) suffering (a form of subjective being); and (5) poverty-related action (by self and enduring the action of others). The analysis of human structures demonstrated the importance of recognizing the ways in which gender and age affect the manifestations of each of these aspects of human poverty (see Bevan, 2004c).

VI. Researching multi-level and multi-dimensional poverty in Ethiopia: the progress and some difficulties of a Q-integrated approach

I have devoted considerable space to describing the conceptual framework which is driving the current empirical research in Ethiopia, since a basic assumption of the WeD program is that good empirical research depends on very careful conceptualization. In this section I briefly describe the main elements of the empirical program; for more information on the Ethiopia program see www.wed-ethiopia.org and on the research in Bath and in the other countries www.welldev.org.uk. The Ethiopia program is divided into the four empirical projects described below under the first heading. Within each project a methodological strategy is being developed involving the design and use of multi-purpose research instruments two of which are described in Section 2²³. The data generated in each of the projects will be usable both within and across the four levels of analysis (country, community, household and individual). They will be used in individualising and encompassing case studies within the Ethiopia program, and universalising and variation-finding comparisons across individuals, households, and communities within Ethiopia and, in some cases, across the four WeD countries. It will also be possible to compare the four countries and to locate each of them in wider global structures.

1. The Ethiopia WeD program: four linked research projects

The program consists of four linked projects:

1. Community studies: WIDE (Wellbeing and Illbeing Dynamics in Ethiopia) – 20 rural sites and 2 urban sites.
2. Household studies: DEEP (in-Depth Exploration of Ethiopian Poverty) – 4 rural sites and 2 urban sites; 250 households surveyed in each rural site (June/July 2004); selection of particular households for in-depth work to follow.
3. Individual-level: DEEP – selection of key individuals as a result of the community research and from the household survey; a particular focus on subjective quality of life / suffering.
4. Country study: ENTIRE (Exploration of The In/security Regime in Ethiopia) – begins in September 2004. The country study will locate the DEEP and WIDE sites in the wider political economy and socio-cultural structures and use secondary source material to produce a picture of the Ethiopian in/security regime (Gough and Wood *et al*, 2004).

2. Multi-purpose research instruments

²² Resulting from earlier failures to meet human needs.

²³ Many of the DEEP research instruments are not yet designed.

Two major research instruments have been designed so far: the community-focused WIDE2 instruments designed for the Ethiopia program were implemented in 2003, while the cross-country Resources and Needs Questionnaire is currently being administered (mid-2004).

i. Community-focused: WIDE2

Between July and September 2003 a pair of researchers, one male and one female, spent time in each of the 20 sites asking questions guided by Protocols and organised into eight Modules:

1. Introduction to People and Society
2. Social Structures and Dynamics
3. Site History
4. Policy Regime Interfaces
5. Crises and Local Responses: Famine, Mothers and Babies under Stress, HIV/AIDS, Conflict
6. Grounding WeD-related Concepts
7. Changes in Wellbeing and Inequality
8. Revisiting People and Society

The data have so far been used to produce working papers of potential interest to policymakers. (Pankhurst and Bevan, 2004, Bevan 2004e, Getachew 2004, Pankhurst 2004) and to interrogate universal notions of human need which are informing the project (Doyal and Gough, 1991, Bevan and Pankhurst, 2004b). Particular issues raised by this study relate to data entry and management, and how to do comparative analysis across 20 sites, a number which is too big for in-depth case analysis, and too small for conventional quantitative analyses.

ii. Household-focused: RANQ

The Resources and Needs Questionnaire has three purposes, prioritized differently by different disciplines:

1. Introduction to community, familiarization, baseline data and orientation for the in-depth research.

Here the main questions for each household are:

- what resources does the household have to deploy in its struggle for wellbeing?
- to what extent are the needs of each member of the household being met?

The data can be used to identify key variables for sub-sampling, for example households and individuals to be used as in-depth case studies for comparison and households and individuals chosen for network tracing.

2. Data that can be used for comparative analysis - statistically and qualitatively

Here the main approaches involve statistical analysis of regularities and differences, case studies of households and comparisons of cases studies looking for similarities and differences, the location of different households in the community political economy and socio-cultural structures and the main questions are varied, for example:

- what are the distributions of the different categories of resources among households (within community and across communities)?
- what are the distributions of harm/wellbeing among individuals (within households, within communities and across communities)?
- what are the relations of inequality which underlie these distributions?
- what relationships can be established among resource variables and individual need-related variables?
- in terms of resources and the meeting of individual needs what household types can be identified?
- what does the information about social and cultural resources at household level tell us about local social and cultural structures

3. Draft of a WeD research instrument for wider use

Here the main issues were:

- how does the RANQ relate to the WeD conceptual framework?
- how can the RANQ used in 2004 be improved on the basis of the WeD research?

The issue we faced was how to design a questionnaire which takes less than 2 hours to administer and which contributes maximally to all three purposes. We were also concerned to identify issues which could be referred to a sub-sample during the later DEEP research. The RANQ which is currently being administered to (at least) 1000 households in each country has six parts organised as follows:

Part I: The Household as an Organisation

Part II: Global Happiness

Part III: Human Resources

Section 3.1: Main Activities /Occupation of Household Members

Section 3.2: Education

Section 3.3: Vaccination and Supplements

Section 3.4: Illness and Treatment

Section 3.5: Anthropometrics

Part IV: Material Resources

Section 4.1: Land and Natural Resource Use

Section 4.2: Livestock and Small Animal Ownership

Section 4.3: Asset Ownership

Section 4.4: Housing, Utilities and Sanitation

Section 4.5: Long-term Shocks and Fortunes

Section 4.6: Food Shortages and Clothing

Section 4.7: Wealth, Transfers and Income Support

Part V: Social Resources

Section 5.1: Kin and Fictive Kin Connections

Section 5.2: Connections to the Local Community

Section 5.3: Connections to the Wider World

Section 5.4: Connections to Markets

Section 5.5: Connections to Government

Part VI: Cultural Resources

Four modes of analysis were identified:

1. Individualizing: how does this household work? – case studies

2. Universalizing: what regularities can be found across all households? – means, regressions, principal components
3. Encompassing: how does this household fit in wider structures?
4. Variation-finding: how can the households be typologized and compared? – analysis of variance, cluster analysis...

3. Other current issues

We are currently struggling with two big issues. The first is how to do the urban research, given that urban 'communities' are less easy to identify and research, and that 'households' are often not constituted in the same way as rural households. The second is how to manage and make use of these quantities and varieties of data in an integrated fashion.

VI. Conclusion: some challenges to Q-integrated poverty research

Most poverty research in the Q-squared traditions is telling us little new about poverty and the mechanisms and processes involved in its dynamics, and this may suit the major policy communities. Q-integrated research of the kind described here endogenizes both policymakers and researchers, and consequently poses a threat to ideological and/or lazy practices. It has proved very difficult to involve economists in cross-disciplinary WeD discussions, partly because they are very busy pursuing a discipline-driven and isolationist agenda, and partly because they do not feel a need. Most funding for poverty research goes to economists and PRA specialists and comes directly from policy-related organizations which, unlike the ESRC, seem reluctant to finance research which explores poverty in political economy and socio-cultural contexts.

This paper demonstrates that the domination of research funding and policy advice by neo-classical economists and their minor partners, the PRA specialists, is not based on their scientific credentials. Serious cross-disciplinary debates around issues of focus, ontology, epistemology, theory, research strategies and rhetoric are needed if the skills residing in the Q-squared traditions are to be used to advance understanding of the dynamics of poverty in different political economy and socio-cultural contexts, rather than to serve policy-messaging interests.

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