

# Some Considerations on the Validity of Evidence-based Practice in Social Work

Stephen A. Webb

---

Stephen Webb teaches social work at the University of Bradford. He is currently writing a book called *Social Work in Risk Society: Social and Cultural Perspectives*, for Palgrave Macmillan. In this book he analyses the development and practice of social work as part of the root condition of modern risk society. His other research interests include evidence-based briefings in children and family work; new information technologies and the caring professions; and social work theory and ethics.

Address for correspondence: Stephen Webb, Department of Applied Social Studies, University of Bradford, West Yorkshire, BD7 1DP, UK. E-mail [S.A.Webb@bradford.ac.uk](mailto:S.A.Webb@bradford.ac.uk)

## Summary

This paper considers the validity of evidence-based practice in social work. It critically examines various underlying presuppositions and assumptions entailed in evidence-based practice and draws out their implications for social work. The paper is divided into three main parts. Following a consideration of the background to the development of evidence-based practice and a discussion of its key organizing concepts, the paper goes on to examine its underlying scientific assumptions. It shows that evidence-based practice proposes a particular deterministic version of rationality which is unsatisfactory. Evidence-based practice is derived from ideas based on optimal behaviour in a planned and systematically organized environment. By concentrating on 'epistemic processes' involved in planning and psychological inference it is claimed that cognitive heuristic devices are the determinants of decision making and not evidence. The heuristic model suggests that decision making is indeterminate, reflexive, locally optimal at best and based on a limited rationality. It is argued that social workers engage in a reflexive understanding and not a determinate or certainty based decision-making process based on objective evidence. Complex phenomena such as decision making are not rationally determined or subject to 'control'. The paper goes on to suggest that the tendency to separate processes into 'facts' and 'values' implicit in evidence-based procedures undermines professional judgement and discretion in social work. The third part of the paper focuses on the connection between method and ideology in evidence-based practice. It examines how the evidence-based preoccupation with positivistic methods and determinate judgement entraps social workers within a mechanistic form of technical rationality. This framework restricts social work to a narrow ends-means rationality such that only certain forms of action are considered legitimate. This feeds into the rhetoric of new managerialist strategies aimed at developing a perform-

ance culture by further regulating and controlling individual practitioners. In the conclusion a number of critical indicators are given which should be addressed by the proponents of evidence-based practice. It is suggested that unless these are adequately dealt with, social work is not greatly advanced by adherence to an evidence-based approach. Moreover, the problematic epistemological and ideological base associated with it are to be regarded as inherently insuperable.

Over the past decade there has been a burgeoning interest in evidence-based practice in social work and health care in Britain. The idea that good practice is ultimately to be delivered by research informed evidence which is underpinned by rigorous and effective methodologies is deeply appealing to our contemporary technocratic culture. Indeed, evidence-based approaches are likely to gain even more salience in organizations, such as social services, where fiscal and resource crises are forcing human resource rationalizations, ever new restructuring strategies and increased monitoring of accountability through quality audits and control mechanisms. As advanced technological systems make possible larger client loads by computerized processing of caseload management, the convergence of behavioural research methodologies and quality control through managerially led administrative steering is likely to be more readily facilitated. However, this paper will claim that the ensuing orientation towards evidence-based practice and related requirements of evaluative effectiveness may well undermine traditional professional practice, whilst further legitimating a harsher managerialist ethos of performance culture in social work.

The recent interest in evidence-based practice is reflected in considerable financial investments by the Department of Health who in 1996 invested £1.5 million in an initiative designed to help social service departments develop evidence-based practice. The Centre for Evidence-based Social Services at the University of Exeter, led by Brian Sheldon, was established to co-ordinate this initiative with fifteen local authority social services departments. In October 1997, the Department of Health also funded research on evidence-based practice at the University of Salford as part of the 'Outcomes of Social Care for Adults' initiative. The project identifies what interventions and professional practices produce the best outcomes from a range of stakeholder perspectives. The research centre fronting this development describes its aims as 'to strengthen and cultivate evidence-based practice in health care and at the interface of health and social care'. Similar research initiatives have taken place in medicine and health studies. The Centre for Evidence-Based Pathology has recently been established at the Queens Medical Centre, University of Nottingham, and the Department of Health Studies at the University of York identifies evidence-based nursing as a key strategic interest. The NHS Research and Development Centre for Evidence-based Medicine at Oxford has been conducting investigations into the applicability and effectiveness of this approach for several years (see McGuire, 1997 and Geddes, 1998 for a discussion of evidence-based approaches in mental health). Taken together these developments in evidence-based practice suggest that the model is likely to become increasingly significant in shaping professional culture and education in both health and social care. Sheldon points out on his webpage introduction to the Centre for Evidence-based Social Services that 'In

the U.S., it has been compulsory for the last few years for all social workers to be trained in the skills necessary to appraise and make use of research evidence' (<http://www.ex.ac.uk/cebss/newsspring/98%20.htm>). Evidence-based adherents wish to see this requirement transferred across to the education and practice base of social workers in Britain. It is relevant to note that a subtle shift is occurring in the language used. Increasingly the phrase 'using research evidence' to facilitate practice is being dropped and replaced by the more monolithic assertion that practice should be 'grounded in' evidence or show a 'commitment to' evidence-based practice. The new Department of Health (1999) *Framework for the Assessment of Children in Need and their Families* as part of the Quality Protects programme outlines a key principle of assessment to be 'grounded in evidence-based knowledge' (Department of Health, 1999, p.10). Similarly, the new social care training agency in Britain, TOPPS, in its strategic launch document *Modernising the Social Care Workforce* (1999) states that a 'key component of a social care human resource strategy must be a commitment to evidence-based practice' (TOPPS, 1999, p. 9).

This emerging panacea of evidence-based practice in social work has thus far developed without critical commentary. This article is particularly concerned with the consequences these developments might have for social work. The critique developed here is not implying that 'evidence' per se is useless or irrelevant to practice, but rather that: (i) the presuppositions made for an evidence-based methodology *as practice* are problematic; (ii) the underlying epistemological basis of evidence-based practice as derived from behaviourism and positivism is flawed; (iii) the *epistemic process* of practitioners (e.g. practical knowledge-based actions) in social work, particularly in relation to decision making and predicting outcomes does not adhere to the tenets suggested in evidence-based practice; (iv) the use of evidence in practice does not function or work in the way that evidence-based proponents suggest it does.

As long ago as 1970, Peter Townsend in his commentary on the Seebholm Report noted that 'the relationship between research or the collection of evidence and the identification of need is critical' (Townsend, 1970, p. 14). However, in current social work literature surprisingly little analysis has been written on evidence-based practice or its implications. There are plenty of policy guidelines and review recommendations, especially in medicine and health care, but very little by way of critical analyses dealing with substantive areas of practice (see Sackett, 1999 and Lewis, 1999 for a critical stance on evidence-based practice in health care). An exception to this is Geraldine Macdonald's work who, along with Sheldon, is a leading exponent of the evidence-based approach. Her articles 'Promoting evidence-based practice in child protection' (1998) and the earlier 'Developing empirically based practice in probation' (1994) attempt to deal with substantive practice-based issues. In the latter she states that the alternative to an evidence-based approach is difficult 'to countenance' since it relies 'purely on ideological assumptions and subjective views about the basis of decision-making' (Macdonald, 1994, p. 405). A harsh generalization indeed, the inference being, of course, that only behaviourist approaches which are objective will suffice. In 1992, Macdonald and Sheldon wrote an article called 'Contemporary studies of the effectiveness of social work', which in many respects

paved the way for the evidence-based approach. Whilst not based on a behaviourist paradigm, Cheetham *et al.* (1996) in *Evaluating Social Work Effectiveness* also gave explicit pointers for the need for evidence-based social work.

These writings were preceded in the 1980s by earlier evaluation type writings such as the edited research highlights collection by Lishman (1984), to which Sheldon contributed two pieces. There are indications of the seeds of an evidential approach in these early writings. Sheldon states that social work should ensure that 'the systematic dissemination of findings, and that research design gets built into our services' (Sheldon, 1984, p. 100). During the 1980s, however, a full blown evidence-based model had yet to fully emerge and issues of effectiveness and evaluative measures tended to preoccupy future evidential practitioners. Clearly evidence-based practice is not a single movement. There are softer and harder versions of it which are beginning to permeate policy statements and practice-based guidelines. Everitt and Hardiker's *Evaluating Good Practice* (1996), for example, is a softer version of evidence driven practice. It advocates a practice of *generating evidence based* on its discrete usage, coupled to a need to recognize power and status differences. It does not uncritically accept the development of an evidence-based infrastructure derived solely from a behaviourist worldview and an empirically generated methodology. Nevertheless, five distinctive background sources can be identified which feed directly into the diverse appeals of the value of evidence-based practice. Each of these sources has its own particular set of influences and trajectories. These are:

- 1 behavioural social work;
- 2 medical and health care research;
- 3 positivistic and empirical science;
- 4 the increasing influence of evaluative research about practice effectiveness;
- 5 government and managerial policies aimed at developing a 'performance culture' by controlling quality, optimizing effectiveness and reducing risk in social work departments.

The common thread which connects these five influences is the idea that a formal rationality of practice based on scientific methods can produce a more effective and economically accountable means of social service.

On the surface the appeal to systematic research dissemination and producing reliable research evidence for social work seems both commendable and uncontroversial. However, a closer examination of the status of evidence-based practice as it has been constituted by some of its leading proponents reveals a more worrying picture. Part of this concern is based on a number of recurring misconceptions about the nature of social work. A deeper reading of the presuppositions of evidence-based practice, reveals that it presents itself in a way that is likely to secure its much needed institutional endorsement and legitimation (e.g. by agencies such as the Department of Health, CCETSW, local authority social services departments and academic research establishments). In doing so it thereby avoids relevant but non-supporting arguments which give way to criticisms of its epistemological and meth-

odological base. In order to bring out the various equivocations and connotations that surround the model, and to isolate the *epistemic processes* of evidence-based practice, it is necessary to uncover the underlying premises on which it is based. Epistemic processes are the knowledge seeking and sorting activities which individuals engage in when trying to determine a particular cause, explanation or understanding for certain events (see Kruglanski *et al.*, 1983). My analysis will reveal that evidence-based practice carries with it a predisposition towards a particular epistemic view of human agency and thereby the nature of social work.

Prior to critically examining evidence-based practice it is relevant to outline the main organizing concepts and methods which it tries to sustain. There is an emerging consensus as to what evidence-based practice means, which is derived mainly from medical science (see Sackett *et al.*, 1996a and Griffiths, 1999). The following definition provided by the Centre for Evidence-based Social Care captures the main contours of this consensus and draws attention to the link between social and health care practice:

Evidence-based social care is the conscientious, explicit and judicious use of current best evidence in making decisions regarding the welfare of service-users and carers (extract from Internet webpage, (<http://www.ex.ac.uk/cebss/newsspring/98%20.htm>).

This is derived from Sackett *et al.*'s *Evidence-Based Medicine* (1996b) and is considered a 'good working definition' by the Centre for Evidence-based Social Care. Whilst open ended in relation to what is 'current' and 'conscientious' and also rather circular in that evidence-based practice is *about* the use of 'evidence', the definition feeds into the central concern with 'making decisions'. In another statement about 'What is evidence-based social care?' the Centre suggests that 'the starting point for evidence-based social care is the principle that all decisions in our field should be based on the best available research evidence. Research evidence should inform both our understanding of the origins and developments of social problems and our knowledge of the likely outcomes of different types of service provision' (<http://www.ex.ac.uk/cebss/newsspring/98%20.htm>). Thus it is suggested that evidence-based practice is concerned with both the diagnosis of social problems and a determination of the likely outcomes of intervention. In this sense it moves from the general to the particular. Social workers are expected to 'know about what works in order to participate effectively in decision making.' The linkage between evidence as a vehicle for decision-making, effectiveness and predicting outcomes is transparent in these definitions. Similarly the Centre for Evidence-Based Pathology at the University of Nottingham says that evidence-based medicine is 'about linking research to patients and service problems, and about clinical effectiveness.' (<http://www.ccc.nottingham.ac.uk/~mpzjlowe/evcent.html>). To be effective and to make judicious use of evidence assumes that social workers are rational agents. We can thus summarize this aspect of the evidence-based approach as complementary to that which might be called 'behavioural decision theory' in that there is an attempt to predict behaviour 'realistically' on the basis of scientific evidence.

Improving effectiveness in social work is clearly a central objective of evidence-

based practice. Indeed, effectiveness, evaluative strategies and evidence-based practice are often used interchangeably in the literature. Further on in the Exeter Centre's introductory statement a stronger claim is made for evidence-based practice which suggests that it is not only intended to supplement opinion-based decision making or professional judgement, but rather to supplant it.

Influence on decision making include political pressure, resource constraints and the personal and professional values of those involved. When choices are based on these influences and do not include relevant research evidence we have what is sometimes called opinion-based decision-making. At present, many perhaps most decisions about social care are opinion based. Changing from opinions to evidence as grounds for decisions has implications and will involve challenges for both practitioners and the social care organizations in which they work (<http://www.ex.ac.uk/cebss/newsspring/98%20.htm>).

The above statement indicates a preference to change professional practice from decisions based on opinion to those made on the basis of evidence. Explicit in this statement, although they shift their ground in the very next paragraph, is the view that opinion-based judgement is inferior to evidence-based decision making, and that extraneous influences such as resource constraints and professional values should not contaminate the evaluative process. According to this view, social work decisions should rest solely on evidence leading to effective outcomes. What is meant by effectiveness, of course, is often a matter of personal interpretation. It is relevant to note that practising effectively in mental health work may mean any number of things such as preventing rehospitalizations, improving the client's quality of life, decreasing stress and isolation or improving tenure in community residence. The interface between policy guidelines, managerial judgement, practitioner experience and clients needs would have a bearing on what is considered effective.

Evidence-based practice shows a distinct preference for certain methodological perspectives to inform decision making. Typically the kinds of approaches recommended are reflected in the classical texts of Kerlinger's (1964) *Foundations for Behavioural Research* and Miller's (1974) *Experimental Design and Statistics*. Whilst these approaches have been contested in recent times they adopt a model of human nature which is essentially 'positivistic' and derived from the natural sciences (see Platt, 1996). For the proponents of this approach, a model, as Miller argues 'has to fit the facts of behaviour as derived from scientific observations taken in carefully controlled conditions' (Miller, 1974, p. 2). Whilst increasingly contested these 'scientific' approaches attempt to develop technical and methodological competence in order to ensure predictions can be made about various observable states of affairs (see Keat and Urry, 1975). The kinds of research methodology which are considered favourable in providing evidence are random control trials, single case experimentation, double-blind and cohort studies, and crossover designs. Checklists and grades of evidence indicators are recommended to practitioners to ensure the reliability and validity of the research. It is interesting, but hardly surprising, that no mention is made of other mainstream research methods which are taught on sociology and cultural studies courses such as ethnography, discourse analysis, actor

network theory, semiotics or psychoanalysis. Presumably these more interpretive methodologies which continue to make a significant impact on contemporary social sciences are considered either too subjective, lacking in cost-effectiveness or the disciplinary prestige of the medical sciences.

## Critique of the scientific basis of evidence-based practice

Evidence-based practice proposes a particular version of rational inference on the part of decision makers. It assumes that there exist reliable criteria of inferential evidence based on objectively veridical or optimal modes of information processing. In other words it creates a picture of social workers engaged in an *epistemic process* of sorting and prioritizing information and using this to optimize practice to its best effect. Decisions are thought to be reached in the course of an optimizing sequence in which evidence is generated and validated. The epistemic sequence is initiated by the epistemic purpose, that is the social workers interest in a given item of data or information as it relates to their practical concerns. The principle of rationality at work is 'If an agent has knowledge that one of its actions will lead to one of its goals, then the agent will select that action' (Newell, 1990, p. 10). This formulation results in the law of behaviour at the knowledge level. Thus, there is a direct connection between goals, knowledge and subsequent actions.

The evidence-based model thus reproduces the dominant model of psychological explanation, whereby explaining an action is a matter of causally identifying the beliefs and motives that gave rise to it. In trying to identify those beliefs, one typically works backwards from the action to identify a belief–desire pair in the light of which it would have been appropriate to expect a rational agent to perform that action (see Rose (1985) for a critique of the dominant psychological model of explanation). This dimension of formal rationality depends crucially upon a conception of the inferences that a rational agent could be expected to make.

The inferences that a rational agent could be expected to make determine the range of inferences that a genuine possessor of a given decision ought to make. Moreover, it also constrains the selection of a particular belief–desire pair as the explanation of a given action. Evidence-based practice assumes that rational agents (e.g. social workers) draw the obvious logical consequences of evidence-based findings, to apply fundamental logical principles about the likelihood of action achieving certain ends that respect the axioms of a behavioural probability calculus. By rooting decision making within a behavioural mind-set, evidence-based practice thus ignores the complexity of actual decision making processes in social work. A more complex relationship exists between social work interventions and decisions made by social work agencies which is governed by imperatives which fall outside the workings of a rational actor, such as the politics of inter-agency relations, internal organizational interest groups and managerially led initiatives aimed at enhancing 'productivity statistics'.

Rational agents, according to the evidence-based paradigm, are generally held to be rational to the extent that they are sensitive to the canons of deductive and some

combination of decision theory and sets of behavioural properties. This can be termed a logical conception of rational decision making. However, what the evidence-based model fails to signal or confront is that this conception of rationality as an epistemic process appears to be under some pressure. The presupposed positivist relationship between evidence and rationality is fragile. As the historian of scientific ideas, Quentin Skinner argues:

It has been usual to define the concept of rational beliefs in terms of the agent's capacity and willingness to recognize 'that there is sufficient evidence in its favour', 'that it is based on good evidence', and so on. It is clear however, that this fails to acknowledge something problematic in the very notion of holding a belief in the light of rather than in the face of 'the available evidence', since it fails to acknowledge that the question of what is to count as good or sufficient evidence in favour of holding a belief can never be free from cultural reference (Skinner, 1988, p. 91).

Skinner goes on further to suggest that we accept various states of affairs on trust, on the grounds that we know no better, that they look inherently plausible or that most people feel the same way. In this view social work is at best a common sense approach to specific problems. As Skinner explains, the evidential approach is tautological and severs these critical possibilities:

The anti-positivist objection can be developed as follows. We can imagine an alien system of beliefs in which the paradigms used to connect the system together are such that none of the evidence which we should regard as evidence in favour of abandoning those beliefs is taken to count as decisive evidence either for or against them. We can then imagine an agent, operating within this belief-system, who accepts on trust these prevailing paradigms (and these prevailing canons of evidence), recognizing and following only the moves accepted as rational within the given system, but never challenging the rationality of any part of the system itself. It might now be argued, of the beliefs held by someone of this type of situation, that provided they are coherently connected together, and provided the agent recognizes their implications they may be said to be held in an entirely rational way. There seems to be no space left for this possibility, however, if we insist on defining rational belief in terms of each individual's continual willingness to examine 'the available evidence' for and against each belief he holds (Skinner, 1988, pp. 91–2).

Recent and well-documented research in cognitive heuristics and the social psychology of decision making shows that reasoning strategies *even in the face of evidence* consistently fail to respect the canons of rationality assumed by the evidence-based approach. Heuristics induce people to attend to certain forms of information and to ignore others in developing judgements. Broadly speaking a cognitive heuristic is a device that allows a decision to be made, as it were by a rule of thumb, without full attention being paid to all available evidence. This makes for economical, but sometimes errorful, processing of information. Biases in judgement occur as a consequence of using an heuristic to predict an outcome. Studies in this field consistently show that situational, attributional and lay inference factors bias judgements away from criteria of evidence and enhance the possibility of error. As Shelley Taylor puts it 'The past few decades have witnessed a shift away from the view of



judgements as the products of rational, logical decision making marred by the occasional presence of irrational motives towards the view of the person as a heuristic user' (Taylor, 1981, p. 198). The various biases of human judgement in the face of evidence are often classified as either motivational or cognitive in origin (Ross *et al.*, 1977). Motivational biases are characterized by a tendency to form and hold beliefs, even in the face of statistical evidence. Individuals avoid drawing inferences they would find distasteful. Cognitive biases are thought to originate in the limitations of otherwise reasonable information-processing strategies. For instance, on the whole, people prefer information which is non-statistical, and they develop sub-optimal strategies to bear on predicting outcomes and assessing evidence. Social workers are not exceptions to the universality of these heuristics, and therefore do not reach decisions in the way that evidence-based adherents suggest. Decision making is always contingent upon heuristics and the inter-subjective relations existing between social actors.

Kahneman and Tversky (1973) showed that people failed to be influenced by base-rate evidence in reaching accurate judgments about a given situation. Nisbett and Ross, working on a proposition made by Bertrand Russell that 'popular induction depends on the emotional interest of the instances, not upon their number', argue that the effects of consensus evidence is based on subjective viewpoints rather than the sheer number of instances reported. They demonstrate that 'people are unmoved by the sorts of dry statistical data that are dear to the hearts of scientists and policy planners . . . information that the scientist regards as highly pertinent and logically compelling are habitually ignored by people' (Nisbett and Ross, 1980, pp. 115–16). Case conference situations confirm this. When social workers provide reasons, explain decisions or conduct to other professionals or clients, they are interested in providing a justification, in putting their acts in a good light. They are also concerned to show that what they did was the right, the reasonable, the correct, the prudent thing to do, or at least in pleading that it was permissible or excusable in some way. Recent research in heuristics undermines the insistence made by evidential practitioners of social work as a data-driven information process, whereby valid and reliable decisions are reached on the basis of empirical research data. People simply do not act or behave in this way, even when they have evidence at their disposal. As Moscovici and Hewstone claim, individuals have a tendency to adopt 'automatic explanations' for evidence. In a strong critique of rational models of decision making they suggest that 'causes are singled out and put forward before the available information has been sifted, and before the effects have been seriously examined' (Moscovici and Hewstone, 1983, p. 121). Thus when explanations of events, such as why a child cries, why a person is addicted to heroin, or why someone is unemployed, social workers will not make inferences of the type presupposed in the evidence-based model. Without much exploring or thinking, they apply what Moscovici and Hewstone call their common sense 'representations' of what is the cause and leave it at that.

The evidence-based approach makes strong claims for the need for the widespread dissemination of reliable research evidence. At the same time it is suspicious of opinion (or ideational) based personal knowledge. Indeed, the SUNY-based health

sciences 'Evidence-based medical course' provides an 'evidence-based pyramid' which places methodologies such as randomized controlled trials, cohort and case control studies at the top, with ideas and opinions at the bottom of the pyramid. Therefore, evidential practitioners need ample amounts of solid empirical evidence which conform to rigorous scientific methodologies. So far so good. However, social workers adopting such a model are in danger of becoming liable to what might be called 'The Pearl Harbour Effect'. All traditional views on what happened at Pearl Harbour were scrapped in the light of Roberta Wohlsetter's (1962) excellent book *Pearl Harbour Warning and Decision*. She convincingly showed that the cause of the disaster was not too little information in the hands of the military and intelligence communities, but far too much, coupled with totally inadequate theoretical frameworks for sifting it. This lack, and social workers will recognize these sentiments, was due to organizational blockages which prevented adequate theoretical information filtering down to the level at which key appraisals were made. What was experienced was information 'overload', an inadequate theoretical framework, and organizational power games which entailed vested interests in projecting one particular view of the world. It is arguable that social workers face a very similar organizational context in British social work.

The above critique leads to a second twist, suggested by Peter Winch (1976), who argues that our concepts or conception of things enter into our actions in an essential way: in fact, they guide and control how we act. Thus, if we want to understand why clients, or indeed, social workers, act as they do, we need to understand their conceptual thinking and not empirical evidence or controlled behaviours. Indeed the latter are not considered intelligible actions without the interpretation provided by the former. Actions are commended in and through language, with concepts constituting the beliefs which inform action. Charles Taylor (1985) and Alasdair MacIntyre (1973) have done the most in recent times to articulate what is at stake in the constitutive function of conceptions, intentions and meanings in social action. This position not only reinstates the value of ideas and conceptually-based professional opinion, but places them at the head of any pyramid of understanding for reaching decisions in social work. Thus it is the social workers conception of how things are, rather than the evidential facts *per se* which determine actions.

Let us consider a mundane example. Smith, the social worker, is bent on keeping an appointment with her senior social worker, for which she is almost late. As she is about to leave, she recalls she promised to telephone an elderly couple, who she had visited the previous night. Shall she turn aside and make the phone call and be late for her appointment or pass up the opportunity to fulfil her promise to the elderly couple? A minor case of decision making no doubt (and one based, incidentally, on little evidential foundations), but nevertheless she makes the phone call. When Smith decides to make the phone call, it is enough that she *thinks* the elderly couple will be there to answer the call. What Smith decides to do is determined not so much by what the facts are but what she thinks them to be. The senior *might* understand the reasons for her lateness, or the elderly couple *might* have been out, thus meaning she had not fulfilled her obligation to phone them or get to her appointment on time. Whereas, Smith might say 'I did A because A led to G' as the evidential practitioner

would insist, the neutral spectator would say 'She did A because she *thought* it would lead to G'. Thus it is the link between heuristics and actions, and not evidential facts and actions which are more likely to determine social workers' decision making. Indeed research in popular induction also tends to confirm that motivational and cognitive interests will determine how people evaluate evidence rather than objective information processing strategies.

The rational actor model deployed by evidence-based practitioners assumes that social workers will act on the evidence they have available to them. However, it is arguable that social workers' not only act on immediately available information, but also on an anticipated state of affairs. Notoriously, social workers' make decisions not only because of the ways things are but because of the way they would like things to be. As Clement Atlee positively expressed as far back as 1920 'every social worker is almost certain to be an agitator'. Decisions are therefore always value-laden, since they point to a possible future world or the need for change (see Webb and McBeath, 1989). Moreover, this justifies the designation of social workers' as agents of change who carry an impulse to reform various conditions in the lives of clients. Popper validates this as a generalizable state of affairs for human action in a discussion of what he calls 'the third world'. He says that the third world is 'the world of intelligibles, or of ideas in the objective sense; it is the world of possible objects of thought'(Popper, 1972, p. 26). Evidence at hand is thus only a partial determinant of decision making on the part of social workers. Social problems, to a very considerable extent depend on what social workers think they are, that is, upon their ideas. Hayek (1983) takes this further in calling for a distinction between 'the ideas we have about society' and 'the ideas we have without which society could not work'. Thus decisions to offer day-care services to single parents are necessary to constitute day-care, but notions about day-care are not. Decisions about day-care draw on certain expectations and ideas about what is possible. It is these often unreflective expectations about how things will change and how clients will react if certain services are offered that shape decision making. So the evidence-based practitioner by foreswearing inferential judgements about how things might be, can neither identify social entities, nor understand why people act, because inferential judgement has been involved in both. At its crudest level the evidential-based model is a mechanistic approach which regards social workers largely as 'information processors' operating within closed systems of decision making. Simon (1999) from a cognitivist standpoint has criticized the idea of individuals operating as information processors in closed decision making systems. Social workers operate in open and contingency based contexts and will tend to fall back on inclinations, values and common sense when making decisions. They operate with a limited rationality which is circumscribed by legal and organizational requirements which change over time.

This leads to a more sweeping critique of the evidence-based model. By underplaying the values and anticipations of social workers' at the level of ideas, it ignores the processes of deliberation and choice involved in their decision making. Supporters of the evidence-based model might refute this, suggesting instead that on the one hand, evidence is complementary with intentional states and judgements (in terms of a simple causal information processing model of input-output), and on the

other hand, that evidence actually bolsters the deliberating process in terms of its outcomes. But as we shall see, one cannot infer a social worker's decision merely by considering the evidence with which he or she entered into the choice situation; there are no regular correlations between evidence and choice or between evidence and action. Let us consider the potential pit-falls the evidential-based practitioner will slip into when undertaking deliberative processes and in making choices between particular states of affairs.

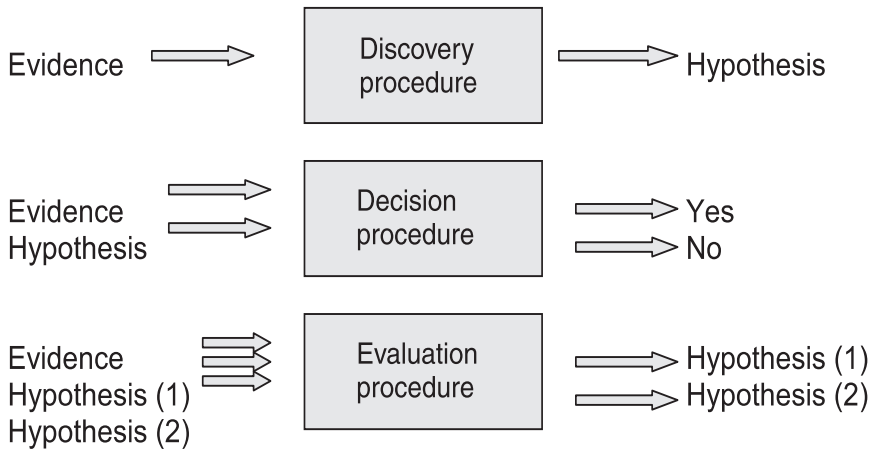
Within the structure of action, evidence assumes a different role from that of deliberation and choice. What a social worker wants to do sets the stage for thoughts about what should be done. Evidence can set the stage for the social worker to act. Deliberation, however, plays the role of solving the problem, whereas choice puts the solution into effect. Clearly the more time allowed for deliberation the greater the chance that the decision will be tutored by reason. Evidence might well present a possible state of affairs to be considered as a back-drop to an effective outcome, but a prudent professional does not move directly from evidence to action. The social worker recognizes that the first consideration about what to do requires reflection upon the consequences of the various alternatives put before them, followed by weighing up the relative merits. A good social worker makes up her or his mind what to do in the light of her or his prior deliberation, the evidence being just one phase in the whole process. The choice is up to the social worker. Decisions are made on the basis of a reflective deliberating process *itself* and not on the basis of evidence. As input, evidence is not simply punched into a black box, with a decision as an output as the more behaviourally minded would have it. When it comes to deliberations about what to do, the social worker does not consider every member of the set of possible actions, or for that matter every piece of evidence. Typically, the social worker faces a very restricted range of alternatives. Decisions are based on the reflexive understanding of contestable beliefs and meanings and not determinate judgements. In *Human Nature and Conduct* Dewey pointed out that deliberation is 'a dramatic rehearsal in imagination of various competing possible lines of action' (Dewey, 1922, p. 12). What the social worker wants or does not want, as an agent of change, partially determines the actual range of alternatives. The values and the meanings associated with a particular situation narrow the *horizon of possibilities* to those actions which the social worker thinks will get her or him what she or he wants. Clearly factors other than desire also help to structure the range of alternatives. An action might be legally or morally required, or desirable or prudent or useful quite independently of whether it contributes to satisfying his or her professional judgement. These other features of actions may serve to bring them within her or his *horizon of possibilities*. Rather than evidence being the cause of actions in many typical occasions evidence becomes the vehicle by which social workers can act in accordance with their own interests (clearly these interests can be equated to the interests of the client or the profession). However, as Gadamer has shown, horizons of possibilities for action must always be understood as contextual and therefore necessarily incomplete and tied to definite points of tension within an actors decision-making process.

Every finite present has its limitations. We define the concept of 'situation' by saying that it represents a standpoint that limits the possibility of vision. Hence an essential part of the concept of situation is the concept of 'horizon'. The horizon is the range of vision that can be seen from a particular vantage point (Gadamer, 1975, p. 269).

For Gadamer the 'horizon of possibility' is a dynamic interplay of different reflexive meanings which are continually shifting around, between experiences of past, present and an anticipated future. This movement necessarily means that 'every encounter . . . that takes place in consciousness involves the tension between the text and the present'. It seems that evidence-based practice attempts to naively assimilate and even cover up this tension between the text (the evidence) and the process of deliberation (the present) engaged in by the social worker. It does this by positing a noise-free relationship between subjective reasoning and formal decision-making procedures. However, we see in Gadamer's conception that interpretation of the evidence is never a straightforward matter and involves competing frames of cognitive reference and self-interest. As Mary Douglas points out with the increasing push towards the development of a self-satisfying forensic vocabulary for dealing with risk and insecurity in modern societies 'Ambiguity always lurks. If you want to cast blame, there are always loopholes for reading the evidence right' (Douglas, 1992, p. 9).

Implicit within evidence-based practice is another hierarchy of types of evidence which are generated algorithmically. By this I do not mean a hierarchy of methodologies which provide evidence as discussed above in the SUNY model. Rather there are certain types of procedure which count as producing better states of affairs in computational or numerical terms. Here we can adapt, as Sober's (1978) has done, Chomsky's (1965) three alternatives for theories of scientific method. Sober refers to these as (i) discovery procedure, which characterizes evidence as inputs and outputs and yields potential hypothesis; (ii) decision procedure, which takes the evidence of a single hypothesis and determines whether or not it is the best explanation or most acceptable hypothesis in relation to the evidence; and (iii) an evaluation procedure which takes pairs of hypotheses and a body of evidence as an input and determines which one of the two is a stronger explanation of the evidence. Sober produces the diagram shown in Figure 1.

This ideal-typical model helps illustrate some of the problems intrinsic to the epistemological suppositions of evidence-based practice. The three levels in this model are inter-linked and feedback into one another. The model presupposes that there is an intrinsic logic to decision procedures whilst also maintaining there is a logic for generating a finite set of alternatives for evaluation procedures. As we have seen above, however, such a finite set would be compounded by a variety of complexities which impinge on the *epistemic* sorting process of the evidence, such as situational factors, resources and motive-based interests. As Sober argues 'if we conceive of the black boxes in the above diagram as providing algorithms for evaluation, decision or discovery, then it is not at all clear that there is even such a thing as a 'logic' of evaluation' (Sober, 1978, p. 172). Clearly the types of method advocated by evidential-based practice to inform decision making, such as randomized, controlled, double-blind studies and single case experimentation, rely on calculations



**Figure 1.** Three alternatives for theories of scientific method  
 Source: Sober (1978)

based on numerical data. Presumably, wherever possible, evidence-based practitioners prefer their decisions to be informed by 'strong' numerical-based research facts. Sober (1978) claims, however, that there would need to be a mechanistic or general procedure for determining which hypothesis or couplings of hypotheses are more appropriate in relation to a given body of evidence. Moreover he raises doubts about how decisions are taken about 'which pair of hypotheses better explain a body of evidence?' (Sober, 1978, p. 172).

What happens for example, if in developing placement policy for children within a given local authority, two competing hypotheses are given as the most significant by the available evidence? For example, female children between the ages of 8–10 are best fostered by: (i) lesbian single parent mothers because this ensures a stronger sense of female identity and independence; and (ii) by married couples in a stable relationship because this a normative sense of familial life? Evidence would not be able to determine the optimal decision-making outcome in this example. The decision taken would be heuristic in nature as well as a political, in that it requires an affective sense of differences in experiences in child socialization processes and a preference for certain gendered arrangements which are considered more or less beneficial. The criticism of level three equally applies to the other two levels, since if no general procedure for determining which are the best couplings applies for evaluation, then the other two levels of decision and descriptive procedures simply fall away. Sober tells us 'Equally negative comments of course apply to the computability of a decision procedure; doubts about there being an algorithm for evaluation infect the other two alternatives because the other two can be viewed as properly containing evaluation procedures as mentioned above. Thus if one holds that there is a logic of evaluation but not one of discovery, it seems rather implausible to characterize this difference in terms of the existence of algorithms' (Sober, 1978, pp. 172–3).

## **Critique of the ideological basis of evidence-based practice**

An acceptance of the validity of the scientific method and the attendant assumption of evidence-based practice described above, which fit so naturally in research programmes, have formed part of a dominant approach in the social sciences for a considerable period of time. There has, however, been a long-standing and sustained critique of the empiricist and positivist methods of scientific investigation. The empiricist view that knowledge may be constructed from a basis of raw sensory data has long been repudiated by Kantian and phenomenological thinkers (see Gray, 1995). The work of the Frankfurt School of Critical Theory has been particularly important in showing there are no certain foundations for empirical knowledge and that positivistic methodologies are flawed and intimately linked to ideological formations in wider society (see Marcuse, 1964; Habermas, 1968; Held, 1980). The evidence-based approach ignores the compelling critiques of scientific knowledge undertaken in social theory and philosophy. Polanyi (1967) for example, stresses the way in which beliefs and assumptions are tacitly involved in all scientific judgements and points out that in many instances scientists are unable to render these explicit. Because such assumptions are not questioned, and because they can change historically, the claims of objectivity are always relative to the particular specialist scientific community. As we shall see, as with the positivistic approach on which it is modelled, evidence-based practice, is equally susceptible to the kinds of criticism levelled by critical theorists (see David Smith's critique of positivism in social work, 1987).

Evidence-based practice entraps professional practice within an instrumental framework which regiment, systematizes and manages social work within a technocratic framework of routinized operations. Whilst this dominant form might be applicable for certain branches of clinical medicine, its translation across to social problems and issues is far from being straightforward. As we have seen it proposes that evidence is something which slides smoothly and naturally between the external world of 'facts' and the subjective world of 'mental processes'. This correspondence model of truth takes for granted the idea that information processes work in terms of producing what Shotter calls 'representations corresponding to reality' (Shotter, 1993, p. 164). The effect of this for social work is to narrow the field of operations to one in which reality is always just 'out there' and waiting to be discovered. This approach is well covered by Max Weber's thesis on the 'iron cage' of administrative rationality, which by its very nature excludes individual arbitrariness or what is called 'opinion-based decision-making' in favour of an objectively regulated process; in the same manner the individual action of a social worker of this type is frowned upon by evidence-based methods. This type of rationality restricts social work to an ends-means relationship and impedes judgement on the rationality of the means. The distortions of evidence-based approaches arise from its method, which translates critical concepts into classificatory ones. Contradiction is absorbed into logical classes or effective outcomes, such that it is regarded as merely non-functional and thus presenting a picture of the whole as harmonious. With the aid

of mechanically functioning categories, procedures and methods, the social world is divided into black and white, thus neutralizing ideas and practices which do not form a part of this clear-cut world view. As Alfred Schutz has observed from a phenomenological standpoint 'In our daily life it is only very rarely that we act in a rational way . . . we do not interpret the social world surrounding us in a rational way, except under special circumstances which compel us to leave our basic attitude of just living our lives' (Schutz, 1970, p. 95). Moreover, to extend Schutz's point further, there is no acknowledgement by the evidential model that social workers are incessantly beset by irreconcilable and contradictory requirements of their own psychological economy as well as that of social reality.

Against evidence-based epistemology, Shotter argues that an adequate account of the *identity of persons* is required to properly understand the nature of human intervention in the social world. He goes on to argue that '*An information processing system* without an identity, without an understanding of who it is and how it is 'placed' in a social situation, could never play the part of a genuine person in everyday social life at large' (Shotter, 1993, p. 163). As suggested above, the processing model fails to account for the *situatedness* of the social context in which social workers and clients find themselves. Moreover, it *devalues* the moral and political context of their work by reducing these dimensions to equivalent elements within the information processing system as a whole. The demand made by evidential practice upon social problems is essentially heteronomous. That is, interventions, no matter what form they take, are to be measured by standardized norms and classifications not inherent to them and which have nothing to do with the quality of the object, but rather form some abstract methodological standard imposed from without. The evidence-based instance of practice, according to its own prescriptions and nature, must for the most part refuse to become involved in questions of immanent quality which specify the everyday nature of particular practices themselves or the complex processes involved in social work interventions. Ritualized practices in domestic violence or child sexual abuse are good examples of an immanent quality which requires an interpretation of process before a social worker can grasp the meaning of the situation for those involved. We know that male batterers, for instance, make overt and implicit references to antecedent circumstances and that these are ritualized in domestic violence. Implicit references need to be examined within the context of the specific ritual, for example, the expectation that his partner will dress in a certain way in order to avoid violence. Such rituals are built into the meaning-contexts of those involved. By confining rational decision procedures to those utilized by the natural sciences, evidence-based practice reduces professional judgement to decisionism. That is, the decisionist separation of questions of fact from questions of value closes off ultimate principles from the possibility of rational justification.

However, by attempting to root out value laden, professional judgement or 'opinion-based ideas' evidence-based practice entails an implicit value base of its own. It embodies a formal (means–end) rationality and centres its interest on efficiency, economy and outcome-based predictions. The effect on social work is to suggest that interventions can be 'value free' and objective, thus in turn encouraging the



development of a technical rationality for practice. Only those interventions which are amenable to scientific-technological inputs and solutions are deemed rationally decidable by the evidence-based approach. Within evidence-based practice, decision making is regarded as instrumental in that it is conceived as the organization of means to defined ends guided by technical rules and based on empirical facts. The information provided by empirical science in the form of law-like regularities and scientifically tested predictions replaces traditional criteria of professional judgement, as well as rules of experience developed unsystematically in everyday working contexts (see Beck-Gernsheim, 2000). However, as Habermas (1970) argues, decisions are based on a more substantive rationality which is inherently political in that they ultimately rest on rationally unjustifiable decisions among competing values and interests and the motivation to carry them out. Commenting on the separation of the political and professional in decision-making, as suggested by some evidence-based proponents, Habermas observes that:

The dependence of the professional on the politician appears to have reversed itself. The latter becomes a mere agent of a scientific intelligensia which, in concrete circumstances, elaborates the objective implications and requirements of available techniques and resources as well as optimal strategies and rules of control. . . . The politician would then be at best something of a stopgap in a still imperfect rationalization of power, in which the initiative has in any case passed to scientific analysis and technical planning (Habermas, (1970, pp. 63–4).

We can thus understand the decisionism of evidence-based practice as a variant of technical rationality in that only certain forms of action are considered legitimate. These are based on empirical knowledge which takes the form of objectivist rules as part of the information basis relevant to a decision. Given the information basis and the preference rules of evidence-based practice, different decision procedures are only permissible from the point of view of maximizing expected utilities and outcomes. Thus its ideological function is the legitimization of a particular type of formal rationality in social work. A critical response to evidence-based practice on these grounds would not be to claim that we should simply replace it with versions of non-scientific forms of rationality, such as psychoanalysis, but instead that we should cultivate a reflective understanding of its empiricist presuppositions as one category of knowledge amongst others, and its technical rationality as one mode of action among many.

Evidence-based practice links directly into what Harris (1998) calls ‘new managerialism’ in British social work (also see Turner, 1977). Effectiveness, as measurement, performance and outcome targets, clearly impinges on conceptions of value for money. As Harris notes in the discussion of the changing working practices in contemporary social work:

the discretion of social workers has been curtailed by information technology systems which prioritize budgetary considerations in the allocation of services. Computerization has undermined social workers’ discretion, subjecting social workers’ recording to standardized procedures for information processing (Harris, 1998, p. 857).

Evidence-based practice effectiveness sits comfortably alongside the new managerialism in social work. The recent imposition of a cognitive-behavioural model in the probation service in England is a further example of this tendency to enforce standardized methods and supposedly scientific models of intervention. This narrow view of the world endorses the idea that practice should be first and foremost objectively accountable to administrative functions and controls. This reflects a double discursive alliance of *scientism* and *managerialism* in social work which gears up to systematic information processing operations to produce regulated action. We thus have the assimilation of a form of 'scientific management' in social work (see Warner, 1995). Smith's (1997) study of changes in child-care provision draws attention to the 'growing concentration on the externally measurable element of practice (performativity) rather than the internal and relatively intangible, quality of relationships (caring). According to this view direct or face-to-face work in social work is rapidly decreasing whilst administrative steering based on the completion of routinized technical functions and controls is on the increase (see McBeath and Webb, 1991a, for a discussion of this phenomenon in assessment frameworks in childcare). Harris (1998) is correct to point out that the Griffiths Report provided the political watershed for these organizational changes. In an earlier article, I pointed out that these changes were likely 'to result in new operational policies about priority services, decentralization of managerial functions, targeting resources, cost-effectiveness, performance levels and efficiency measures on workload' (McBeath and Webb 1991b, p. 751). What was not anticipated at the time was that a behavioural decisionist model, as embodied in evidence-based practice, would combine a methodological and information processing system to bolster and legitimate the rationalizing aims of Thatcherite welfare economic policies as currently articulated by New Labour (see Maddock and Morgan, 1998).

## Conclusion

It has been shown that evidence-based practice makes a number of implicit claims and is underpinned by particular presuppositions about the nature of social action. The claims of objectivity, effectiveness and efficiency provide a strong platform on which rests the reputation and legitimation of evidence-based practice in social work. The view that evidence-based practice is scientific and its methodologies are objective is a value-laden belief which is being constantly fostered in social work practice and government policy. However, further clarification of the role which evidence-based practice plays within social work is required. Does it regard itself, for example, as a platform for formulating decision making across the board and as a mechanism that ensures continuity and objectivity in a new scientifically organized social service? Is evidence to be reduced to formats that assist decision making, not as a factor that meaningfully contributes to results? Are evidence-based practices supportive rather than determining of interventions and actions in social work? What exactly is the relation between evidence-based indicators and what Macdonald calls the 'ideological assumptions and subjective views' of social workers? Is it realistic

to assume that a rigorous and standardized method of evidence-based practice can be implemented within cost-cutting social work departments, by practitioners who already struggle to keep abreast in overloaded information environments? Until these kinds of questions and other critical pointers raised in this paper have been properly addressed social work is not greatly advanced by adherence to an evidence-based approach. It might be helpful if evidence-based proponents provided indicators across the following four suggested dimensions and explain exactly how social workers are expected to implement this approach in practice:

- *Evidence as mediated:* Research is needed into the dynamics of how social workers actually use evidence in resource intensive organizations that are in a state of constant flux and change. It needs to show how changes associated with new information and communication technologies as they combine with other developments such as new organizational and policy structures mediate the use of evidence. Further work is needed on how evidence-based practice is appropriate at the point of implementation within various settings. Research is required to document how evidence-based procedures either assist or militate against vested political interests within social work.
- *Evidence as situated:* Work is needed to develop the relevance of evidence-based approaches given that social workers are embedded in highly situated, varied and complex decision making environments. Evidence-based practice assumes that social work is decontextualized. Little is known about the ways in which social workers' understanding of their activities will change as a consequence of developing an evidence-based approach to their work.
- *Evidence as provisional:* Research is needed into the claim that evidence, is essentially, provisional and developing, as well as contaminated by heuristic devices. It has been suggested here that developments in the implementation of evidence and the actual outcomes of its usage will occur in tension with the actual ways social workers do things. Changes in the use of evidence may or may not be planned and may or may not be properly understood or articulated by social workers. Research is needed into the idea that by alerting social workers to the evidence and systematic reviews of research that might otherwise be ignored or merely paid lip-service to, that they will actually do things differently. Moreover what tensions will emerge between expert-dependent activities and common sense judgement in the implementation of an evidence-based approach?
- *Evidence as pragmatic:* Central to models of organizational activity is the idea that professional action is driven by conceptions that people have of their activities. Further research is needed into the influence that 'informed' and 'evidence-intensive' environments would have on the approaches that social workers take to their work. It seems likely that if an evidence-based approach were to become integrated it would be resisted by social workers, either because it undermines traditional approaches or because training, staff development and the use of resources and information technology makes it untenable to implement properly. Research is needed into the sensibilities involved for developing social work within an expanded evidence-based environment.

This paper has not suggested that either decision making or outcome predictions in social work are essentially undecidable and thereby always restricted to some subjective economy of personal interest. Unlike some postmodern thinkers it is not claimed that social actors exist in a world of unconditional undecidability or that unity is permanently underscored by conditions of plurality and relativity (Baudrillard, 1994; and Kroker and Cook, 1988 are examples of this kind of excess in postmodern thought). More simply it is claimed that social work simply does not and cannot work in the way evidence-based practice suggests. Research shows that heuristics play a much more decisive role even in the face of evidence, than the evidential approach allows for. This suggests that social work requires a model which is much more nuanced and sensitive to local and contextual factors. That is, a model which recognizes, in line with research in connectionist and network analysis, that social actors operate with a limited rationality due to the indeterminacy, uncertainty and spontaneous effects of networked systems which change over time (see Plotinsky (1993) and Bohr's (1958) classical account of the indeterminacy of quantum systems).

Thus the stronger view expressed here is that social work should abandon mechanistic approaches, such as evidential practice and those characteristic of experimental and behavioural research, and replace it with a conceptual model that is designed explicitly to recognize social agency as meaningful, intentional and interconnected (see Byrne, 1998 and Hannerz, 1992). Rather than conceiving of social workers and clients as social billiard balls, passively bounding through a world of causal and objective relations, they should be conceived as dynamic, interconnected agents who make decisions according to heuristic devices which are bound up with specific cultural formations (see Taylor, 1989). Unless this is done, the emerging panacea of evidence-based work can have the effect of neutralizing social work's role in moral and political discourse and undermining its professional autonomy. It is not difficult to envisage that a stronger set of prescriptive policies will emerge thus tightening the straight-jacket further by insisting that evidence-based, cognitive-behavioural and evaluative practice combine to provide a uniform diet of interventions and training. This would represent a combined attempt to impose a planned rational order on the delivery of social work, despite contrary evidence suggesting that such order is impossible. The irony being, of course, that if the criticisms raised here are correct and if evidence-based practice is implemented across the board it is likely to incur losses in efficiency and to be at financial cost. It might serve us well to recall the recent Gulbenkian Commission report on restructuring the social sciences 'Perhaps we are witnessing the end of a *type of rationality* that is no longer appropriate for our time. The accent we call for is one placed on the complex, the temporal and the unstable, which corresponds today to a transdisciplinary movement gaining in vigor' (Gulbenkian Commission, 1996, p.79). Social work will become truly reflexive when it is concerned with its unintended consequences, its manufacturing and imaginings of risk and its position within the grip of an *aporia*.

## References

- Baudrillard, J. (1994) *The Illusion of the End*, Oxford, Polity Press.
- Beck-Gernsheim (2000) 'Health and responsibility: From social change to technological change and visa versa' in, Adams, B., Beck, U. and Van Loon, J. (eds), *The Risk Society and Beyond*, London, Sage.
- Bohr, N. (1958) *Atomic Physics and Human Knowledge*, New York, Wiley.
- Byme, D. (1998) *Complexity Theory and the Social Sciences*, London, Routledge.
- Cheetham, J., Fuller, R., McIvor, G., and Petch, A. (1996) *Evaluating Social Work Effectiveness*, Milton Keynes, Open University Press.
- Chomsky, N. (1965) *Aspects of the Theory of Syntax*, Boston, MA, MIT Press.
- Department of Health (1999) *Framework for the Assessment of Children in Need and their Families*, Consultation document, September, London, HMSO.
- Dewey, J. (1922) *Human Nature and Conduct*, New York, Henry Holt.
- Douglas, M. (1992) *Risk and Blame: Essays in Cultural Theory*, London, Routledge.
- Everitt, A. and Hardiker, P. (1996) *Evaluating for Good Practice*, Basingstoke, Macmillan,
- Gadamer, H. G. (1975) *Truth and Method*, London, Sheed and Ward.
- Geddes, J. (1998) 'Evidence-based practice in mental health', *Evidence-based Mental Health*, 1(1).
- Gray, J. (1995) *Enlightenment's Wake: Politics and Culture at the Close of the Modern Age*, London, Routledge.
- Griffiths, P. (1999) 'The challenge of implementing evidence-based health care', *British Journal of Community Nursing*, 4(3).
- Gulbenkian Commission (1996) *Open the Social Sciences*, Stanford, CA, Stanford University Press.
- Habermas, J. (1968) 'Science and technology as ideology', in Barnes, B. (ed), *Sociology of Science*, Harmondsworth, Penguin.
- Habermas, J. (1970) *Towards a Rational Society*, London, Heinemann.
- Hannerz, U. (1992) *Cultural Complexity: Studies in the Social Organization of Meaning*, New York, Columbia University Press.
- Harris, J. (1998) 'Scientific management, bureau-professionalism, new managerialism: The Labour process of state social work', *British Journal of Social Work*, 28, pp. 839–62.
- Hayek, F. A. (1983) *Knowledge, Evolution and Society*, London, Adam Smith Institute.
- Held, D. (1980) *Introduction to Critical Theory*, London, Hutchinson.
- Kahneman, D. and Tversky, A (1973) 'On the psychology of prediction', *Psychological Review*, 80, pp. 237–51.
- Keat, R. and Urry, J. (1975) *Social Theory as Science*, London, Routledge & Kegan Paul.
- Kerlinger, F. N. (1964) *Foundations of Behavioural Research*, London, Holt, Rinehart and Winston.
- Kroker, A. and Cook, D. (1988) *The Postmodern Scene: Excremental Culture and Hyper-Aesthetics*, London, Macmillan.
- Kruglanski, A. W. and Ajzen, I. (1983) 'Bias and error in human judgement', *European Journal of Social Psychology*, 13(1), pp. 1–44.
- Kruglanski, A. W. et al. (1983) 'The lay epistemic process in attribution-making', in Hewstone, M. (ed.), *Attribution Theory*, Oxford, Blackwell.
- Lewis, B (1999) 'What happens when experience belies the evidence?' *Community Mental Health*, 2(1).
- Lisham, J. (ed) (1984) *Evaluation*, Research Highlights in Social Work 8, London, Jessica Kingsley Publishers.
- Macdonald, G. (1994) 'Developing empirically-based practice in probation', *British Journal of Social Work*, 24, pp. 405–27.

- Macdonald, G. (1998) 'Promoting evidence-based practice in child protection', *Clinical Child Psychology and Psychiatry*, **3**(1), pp. 71–85.
- Macdonald, G. and Sheldon, B. (1992) 'Contemporary studies of the effectiveness of social work', *British Journal of Social Work*, **22**, pp. 615–43.
- MacIntyre, A. (1973) 'Ideology, science and revolution', *Comparative Politics*, **5**(3), pp. 321–42.
- Maddock, S. and Morgan, G. (1998) 'Barriers to transformation: Beyond bureaucracy and the market conditions for collaboration in health and social care', *International Journal of Public Sector Management*, **11**(4), pp. 234–51.
- Marcuse, H. (1964) 'Technological rationality and the logic of domination', in Barnes, B. (ed.), *Sociology of Science*, Harmondsworth, Penguin.
- McBeath, G. and Webb, S. A. (1991a) 'Child protection language as professional ideology', *Social Work and Social Sciences Review*, **2**(2), pp. 122–45.
- McBeath, G. and Webb, S. A. (1991b) 'Social Work modernity and post-modernity' *Sociological Review* **39**(4) pp. 745–62.
- McGuire, J. B. (1997) 'Evidence-based approaches in mental health settings', *Children & Society*, **11**(2), pp. 89–96.
- Miller, S. (1974) *Experimental Design and Statistics*, London, Methuen.
- Moscovici, S. and Hewstone, M. (1983) 'Social representations and social explanations: from the "naïve" to the "amateur" scientist', in Hewstone, M. (ed.), *Attribution Theory*, Oxford, Blackwell.
- Newell, A. (1990) *Unified Theories of Cognition*, Cambridge, MA, Harvard University Press.
- Nisbett, R. E. and Ross, L. (1980) *Human Inference: Strategies and Shortcomings of Social Judgement*, Englewood Cliffs, NJ, Prentice Hall.
- Platt, J. (1996) *A History of Sociological Research Methods in America: 1920–1960*, Cambridge, Cambridge University Press.
- Plotnisky, A. (1993) *Reconfigurations*, Gainesville, FL, University Press of Florida.
- Polanyi, M. (1967) 'The growth of science in society', *Minerva*, **5**, pp. 533–45.
- Popper, K. (1972) *Objective Knowledge*, Oxford, Clarendon Press.
- Rose, N. (1985) *The Psychological Complex: Psychology, Politics and Society 1869–1939*, London, Routledge & Kegan Paul.
- Ross, L. Amabile, T. M. and Steinmetz, J. L. (1977) 'Social roles, social control and biases in social perception processes', *Journal of Personality and Social Psychology*, **35**, pp. 485–94.
- Sackett, D. L. (1999) 'Getting evidence into practice', *Effective Health Care*, **5**(1).
- Sackett, D. L. *et al.* (1996a) 'Evidence-based medicine: what is it and what isn't', *British Journal of Medicine*, **312**, pp. 71–2.
- Sackett, D.L. *et al.* (1996b) *Evidence-Based Medicine*, Oxford, NHS Research and Development Centre for Evidence-based Medicine.
- Schutz, A. (1970) 'The problem of rationality in the social world', in Emmet, D. and MacIntyre, A. (eds), *Sociological Theory and Philosophical Analysis*, London, Macmillan.
- Sheldon, B. (1984) 'Group-controlled experiments in the evaluation of social work services', in Lishman, J. (ed.), *Evaluation*, London, Jessica Kingsley Publishers.
- Shotter, J. (1993) *Cultural Politics of Everyday Life*, Buckingham, Open University Press.
- Simon, H. (1999) 'Cognitive architectures in a rational analysis: comment', in K. VanLehn (ed.), *Architectures for Intelligence*, Hillsdale, NJ, Lawrence Erlbaum Associates.
- Skinner, Q. (1988) *Meaning and Context*, Tully, J. (ed.), Oxford, Polity Press.
- Smith, C. (1997) 'Children's rights: Have carers abandoned values?' *Children and Society*, **11**, pp.3–15.
- Smith, D. (1987) 'The limits of positivism in social work research', *British Journal of Social Work*, **17**(4), pp. 401–16.

- Sober, E. (1978) 'Psychologism', *Journal for a Theory of Social Behaviour*, **8**(2), pp.165–92.
- Taylor, C. (1985) *Human Agency and Language*, Cambridge, Cambridge University Press.
- Taylor, C. (1989) *Sources of the Self: The Making of Modern Identity*, Cambridge, Cambridge University Press.
- Taylor, S. E. (1981) 'The interface of cognitive and social psychology', in Harvey, J. H. (ed.), *Cognition, Social Behaviour and Environment*, Hillsdale, NJ, Erlbaum.
- TOPPS (1999) *Modernizing the Social Care Workforce*, Consultation document, October, Leeds, TOPPS.
- Townsend, P. (1970) 'The objectives of the new local social service', in *The Fifth Social Service*, London, Fabian Society.
- Turner, S. P. (1977) 'Complex organisations as savage tribes', *Journal for the Theory of Social Behaviour*, **7**(1), pp. 99–125.
- Warner, M. (1995) 'Taylorism and human resources in Japan', *Organisational Studies*, **16**(1) pp. 509–22.
- Webb, S. A. and McBeath, G. (1989) 'Political critique of Kantian ethics in social work', *British Journal of Social Work*, **19**, pp. 67–71.
- Winch, P. (1976) *The Idea of a Social Science and its Relation to Philosophy*, London, Routledge & Kegan Paul.
- Wohlsetter, R. (1962) *Pearl Harbour: Warning and Decision*, Stanford, CA, Stanford University Press.

## Acknowledgements

I would like to thank Paul Stepney for his comments and suggestions on an earlier draft of this paper. I have also been greatly assisted by the comments of the reviewers of this article and the recommendations of the journal editors. Finally I would like to thank Graham McBeath and Penelope Adamson for their contributions.