

Complementarism versus incommensurability in psychological research methodology (1)

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Abstract

This paper does four things. 1) It identifies and explores the paradigm clash between the traditional methodological orientation and 'newer' qualitative approaches. 2) It explores the question of whether they can co-exist or whether they are mutually incompatible. 3) To construct an answer it draws on Habermas's theories of knowledge interests and communicative rationality. 4) It draws on systems theory, which has faced the same issue, to describe one way of making methods choices, and then to move beyond the paradigms debate through a systems view of the work of the researcher.

Introduction

Qualitative investigative methods in psychology have arrived. This is demonstrated by a special edition of The Psychologist (Henwood and Nicholson, 1995), and the publishing of textbooks either wholly concerned with qualitative approaches in psychology (Banister et al., 1994) or giving equal space to such approaches alongside the more familiar quantitative methodology (Foster and Parker, 1995). Even in that heartland of positivism, British clinical psychology, it is being suggested that qualitative methodology has a contribution to make (Orford, 1995). This qualitative turn is in some ways a rediscovery of suppressed approaches in psychology itself, but it also involves considerable borrowing from other disciplines, especially sociology, anthropology, and cultural and literary studies. Such borrowing has a pedigree in psychology which also borrowed methodologies from areas as diverse as agricultural research, economics, physiology and ethology.

Despite this there is often conflict between traditionalist researchers and those using qualitative approaches. It erupts at job interviews, exam boards, research ethics committees, and it has appeared in the literature (e.g. Aitken, 1996; Craig, 1996; Denzin and Lincoln, 1994, Morgan, 1996; Warner, 1996). What is striking is the passion that can accompany these debates about research strategy, the naked hostility that surfaces so readily, the dismissal as worthless of research tactics with decades of development behind them. This suggests that more may be at stake than an intellectual choice of appropriate methodology. The phenomenon requires analysis.

The term 'qualitative research' is used in a variety of ways, to include a variety of different strategies and orientations. Examples are grounded theory, discourse analysis, conversation analysis, ethnography and participant observation, various kinds of interviewing, feminist research, action research, participative action research, and so on. Hammersley (1995) identifies the following component meanings of the qualitative - quantitative distinction:

1. Qualitative versus Quantitative data.

2. Natural versus artificial settings.
3. Focus on meanings rather than on behaviour.
4. Adoption or rejection of natural science as a model.
5. An inductive versus deductive approach.
6. Identification of cultural patterns versus seeking of scientific laws.
7. Idealism versus realism.

Such a weighty list may suggest that the qualitative - quantitative distinction is being made to carry rather too much ideological and philosophical content for its own good, an idea that we will return to later.

Qualitative methodology is rich and varied, but for the sake of the discussion we will temporarily collapse it all into one 'qualitative orientation', and similarly combine the various versions of the more traditional quantitative approaches.

Mapping the clash: thinking about paradigms

Let us begin with the idea that the two approaches might represent different paradigms in the Kuhnian sense (Kuhn, 1962; Masterman, 1970).

The paradigm issue can be stated in several ways. Fundamental to the discussion is the distinction between theoretical and methodological issues. In turn, the theoretical issues can, for some purposes, be divided into the ontological (theory of the nature of things) and the epistemological (theory of the nature of knowledge).

1 As a matter of methodology choice

Some writers have attempted to minimise the importance of theoretical orientations when making choices about methods.

Patton (1986) reviewed the paradigmatic differences between approaches that drew on the natural science model and those based on interpretive tradition. He suggested that the

paradigms debate was already over in evaluation research, and that what had instead emerged was a 'paradigm of choices', wherein the evaluator

'.. must be sophisticated about matching research methods to the nuances of particular evaluation questions and the idiosyncrasies of specific decision maker needs. The evaluator must have a large repertoire of research methods and techniques available to use on a variety of problems.'

Patton, 1986: 215.

Hammersley (1995), on the basis of an exploration of the distinctions listed above, argues that the distinction is misleading because it obscures the complexity and diversity of the issues for which the distinction is used as a shorthand. Rather than a contrast between two standpoints, a variety of positions on several dimensions is involved. However, he echoes Patton's emphasis on methodology choice:

' selection among these positions ought often to depend on the purposes and circumstances of the research, rather than being derived from methodological or philosophical commitments. What is involved is not a crossroads where we have to go left or right. A better analogy is a complex maze where we are repeatedly faced with decisions, and where paths wind back on one another.'

Hammersley, 1995: 51-52.

Bryman (1995) also recognises the differing theoretical basis for the two styles, with quantitative research reflecting natural science in its positivist form, and qualitative research rejecting this in the study of human beings. He argues that methodology can be relatively autonomous of methodology from its theoretical (epistemological) sources:

' the depiction of quantitative and qualitative research ... as distinct epistemologies or paradigms that cannot be reconciled is both inaccurate, since they have achieved a certain degree of independence from their epistemological foundations, and unduly restrictive.'

Bryman, 1995: 75.

2 As a matter of theoretical assumptions

Other writers have put more emphasis on the differing epistemological bases of the approaches. Henwood and Pigeon (1992) argue that qualitative research is not just a matter of non-numerical methodology. Instead they frame the distinction primarily in terms of the epistemological distinction between the natural scientific and interpretive paradigms. In the former the search is for universal laws of cause and effect and in the latter it is for meaning or understanding (Verstehen). Similarly Henwood and Nicholson (1995) assert that

'This [qualitative] paradigm rests upon the adoption of a rather different epistemological position (constructivism)...'

Henwood and Nicholson, 1995: 109.

'Constructivism' is the idealist stance informing the paradigmatic statements of the influential qualitative methodologists Guba and Lincoln (e.g. Guba and Lincoln, 1989, 1994), in whose hands it also attains an ontological force.

Banister et al. (1994) characterise qualitative research as

'... the interpretative study of a specified issue or problem in which the researcher is central to the sense that is made.'

Banister, et al., 1994: 2

They emphasise the gap between objects and their representation and stress the role of qualitative research in both bridging that gap and working with it: this contrasts with traditional research which uses a variety of techniques to try and fill it (p. 3-4). Banister et al. acknowledge that qualitative research may be underpinned by either constructivist or (critical / transcendental) realist underpinnings. In the realist account (e.g. Harré, 1974; Bhaskar, 1977, 1978, 1989; Pawson and Tilley, 1997) social phenomena are real although dependent on activity, concepts, and time. Social phenomena and the investigative process also affect one another. Finally, because social (and psychological) systems are open, rather than closed, and hence subject to many sources of variation, then theories are denied decisive test situations. So for the (transcendental or critical) realist an emphasis on understanding and meaning arises not so much because of the gap between objects and their representation but because of the inherent limitations on a predictive approach to the testing of theory. The qualitative

methodologists Huberman and Miles (1994a, b) adopt such a transcendental realist stance:

'Fundamentally we think that social phenomena exist not only in the mind, but in the objective world as well, and that there are some lawful, reasonably stable relationships to be found among them. The lawfulness comes from the sequences and the regularities that link phenomena together; it is from these that we derive the constructs that account for individual and social life.'

Huberman and Miles, 1994: 429

Neither constructivism nor realism is necessarily incompatible with quantification: the problems they would have with traditional psychological research stem more from problems with its adequacy to the phenomena under investigation. It is no surprise that the qualitative movement in psychology has roots in the 'crisis of social psychology' of the 1970s (Burman, 1996), where the manipulative, reified, experimental paradigm came under criticism on philosophical, ethical and political grounds (Armistead, 1974, Harré and Secord, 1972).

3 As a matter of ethics or politics

Writers within the qualitative tradition have made ethical and political claims for this style of research (see Miller and Crabtree, 1994 for a persuasive example). One contrast is with the positivist fact/value distinction: in qualitative research, facts are not just theory laden, but also value laden.

Qualitative approaches assert a distinctive style of relationship with the participants in research. Researchers variously attempt to understand participants' perspectives and experiences, to give them voice and power, and do this on a basis of respect and equality. However, these desirable things are not automatically delivered by the adoption of a qualitative methodology. Burman (in press) reviews claims of relationship, equality, and participation in qualitative research. She suggests that the 'discourse of democracy threatens to obscure the maintenance of the traditional direction of power in researcher-researched relations'. After all, why should an emphasis on intersubjective meaning necessarily lead to the empowerment of

participants? To assume that it should implies a naiveté about the structural dimensions of powerlessness (Burton and Kagan, 1996). For some of the most disadvantaged people (e.g. people with profound intellectual disabilities) selective use of a more experimental approach might paradoxically yield greater sensitivity in detecting individual preferences and needs.

The use of quantitative approaches need not be inconsistent with ethical and political considerations (see Engels, 1892/1969, Griffin and Phoenix, 1994). What may be questionable is the loss of experience, voice and influence in the summarisation process, and this can operate in qualitative research too. Again the objections of the qualitative movement are more to do with the inadequacy of the traditional approach to adequately research lived experience in a world of unequal resources and power.

Complementarity versus incommensurability

So can qualitative and quantitative approaches co-exist or not, and if so what

'meta-methodology' should inform the selection of method?

Paradigms can be understood as either,

1. in principle irreconcilable ('incommensurable' in the terms of Kuhn, 1962, and Feyerabend, 1970), or
2. in principle reconcilable, that is 'complementary' (e.g. Oliga, 1988, Flood and Jackson, 1991).

The methodological styles that follow from each of the above stances may be characterised as 'isolationist' and 'pluralist' respectively.

Enough has been said to suggest that the position of incommensurability and isolationism in its pure form is untenable. What is unclear, is how far pluralism can go without descending into an unprincipled and atheoretical eclecticism with no self understanding. How can a meta-methodology be constructed that helps the researcher navigate among the many methodologies on offer, and, more specifically to choose when methods with particular philosophical pedigrees might be justifiable? How might (the mainly student) users of Foster and Parker's text judge when to use the traditional methods and when to use the new qualitative methods? How might Patton's post paradigmatic evaluator's sophistication about methods choices be guided? How might Hammersley's researcher find a way around the complex maze of methodology and social phenomena?

1 Knowledge interests and paradigmatic differences

One approach that offers a promising way forward has received little mention in the methodology literature. This is the work of Habermas on human knowledge interests (Habermas, 1978) and communicative ethics (Habermas, 1991). Habermas is a 'critical modernist' who rejects the relativism of post structuralist / post modernist theory, which perhaps explains his neglect by qualitative researchers (but see Cocks and Cockram, 1995; Morrow, 1994; Ryan, 1988). Instead, like the critical realists he tries to put knowledge claims on a secure basis while rejecting the errors of positivism. (A particularly clear description of his research programme is provided by McCarthy, 1979). Habermas (1978) defined three different categories of inquiry, each of which incorporates distinct 'knowledge-constitutive' or cognitive interests which together

'...establish the specific viewpoints from which we can apprehend reality in any way whatsoever.'

Habermas, 1978: 311.

These three knowledge constitutive interests were

1. the 'technical' interest, expressed through the natural sciences and concerned with technical or instrumental knowledge and means-ends rationality;
2. the 'practical' interest, expressed through the 'historical / hermeneutic' disciplines, and concerned with the understanding of meaning through the attainment of consensus;

and

1. the 'emancipatory' interest, expressed through the critical human and social sciences, and concerned with release from arbitrary power, initially through self-reflection.

As he points out more recently (in Dews, 1992, pp. 192-3), he still regards his account as substantially correct, but he has since (1991) developed a version rooted in an analysis of the universal characteristics of speech acts. He suggests that rationality can be inferred in the same way that an intelligible statement can be made or challenged: that is in terms of its truth

(in terms of the material world), its rightness (in terms of social rules and norms), and its sincerity (or honesty).

Whichever version of Habermas we adopt, we can use the distinctions to help clarify what the different research methodologies are about. Each emphasises different aspects of knowledge, but if we take Habermas seriously it is not necessary to denigrate one in order to accept the validity of the other. To illustrate, consider the following scenario:

Mr Thomas (who is severely intellectually disabled) went into hospital for an operation to lengthen the tendons in his left foot. This was successful; he made a complete recovery, and while previously he limped, he now walks normally. While there he felt frightened because little effort was made to explain what was happening to him at a level that he could understand. It had taken the concerted efforts of his community nurse to get his G.P. to refer him to the consultant who carried out the operation in the first place: the G.P. appeared to think that it would make little difference for a person with a learning disability.

Burton and Kagan (1995: p. 308)

In the above example we have implicitly evaluated Mr Thomas's hospital experience using all three models. Technically the operation was a good one, it produced the desired, mechanical, measurable, effect. On the level of personal subjectivity, however, the episode was less successful. Mr Thomas had a bad experience and little effort appears to have been made to understand his feelings and perception of what happened. In emancipatory terms the community nurse was able to overcome the discrimination by the G.P., which itself reflects the wider discrimination against people with intellectual disabilities, by gaining access to the medical treatment. However, as the experience in the hospital was traumatic, this emancipation was compromised.

To confuse the picture; in most cases the three models are not pure. The methods of one approach may be used to answer a question posed within the perspective of a different approach, for example, but it is helpful to recognise the need to combine elements from each of the three perspectives for valid research in real cases.

What seems to be going on in the qualitative - quantitative debate is that the different knowledge interests or sources of rationality are being conflated by proponents of both approaches. So the practical (interpretive) interest is conflated with the emancipatory interest.

Interpretive approaches are made to stand in for the emancipatory interest, but don't deliver (cf. Burman, in press), because liberation takes more than reaching intersubjective agreements.

Traditionalist researchers want to use technical criteria to judge what are interpretive or emancipatory studies, because there is not a publicly legitimated and clear rationale for research knowledge claims other than that rooted in the prediction and control of objects. Meanwhile technical research strategies are used inappropriately to study matters outside of their domain, leading to findings denatured from their social context (Harré and Secord, 1972).

We can also hazard a guess at why it is the qualitative - quantitative issue that has occasioned such hostility and conflict. The broader emancipatory, interpretive and technical paradigms each bring their own investigative tools, key texts, terminology, and other concrete artefacts common to their practitioners (cf. Masterman's, 1970, third sense in which Kuhn, 1963, uses the term 'paradigm'). This typically takes place in a context where the different knowledge interests are poorly differentiated and understood. Implicit is a challenge to legitimacy, and to investigative competence. The most obvious aspects of the difference in investigative approach are the reliance on numbers or non-numerical information, and the means of presentation of 'data'. These differences then stand for the (poorly understood) differences that in reality are located on several dimensions, as indicated by Hammersley (1995).

Following the Habermasian distinctions, a meta-methodology might involve decision rules that relate methodologies to research questions. Since the mid 1980s an attempt to do this has been made by systems theorists (e.g. Jackson and Keys, 1984; Jackson, 1990, 1991; Flood and Jackson, 1991). Systems theory has itself experienced a paradigms debate, not dissimilar from that in other fields, characterised by the critique of the technical 'hard' methodologies, the emergence of interpretive 'soft' methodologies, and finally the articulation of 'critical' emancipatory methodologies. However, the systems field is considerably smaller than those of psychology and social science. The 'system of systems methodologies', the meta-methodology of Jackson, Keys and Flood, only dealt with two different dimensions of problem situations and seven distinct methodologies. Devising a system of methodologies for social or psychological research in general (or even just for qualitative research) would be a considerably more demanding task.

2 Beyond theoretical pluralism: creating an inclusive paradigm

The experience of the system of systems methodologies also suggests that attempts to navigate between paradigms will confront at least two problems:-

1. In practice it is difficult to relate methodologies securely either to their parent paradigms, or to research questions (Flood, 1995).
2. In making choices between paradigms, and their methodological children, there is either no place 'outside the paradigms debate' where one can stand to make choices and judgements, or such a place needs to be identified clearly, and when this is done it will have the characteristics of a new paradigmatic position (Midgeley, 1996). This suggests the need to identify a new paradigm that supersedes (but also incorporates aspects of) the previous inadequate ones.

It is not enough to assert the need for a new paradigm: paradigms emerge from collectivities of actions and ideas (Kagan and Burton, 1994). What we can do here is sketch some aspects of such a new paradigm.

Actually, the issue of methodology is of relatively little interest once a pluralist stance has been taken. Different researchers in different contexts can use the same methodology with radically different consequences. Some of the critical factors in these differences include:

- Researcher identity, values, position and world view
- Context
- Relationship between researcher and those who participate in the research
- Research purpose
- Research question
- Implementation of method
- Analysis
- Interpretation of findings
- Usage of findings

These factors, and others, can be regarded as a politico-methodological system. It has the requisite requirements of complexity, differentiation of levels, feedback loops, and emergent properties, to make the system metaphor appropriate. It is an open system, with fuzzy boundaries that are themselves contestable (Ulrich, 1983/1994). Such a system is definable for each piece of research, or (with more variety in the system) for programmes of research.

In working within such a politico-methodological system, the researcher has to be mindful of a series of issues. For the purposes of this discussion, we can emphasise two:

1. The dominant and subsidiary knowledge interests in the piece of work. It will be important to identify the unintended consequences of the dominant focus. For example a 'technical' interest may impose an objectification on the research participants that compromises their rights and dignity either during the process of research, or when the findings became fact or ideology. Conversely a research project orientated to emancipation might neglect technical and practical constraints in either conducting the research or in using its results (see Jiménez, 1996, for an example).
2. The sensitivity of methods to paradigmatic origin. While we agree with Patton, Hammersley and Bryman that there is a relative autonomy of methods from their parent paradigms, we would also stress that this autonomy is indeed only relative. An example is tests of intellectual performance, which disconnected from their Galtonian/eugenic paradigmatic origins provide a tool of some use in defining samples of research participants, yet still carry with them the risk of marking the tested with attributes that have little meaning at the individual rather than population level, that may carry a dubious implication of permanence, and that can be incredibly difficult to shift.

So in working with a particular politico-methodological system, and piece of research, the socially responsible researcher engages in a process of best fitting the available methods to the various questions and purposes under examination, always being mindful of the unintended consequences of actions, but refusing to be paralysed by indecision and inaction, since knowledge and justice arise not from contemplation in the abstract but from simultaneous critical engagement with both theory and human life.

In this incipient paradigm, qualitative and quantitative approaches have qualities of both commensurability and incommensurability in relation to one another, and also to this avowedly inclusive standpoint.

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