

JUST FOR THE RECORD ? NOTES TOWARDS A THEORY OF INTERVIEWING  
IN EVALUATION \*

Barry MacDonald and Jack Sanger

Centre for Applied Research in Education  
University of East Anglia  
Norwich, England

For the second time that day, deliberately now, Flavia said,  
 'It takes two to tell the truth.'  
 'One for one side, one for the other?'  
 'That's not what I mean. I mean one to tell, one to hear. A  
 speaker and a receiver. To tell the truth about any complex situation  
 requires a certain attitude in the receiver.'  
 'What is required from the receiver?'  
 'I would say first of all a level of emotional intelligence'.  
 'Imagination?'  
 'Disciplined.'  
 'Sympathy? Attention?'  
 'And patience.'  
 'Detachment?'  
 'All of these. And a taste for the truth - an immense willingness  
 to see.'  
 'Wouldn't it be simpler,' he said, 'just to write it down?'  
 'Postulating a specific reader-receiver?'  
 'Casting a wider net: one or more among an unknown quantity of  
 readers.'  
 Quite cheerfully now, Flavia said, 'You forget that I am a writer.  
 Writers don't just write it down. They have to give it a form.'  
 He said, 'Well, do.'  
 'Life is often too ... peculiar for fiction. Form implies a  
 measure of selection.'  
 He pleased her by catching on, 'At the expense of the truth?'  
 'Never essentially. At the expense of the literal truth.'  
 'Does the literal truth matter?'  
 She thought about that. 'To the person to whom it happened.'

(A Compass Error, Sybille Bedford)

\* Paper presented to the Annual Meeting of the  
American Educational Research Association,  
19-23 March 1982, New York, in a symposium  
entitled 'Evaluation Methodology'.

This extract from a novel maps an area where social science methodologists seldom tread. The dynamics of the interview process still await sustained treatment, though Guba and Lincoln (1981) have made a beginning. In educational research and evaluation, where an increasing reliance on the interview method is evident, there is little by way of guidance for the novice in an otherwise comprehensive literature. Even field work manuals talk around the interview, not about it. We can't find books where examples of good and bad interviews are discussed. One is tempted to conclude that the interview process is indescribable or unjustifiable, apparently self-taught, probably idiosyncratic, perhaps not worth talking about. Even if one pieces together the relevant fragments from the voluminous output of a methodologist like Lou Smith, who more than anyone else has described his fieldwork behaviour in terms of its underlying intellectual purposes, structures and processes (see particularly Smith 1981) the impression remains that a rather important instrument of evaluative enquiry is characterised by an unusual degree of normative latitude.

The odd thing about this is that whenever evaluators get together to discuss how they do their work, or when they try to induct newcomers to the field, interviewing practices and skills feature prominently on the agenda. In an evaluation centre like ours for instance, which has built a tradition of naturalistic programme evaluation, the ends and means of interviewing are the subject of extensive and often heated debate. From this debate different profiles of interviewing practice begin to emerge and take shape, the blooms of a hitherto secret garden. And what becomes immediately evident is that this secret garden is no collective farm. Even in a group like ours with a shared rhetoric of intent and consensual canons of criticism the varying prosecutions of intent and interpretations of the canons reveal a disturbingly wide range of *modi operandi*. Sure, we all agree that interviewing should be consistent with the naturalistic imperative - to generate public knowledge of educational action that derives from, consists of, or is co-extensive with private knowledge. And sure, we all agree that interviews, the best method we have for getting access to this private knowledge, should be effective, fair and valid (leaving aside House's (1981) collapse of fairness and validity into a single category). Such agreements do go some way towards defining the boundaries of the

permissible but they fall short of resolving our epistemological, political and technical differences. These differences shape our procedures, our roles and ultimately our products, in ways that are not widely understood. This paper is an attempt to provide for some a window, for others a door to what has been a private debate. In the course of writing it one reason for the paucity of public debate has become quite clear. The issues are complex and interpenetrating, and the range of practice is so wide as to defy unchallengeable categorisation for purposes of comparison and contrast. We have, we think necessarily, limited the coverage of the paper in several ways. In the first place it is about the so-called 'unstructured' interview, for reasons we will shortly elaborate. In the second place the discussion is organised around one seemingly limited issue, whether the interviewer should take notes or tape record the interview. And finally, only two profiles of interviewing are described, compared and assessed in terms of their strengths and weaknesses. These profiles are not of course the only choices open to the would-be interviewer, nor are their logics the only logics available. Our intention is to expose the variables involved by elaborating two lines of reasoning, and to draw attention to some of the consequences of choice.

Before embarking upon that task it may be useful to locate the topic within the still evolving field of programme evaluation. It would now be rare to find a programme evaluation that did not at some stage use interviews to obtain data. Even since Stake (1967) convincingly argued for a much more comprehensive range of information needs than had previously been recognised evaluative investigations have increasingly included interviewing in methodological packages designed to cope with an expanding matrix. Evaluation has become a complex methodological task. As those who use and shape evaluation become more sophisticated about information needs and more realistic about the prospects of immediate programme success the demands made of evaluation stretch both the resources and skills of teams and individuals. Relatively simple input-output models of programme effectiveness, calling for specification at one end and measurement at the other have given way, in the sober aftermath of a succession of reformist misadventures, to concerns that stress programme understanding, reception, variation, and impact in the broadest sense. The 'why of the outcomes' (Hastings 1966) has become an important provision in evaluation

designs. It is this broad change that underlies the emergence in the last decade of a naturalistic school of programme evaluators, field-based chroniclers and interpreters of the participant constituencies generated by programmes. For this school the interview, even more than direct observation, is the predominant means of data gathering. Its flexibility and negotiability make it uniquely attractive to evaluators who usually need to gather many different kinds of data in a short span of time. But even traditional evaluation studies whose main focus is still aims achievement now supplement their test batteries with interviews designed to yield contingency data. In other words the interview is now a commonplace instrument of programme evaluation studies.

A great deal of this interviewing is known as 'unstructured'. The term has no consensus meaning. At the one end of the spectrum of users are those who, armed with a range of programme interests, problems, issues, perhaps even conclusions, mean by it only that they don't know what line of questioning they will pursue until they have a chance to see what kind of information is available. 'Unstructured' in this sense means no more than tactical opportunism. At the other end, where most of the 'naturalists' are located, are those for whom the term 'unstructured' connotes an epistemological sensitivity to the terms in which interviewees understand their experience, and an intent to in some sense keep faith with these 'structures'. Again, what is meant by keeping faith is not always clear. There is a big difference between those for whom validity inheres in the subjective, individualised organisation of affect and cognition, those whose claims rest upon the strength of a literal interpretation of the term 'interview', and those metatheorists who seek reconstructions of experience that account for the self-knowledge of others. All would agree that validity depends upon inter-subjective agreement but would differ about the parts played by interviewees, interviewer, and audiences in securing and validating the data of educational experience. Some invoke scientific labels to indicate where they stand on this rather daunting issue, but it is not at all clear how evaluative interviewers of, say, phenomenological persuasion would differ from, say, symbolic interactionists, ethnologists, ethnomethodologists, existentialists, linguistic ethnoscientists or ethnographers of communication. But as evaluators of educational programmes, concerned with the acquisition and transfer of

knowledge of human action, we all have at least a sense of the problematics of enquiry that shapes and sensitises our practice.

For the evaluator the intrinsic problems of interview data are compounded by the socio-political circumstances in which he tries to resolve them. He operates in a context of persuasion, a contest for resources in which his role is to provide knowledge for allocation decisions. With truth and consequence so intertwined disinterest, which might help, is a scarce commodity. And that's not all. He has to be fair to those whose interests are at risk, and this commitment can seriously restrict the pursuit of private knowledge. When an evaluator constructs an interview sample that sample has to represent the constituency of interests generated by the programme if he is to avoid the charge of taking sides. Programme constituencies tend to be large and varied and so must be the sample. The evaluator rarely has the time, resources or freedom to develop the kind of intimate, friendly relationship with respondents that is commonly advocated by social scientists as a precondition of productive and valid interaction. Prominent programme actors apart, the evaluative interview tends to be a one-off, hit or miss encounter between relative strangers. Can it do more than offer the stake-holders a chance to be heard? Can it do even that?

At some point a programme evaluator needs to know what it is like to take part in the programme, what meanings and significance it holds for participants, why they respond to it in the ways they do. He is an outsider looking in, trying to find out what it is like to be an insider. Not merely for his own satisfaction; he has to tell others. These others may be non-participants, his various 'publics'. Or they may be the participants themselves, users and receivers as well as givers of this knowledge. He has therefore both outsider and insider audiences in mind. He already knows a lot about the surface features of programme experience- roles and responsibilities, observed behaviours, self-reports and other indices of programme involvement and impact. He knows a lot too about patterns of interaction between programme participants, which participants have had opportunities to observe and judge other participants, who is likely to know what about the programme. But he knows too that these surface features are more constitutive of public performance than of private

experience, and are heavily shaped by programme scripts, professional norms, personal image management and structures of accountability. He wants, assuming that his audiences need, a better understanding than these indices give of why the programme in action is the way it is. In these circumstances he looks to the unstructured interview to reveal the dark side of the programme moon.

Unstructured interviewing is peculiarly appropriate for such a purpose, as well as being arguably indispensable for those evaluators who seek to represent the concerns and interests of evaluatees. In principle it allows both parties to participate in the generation of an agenda and permits the interviewee to be proactive in that process. The extensive and effective use of such interviews could help evaluators to redress the imbalance of interests that invariably ensues from the circumstances and sources of their commission. But unstructured interviewing promises more; it appears to offer a means of getting to the nub of the 'information for understanding' problem. With rare exceptions, and to greater or lesser extent, the programmes we evaluate fail to deliver the goods. They stumble, they seize up, they get subverted, emasculated, rejected, diverted, diluted, or otherwise run out of steam. Even those programme evaluators who pre-conceive their major task as the demonstration of goal accomplishment end up casting around for unanticipated benefits and trying to explain short-falls in targeted outcomes. The development of more sensitive and durable models of intervention has much to gain from efforts to map and understand what happens to programmes, and the unstructured interview is the means by which underestimated or unanticipated dimensions of programme experience may be probed.

As we have indicated, there is very little help as yet in the growing literature of evaluation for those who seek guidance on good practice in unstructured interviewing. Even the naturalistic school of evaluators, for whom the evocation of the personal experience of public life is a required strand in programme portrayal, has had little to say about the principal means by which this evocation is achieved.

This presentation will explore one seemingly insignificant variable in unstructured interviewing, the choice between tape-recording and note-taking

as the means of recording. We say 'seemingly insignificant' not because it seems so to us but because the few published guides that make reference to it pay scant attention. To quote the most recent of these, (Guba 1981) *"For most of this kind of interviewing we recommend notepads and written notes; tape-recorders can make one a victim of the 'laters' - 'later I will listen to these tapes, later I will analyse these data'."* Here, typically, tape-recording and note-taking are treated as if they were alternative means of generating an identical product rather than, as we will argue, generators of different kinds of encounter with divergent products.

We launch our analysis from a penetrative observation from a cognate field. Johnson, reviewing his field study of social welfare offices (Johnson 1975), notes briefly two phenomena that are central to our analysis of interviewing options. At one point in his research he had the opportunity to compare written field notes with cassette recordings of the observed events. He writes: *"First, the master field notes reflected an attempt to recapture all the statements of a particular worker as he presented the facts of a case and the diagnosis reached. Grammatical and syntactical structures, as I recalled them, had also been recorded. The transcripts, however, illustrated my illusions. They revealed only my grammar and syntax."* If this degree of discrepancy is characteristic of a committed and sensitive observer what can we reasonably expect of the notes of the more involved interviewer? Does it matter? One distinguished sociologist, questioned on this issue at a gathering of naturalistic enquirers, shrugged off the problem as a pedantic quibble, with words to the effect "I don't care if he actually said what I say he said. The point is he might have said it." (We leave to the reader the enigma of the status of a recalled exchange that was neither taped nor written down.) Some of those present were shocked by the response, others nodded knowingly. Whose truth is it, anyway? Later in the same review Johnson returns to the comparison, this time to attack the taped record. *"When I listened to the cassette recordings of home visits, on several occasions I realised that I knew certain things about the actions that had not been stated in so many words. This is not to imply I had to read between the lines of the transcripts or review them in an ironic or metaphorical manner to understand them. It is to say some of the crucial*

features of the action were not expressed verbally." Is that what the sociologist meant? Such observations and reactions introduce one set of issues and possibilities that need to be taken into account when we choose how and what to record when we interview. Fidelity, accuracy, validity, even authenticity are at risk. But there is another set of issues and possibilities, linked to the first set but not addressed by the comments we have cited. A decision to take notes or to tape-record significantly influences the nature of the social process of interviewing, in particular the generative power of the encounter. In what follows we explore both the necessary and the arguable differences between a conversation in which one participant writes things down and a conversation that is automatically recorded.

From this point on we attempt to pursue these issues by describing, justifying, comparing and contrasting two models of interviewing, both offered as responses to the naturalistic aspiration, both conceived and practised in a context of programme evaluation concerns. One favours tape-recording, the other note-taking. Since one of the authors is committed to the first of these models, the other to the second, we are jointly committed to not taking sides in this presentation.

For the evaluator the unstructured interview poses three serious problems. The first is how to achieve a penetrative conversation with relative strangers in a short space of time. The second problem, given a 'solution' to the first, is how to be fair to the interviewee whose interests are at stake. Striking a balance between the 'right to know' and the individual's right to some measure of protection is a central issue in the politics and ethics of evaluation practice. In unstructured interviewing the individual faces the maximum risk of personal exposure, and this means that the two problems referred to are at least uncomfortably juxtaposed and arguably indissolvable. The third problem, given a 'solution' to the first two, is 'What claims to truth are associable with the results?' The case for any system of conducting, recording, interpreting and reporting such interviews must therefore address these problems and offer a resolution.

Although the choice between tape and notes can be seen as a discrete

issue of ad hoc preference we believe that the choice is better understood as an issue embedded in differing evaluation rationales, and we begin our dissection of two interviewing practices by outlining the reasoning that we invoke in their defence. The case for tape-recording is made within a particular view of the evaluator's role in a liberal democratic society. The case for note-taking takes account of this view, is sympathetic to its concerns and values, but offers an alternative response to the problems of evaluative action. The two positions are comprehensive in that they address the purposes, values and aspirations of evaluation and try to show how procedures and methods are related to these. At the same time the overall advocacy is tempered by consciousness of deficiency. We want more attention to the issues, not converts to a particular practice.

#### The case for tape-recording

The unstructured interview is the means by which, throughout a constituency of stake-holders in a particular programme, the evaluator promotes the manufacture of a trading commodity (private data, personal experience, individual evaluations) that will constitute the basis of his subsequent efforts to achieve exchange (reporting). Within this perspective the autonomy of the interviewee is respected, and the principle of reciprocity guides the evaluator/broker of trade offs between constituents. The separation of the data generation and data reporting phases of the process is essential to the operation, as is the construction of an interview sample that represents programme 'interests'. In its strongest form this conception of evaluation derives from a political philosophy that stresses the individual as decision maker and the dangers of both bureaucratic and academic control of educational enquiry. Let us expand that position a little. All evaluation is formative. The question that evaluators address is "What should be done next?" All evaluators would agree with that. What divides them is the substructure of that question. Whose next step matters most? Whose evaluation of what has happened so far should count? How should decisions about the next step be reached? Evaluators part company on these questions, and do different things as a result (see MacDonald 1976).

Choosing priorities - of focus, of issues, of audience, is clearly a

headache for evaluators. After all everybody has an 'interest' in educational programmes. Everybody evaluates education in the light of that interest and with whatever available information they choose to make use of. Everybody acts on the basis of that evaluation in so far as it is compatible with their other interests and evaluations. In this sense everyone is entitled to consideration as an evaluative actor with respect to social policy, entitled to a share in the evaluation service. But of course not everybody has equal potency of action or accountability for consequence. Some are more responsible than others for the allocation of resources to education and for their effective use. Some have more to gain and lose. Potency of and accountability for action are prime factors in the evaluator's response to the problem of whose next step he should address. So is demand, positive and negative. Evaluators are not short of advice or free of direction- towards this, away from that. So is access. Evaluators can only look at what they are allowed to see, and visas can be hard to get. They have to honour their contracts too, and these may preempt both initial and emergent options. The independence we like to associate with evaluation is difficult to secure and maintain in this context of multiple constraints.

Nevertheless all evaluators carry into their work an ideal of their service that determines how they exploit the available or negotiable areas of discretion. The particular conception of the evaluation service that we have outlined here is one to which one of the writers (MacDonald 1976) has attached the label 'democratic', a deliberately provocative title intended to focus attention on the political function of evaluation. Democratizing evaluation (making the service more consonant with the principles of the liberal democratic state) commits the evaluator to a particular political view of what he is about. It makes central and problematic the means by which and the degree to which private knowledge should become public knowledge. It means respect for persons as both givers and receivers of information. It means enhancing the possibility of the widest possible debate about matters of common interest and consequence. In this sense an evaluation report can be seen as fulfilling the function of foreshadowing (rather than preempting or concluding) a debate about what should happen next. That is the justification for evaluation reports being inconclusive accounts of programmes.

Given these aspirations, and focussing now on the unstructured interview, we can say that words are important, what the interviewee says. Non-verbal communications are interpretations of the observer. Creating the conditions in which the interviewee says what he means, means what he says, says what he thinks and thinks about what he says, are the major tasks of the interviewer. Self representation in transportable form is the aim.

The case for the tape-recorder is embedded in these concerns and values. At one level it rests upon a conception of the interview as a creative process which demands of the interviewer full commitment to the generation of data. The use of the recorder allows postponement of those roles (processing and reporting) that would seriously limit this commitment or otherwise inhibit the interchange. A procedural corollary of this aspiration is that the data so generated belongs in the first instance to the interviewee. Its subsequent use by the interviewer for the purpose of informing others has to be negotiated with the interviewee-owner. The presence of the recorder means that the interviewer is free to concentrate on one task - production. Relieved of any immediate need to edit the communication, to select, marshal and codify what he hears and sees he can listen to all that is said, observe all the non-verbal communications and develop a person-to-person dynamic without the hindrance of constant reminders of ultimate purpose and role. The tape-recorder in this sense seems to offer the best opportunity of realising the intentions of the unstructured interview, to evoke and develop the interviewee's affective and cognitive experience of the programme. Precisely because the encounter is not experienced by the interviewee as instrumental to the purposes of others, precisely because he is not compelled to produce the immediately negotiable public account, the interview offers a rare opportunity to explore, with an unusually attentive and interested listener, his own realms of meaning and significance. It is these realms of meaning, the private experience and evaluation of public life, that the programme evaluator needs to represent in the dialogues of educational policy.

The record is essential for subsequent phases of the evaluation. It guarantees the availability of an accurate chronicle of the verbal component of the interview, a total record of what both participants

say. Although it is unlikely to be reproduced in full in an evaluation report the record is the basis of subsequent representations of the interview and negotiations about its use. For the interviewee and for other parties who may wish to challenge or corroborate the use in context or interpretive selection of the data it constitutes an independent and undeniable resource. Depending upon the agreed rules governing control of the interview data the tape may be seen as a first draft, a basis for further development as well as negotiation. Given unqualified interviewee control over the use of the interview the evaluator does of course risk the loss of revealing data, but interviewees may exercise this power by demonstrating a correspondingly greater sense of responsibility for securing the validity and adequacy of the data. Experience shows that programme participants who have had this opportunity to ensure that their experience, concerns and perspectives are adequately represented in the evaluation report (i.e. that they have had a say, not just a hearing) are much more receptive to critique of their actions and less hostile to the reporting of alternative perspectives. In short the use of the tape recorder in the generation of a data base enables the tasks of the evaluator to be more effectively shared with many of those who are most vulnerable to the consequences. Since we have argued that the taped interview frees the interviewer to develop a more penetrative discourse the provision of these checks and balances constitutes a necessary safeguard against misuse of the product.

#### Weaknesses of tape-recording

It is only a partial record of the interaction and the communication - the sound component, and even this partial record will be reduced if, as usually happens, subsequent use of the record is based on transcript-words only. These verbatim accounts reveal the extent to which communication depends upon the synthesis of sound, gesture, expression and posture. In extreme cases the word residue of the communication is unintelligible. In every case it under-represents the communication. The experienced interviewer can to some extent minimise this problem by prompting verbalisation ("*That's an interesting shrug, what does it mean exactly?*"), Note-taking interviewers have a similar problem but

rely on their own reading of the communication to round out incomplete sentences and non-verbalised intimations of states of mind. Facility with language, experience of self-representation and a preference for the kind of discourse that best survives the recording filter are important variables in any programme constituency, and there is a danger that tape-based representations will be skewed in favour of the most articulate. This skew can be compounded by uneven take-up on the part of interviewees of opportunities to improve the accounts they have given and to monitor their use. In many educational programmes these characteristics of interviewees will correlate with the interviewee's location in a hierarchical system and can lead to a serious distortion in evaluation reports in favour of superordinate perspectives.

The would-be democratic evaluator will do his best to counter these threats to the validity and fairness of the reports. He must make sure that his principles and procedures are understood by all his interviewees, that all have reasonable opportunities to exercise the rights accorded to them, and that those who have most difficulty in fulfilling their tasks are given most assistance. These obligations upon the evaluator lead us into consideration of a major weakness of the approach - the demands it makes of the evaluator's time and resources. It is a slow method and one which is costly in terms of secretarial support. It invokes a complex system of separate stages in the execution of the evaluation task and the maintenance over a period of time of a participant network. It is ill-suited as a major instrument of enquiry in circumstances of urgency, where information about one part of a constituency is needed quickly by another. It is messy, complicated, and exasperatingly subject to delays, even where the evaluator has negotiated agreed deadlines with evaluatees. For these reasons alone it is unpopular with those who commission evaluation studies, and can often only be successfully advocated in circumstances where the inadequacy of managerial assumptions and forecasts is either evident or anticipated, where there is enough time to learn, or where programmes are so politically sensitive that a democratic evaluation is a necessary concession to hostile stake-holders.

The case for note-taking

Historically, and in disparate disciplines and paradigms, note-taken accounts of interviews have been preferred to other forms of recording in that they aspire to serve two basic functions for which other techniques are inadequate. These functions are unobtrusiveness and economy of effort. Any reference to the technology of recording by authors of case-study manuals or naturalistic inquiry methods usually prefaces a choice for note-taking with some such declaration. However, note-taking has a broader basis for use than just these two criteria.

The note-taking interview should be seen as a joint act of making. The evaluator is a representative of near and distant audiences and enables the interviewee to develop a case for those audiences. The fact that the data is generated in note-form maintains least transformation in the process of creating the final vehicle of communication in which the data will reside. At all stages there are words on paper. By encouraging the respondent to be privy at the outset to these stages of production, the evaluator's operations are given high and contestable profile and her authority, conversely, diminished as the respondent discovers an equal control of opportunity. If, as would be ideally the case, the evaluator is able to complete her notes and present them the same day for comment to the respondent, then the evaluation process will become much more meaningful to him. And the respondent gains shared control over his products.

What is this mysterious process? It comprises the usually hidden, reflexive acts of interpretation, analysis and synthesis which converts data into draft reports. These acts are evidenced in the written words, themselves, the syntax, the metaphors, the juxtaposition of information, the special highlighting of data and the very act of overall simplification. They combine to form the groundwork of theory-building. Essentially, they are interwoven in a story which communicates the 'essence' of the constituency's experience. It is as a story-teller that the note-maker achieves greatest impact.

Note-taking should aspire to make the interviewee aware that he is not merely a source of so much recondite information but that he is

an instrument of education in the evaluator's operations. The personal constructs of the interviewee are to be afforded the important significance owing to them by the deference exemplified in the conduct of the interview.

He becomes the subject of thoughtful effort on the part of the evaluator to be placed carefully in the unravelling scheme of the programme. Note-taking, at best, draws interviewer and interviewee closer in the mutuality of the event. Their developed intimacy imbues both words and syntax with information (the substantive nature of the interviewee's account) and with the character of the interviewee. Properly recorded notes thus become acutely analogous to the interview in its social and psychological context. For the recorder, the notes are a meaningful coding, a mnemonic arrangement of evaluation history. Providing the evaluator manages to engage the respondent in joint-action, then there is every possibility that the interview can proceed to the penetrative levels that the interviewer requires. The note-book acts as a symbol of the interest and concern of the interviewer and the importance she ascribes to the interaction.

There is an overall pragmatic reason for preferring notes to other forms of recording during evaluation: economy. On-site data processing and the collection of summarised information enable the evaluator to keep in constant touch with the pulse of her operations. Analysis and synthesis leading to theory are kept within the event and are not imposed at a temporal distance in the manner of a jigsaw construction of discrete pieces of cold data. In the best of circumstances this keeps the evaluator focussed upon the properties of the field of study, explaining them in terms of idiosyncratic context rather than as part of an imposed grand design. Patterns of explanation which make up eventual reports, case-studies or portrayals must take account of these disparately processed, obstinately extant interview events, rather than seeking post-event coherence for a mountain of raw data and treating it piecemeal.

And what of the practical criteria which facilitate the successful interview? When to write and what to write provide the interviewer with

her greatest challenge. Given that eye-contact and general non-verbal encouragement provides the basis of sympathetic listening, recourse to notes should be minimised. Notes are generally effective in/for the following circumstances:

- When previously undiscovered data of importance arises from the testimony of the witness
- Data which would be difficult or impossible to triangulate in the testimonies of other witnesses
- Metonymic statements whose form seem to encapsulate current thinking/practice in individual or group
- Statements which, though obviously seriously intended, seem at variance with the expected or consistent viewpoints of individual or group
- Statements which politically, theoretically or situationally seem to define significant insights or attitudes of individual or group
- Key words whose currency gives insight to individual or group thinking
- Key words, which for the interviewer, allow reconstruction of the depth and breadth of the interview.

The purpose of these notational forms is to make the respondent conscious of the evaluator in a service role, at ease and in control of the technology of recording. The service role becomes experientially amplified for the interviewee in the course of that event. The role is one which facilitates the respondent in developing a most articulate and just explanation of his thinking concerning all areas of mutual and public interest.

Note-taking and note-making will always be a matter of highly developed skill. Every act of recording involves meaningful transformations of data. Words have strong contextual clothing. Verbatim accounts do not necessarily provide accurate representation of what occurs in interviews. However, through the broad strokes of the note-taken account, much nuance, implicit and explicit, is retained, rather as in the works of Impressionism, stand too close and the meaning's gone. In this way note-recordings are ideally suited to protecting the respondent against

the kind of retaining mud that context-bound statements often produce. Note-taking attends to the fluid process of people-in-charge. It doesn't hold them to particular states or attitudes or final statements but reflects the daily choices and changes that people have to make in their daily lives.

#### Weaknesses of note-taking

Note-taking has some very obvious problems associated with it. In many ways these problems combine to demonstrate that, at the stage of recording data, factors such as accuracy, fairness and appropriateness may be largely decided by the evaluator's skill with the technology.

The most obvious practical difficulty to the smooth generation of data which note-taking presents is in its capacity to be distracting to the respondent. Handled badly: breaks of eye contact to rush to the note-pad, a slow scrawl holding back a respondent's flow or even the pained look of the evaluator realising that she is suffering data overload; and the interview devolves into non-penetrative irritation. If the respondent does not dry up, then she may become 'co-opted' to the needs of the interviewer by picking up cues from pen movement, speaking selectively and pausing dramatically to allow assimilation and recording. Lack of penetration becomes heightened because the evaluator's eyes, fixed to her writing, misses facial contact and other non-verbal referencing which together help to tune the meanings of spoken words. An interpretation which is heavily ear-dependent is likely to be very different from an interpretation employing the usual mix of senses.

If the evaluator does not co-opt then she may dominate. Note-taking is an activity which can lend itself to massive infusions of the evaluator's own attitudes, interests and needs. Unconsciously, as her fingers write, she may be grasping for the tightest control of the type and ordering of data. Improperly handled, notes become the coded instrument of a dominant interviewer and the respondent's case becomes perverted to fulfill her goals. In terms of the three styles of evaluation posited by MacDonald (1976): bureaucratic, autocratic and democratic, note-taking would always seem more naturally suited to the two former. In the

latter case, the most stringent discipline is needed in order to come near to upholding a democratic mode.

A major concern in note-taking is the sheer loss of hard information. There is inevitable reductionism in its use. Babies may be thrown out with bathwater, underlying threads missed and facts mislaid. Because it tends to focus on the highlights of the respondent's case, background detail, contextual evidence and powerful, though illogical or not immediately apparent influences, may be omitted as extraneous noise. Data which depends entirely upon note-recordings will remain questionable until the quality of the writer can be vouchsafed.

A last problematic area is the lack of leverage which notes afford in presenting cases. Because they can always be called into question as 'mere interpretation', they do not represent a means by which an evaluator can hold a respondent to witness in the development of his case. Without the actual words what is there to barter with? The undoubted consequence of this lack of hard currency is the tendency for notes to provide ample evidence of the interviewee's public status rather than his personal understandings.

In the latter case, the most stringent discipline is needed in order to come near to upholding a democratic mode.

#### GENERATING, PROCESSING AND REPORTING INTERVIEW DATA - TWO PROFILES

A major concern in note-taking is the sheer loss of hard information.

There is inevitable reductionism in its use. Babies may be thrown out

On the following two pages we attempt to illustrate the consequences

with bathwater, underlying threads missed and facts mislaid. Because

that flow from a choice of tapes or notes as the recording technique of

it tends to focus on the highlights of the respondent's case, background

the unstructured interview by offering a detailed breakdown of two

detail, contextual evidence and powerful, though illogical or not

practices with recording technique as the key variable. In these charts

immediately apparent influences, may be omitted as extraneous noise.

we address the question "What do the cases for tape or notes mean in

terms which depend entirely upon note-recordings will remain questionable

terms of concrete operations, procedures and products?" Evaluation

until the quality of the writer can be vouchsafed.

interviews are shaped by individual theories of evaluative action, personal

views of purpose and possibility in which philosophical, moral, ethical,

political, social, and psychological ingredients are combined. We have

presenting cases. Because they can always be called into question as

argued that it is a mistake to assume that techniques of recording are so

'mere interpretation', they do not represent a means by which to

malleable and adaptive that they can be harnessed to any intent. Different

evaluative action can hold a respondent to witness in the development of his case.

techniques make different processes and products possible.

Without the actual words what is there to barter with? The undoubted

consequence of this lack of hard currency is the tendency for notes to

provide ample evidence of the interviewee's public status rather than

his personal understandings.

In the latter case, the most stringent discipline is needed in order to come near to upholding a democratic mode.

NOTE - TAKING

DATA GENERATION	CHARACTERISTICS	STRENGTHS
EFFECTIVENESS	Structured roles. Working relationship. Question/Answer style. Episodic discourse. Interviewer as informed questioner and ethnographer of communication.	Only what is 'finished' and valued is recorded, so interviewee's stumbles, confusions, incoherences, irrelevances are weeded out or improved and polished. Professional control of the record. Penetrative of meaning and salience. Parsimonious.
FAIRNESS	Private except for what is noted - and remains so. Open notebook offers interviewee cumulative evidence of data value. (Even closed notes indicate selection criteria.) Time out to write and check entries enhances interviewee control of testimony.	Low risk testimony the norm. Affords the security of the conventional recording medium. Emphasis on role performance rather than role experience protects the person.
VALIDITY	Emphasis on public outcomes minimises lazy, careless or unsupportable testimony. But - no objective record; limited verbatim data.	Non-verbal as well as verbal components of communication taken into account. Interviewer uses knowledge and skills to cross-check, represent other viewpoints, challenge testimony.

DATA PROCESSING	CHARACTERISTICS	STRENGTHS
EFFECTIVENESS	Negotiation of noted summary in biographic form for improvement and release. Interviewee invited to: (a) authorise the representation (b) rewrite (c) add	Summaries facilitate faster data negotiation and clearance. Economical in time and cost. Clearance facilitated as summary approximates to recall of event.
FAIRNESS	Absence of high risk data reduces need for confidentiality. Joint arbitration of processed accounts. Interviewee can totally reject the account as inconsistent with his recall of event.	Nature of summary affords less threatening accounts. Summaries evidence evaluator's style and likely use of data - signals which inform and 'arm' respondent against later abuse. Economical, intelligible forms facilitate interviewee task in negotiating clearance.
VALIDITY	High premium placed upon interviewer's skill and integrity in selection, analysis and synthesis of data. Accounts of particular testimony structured in terms of their contribution to generalised validity of program overview.	Rich data on context of response. Interviewer's skill, interests and overall knowledge enable valuation, validation and rationalisation of data.

DATA REPORTING	CHARACTERISTICS	STRENGTHS
EFFECTIVENESS	Biographical portrayal or narrative account of the programme experience, with individual cameos. Thematic or issues organisation. Interviews treated piecemeal or as epitomes of the program story.	Condensed and susceptible to summary. Complex features noted but integrated. Commonalities emphasised. Parsimonious use of raw data to support or illustrate. Offers a synthesis of 'understandings'.
FAIRNESS	De-emphasis on individual testimony. Opportunities to comment, adverse comments noted and reported, usually as addenda.	Individuals protected because their testimonies are subsumed in framework of understanding.
VALIDITY	Emphasis on contextualisation, coherence, contingency. Inherent logical forms in summarising afford critique. Constructs explicit.	Interviewer, with skills, interest and knowledge, is the most qualified to judge authenticity, relatedness and resulting hierarchies of data importance. Interviewer's commitment is to the 'greater truth'. Interviewer accountable to academic peers.

T A B L E A

W E A K N E S S E S

Reductionist. Interviewee deference to recording task constrains natural discourse, invites closure and conservatism and resultant lack of penetration. Reduced non-verbal contact.

No chance to reconsider testimony or its representation. Tendency for interviewer's structures to organise the data. Reliance upon interviewer's skill with shorthand/encoding.

Little raw data survives. Most data has been treated at source in some way. Difficult to respect informal, non-propositional forms of knowledge and understanding.

W E A K N E S S E S

Difficult to use data except in individual interview packages. Paucity of raw data. Understandings of data prematurely fixed. No re-selection of raw data possible.

Packaged nature of summaries deters from deleting/adding to accounts. Respondents private interests under-represented. Empathy/sympathy with interviewee at mercy of writer's skill. Lack of independent record may lead  
(a) strong interviewees to disclaim account  
(b) weak interviewees to accept account

Interviewer error/bias in generation compounded at advanced processing stage. Lack of objective evidence to substantiate analysis. Vulnerable to facile causal interference. Autobiography treated as biography.

W E A K N E S S E S

Individuals submerged in overview or lost in 'group' perspectives. An outsider's account of insiders.

Interviewees dependent on sympathetic evaluator as spokesman for their realities. Importance of individuals as actors diminished. Interviewees deskilled as critics by literary construction and by lack of source data record.

Loss of individual voices. Final reports are summaries of summaries - high possibility of gross reductionism, compounded error and heavy skewing. Reliance on interviewer as story-teller increases systematic bias. No objective raw data to support the account.

T A P E - R E C O R D I N G

D A T A G E N E R A T I O N	C H A R A C T E R I S T I C S	S T R E N G T H S
EFFECTIVENESS	Personalised relationship. Conversational style. Continuous discourse. Sustained multi-sensory communication. Interviewer as listener.	Naturalistic. Prolific. Penetrative of experience. Tolerant of ambiguity, anecdotalism, inconclusiveness.
FAIRNESS	Confidential but on-the-record. Interviewee control emphasised, but hazards unknown, and minimal indication of the value or likely use of the data.	Testimony as 'draft'. Authority vested in objective record. Emphasis on generation maximises opportunity to testify.
VALIDITY	Insulated from consequences. Structured by the truth-holder. Told to a person.	Raw data preserved in verifiable form. Stimulus as well as response recorded. Time to search for truths. Freedom to tell. Safe responses quickly exhausted and superseded. Dissimulation hard to sustain under continuous observation.

D A T A P R O C E S S I N G	C H A R A C T E R I S T I C S	S T R E N G T H S
EFFECTIVENESS	Record transcribed. Transcript sent to interviewee for im- provement and release. Inter- viewee invited to: (a) amend or delete (b) extend, develop (c) prioritise, indicate high risk data Uncontentious data may be sum- marised. Deadline for return stipulated.	Data retains much of its original form. Considered testimony. Inaccuracies cor- rected. Additional data obtained. More clues to inter- viewee's values and valuables, a guide to negotiable reporting. Interviewee's responsibility for the product is explicit.
FAIRNESS	Negotiation confidential. Interviewee the arbiter. Access to record. Governed by agreed rules. But, 'release' can be seen as a 'chicken run' test for the fool-hardy.	Interviewee rights respected. Time and opportunity given to change testimony, to calculate risks and benefits. Inter- viewee free to consult others, to take advice. Possession of transcript and agreement consti- tute insurance against abuse.
VALIDITY	Characterised by set sequence of moves open to scrutiny. Based on objective record.	Depends on the argument that, given the power and the res- ponsibility for making known their own truths, interviewees will make more effort to do so.

D A T A R E P O R T I N G	C H A R A C T E R I S T I C S	S T R E N G T H S
EFFECTIVENESS	Aspires to theatrical form of oral history. Interviews pro- vide sub-scripts in program drama, interwoven in chrono- logical, scene-by-scene con- struction. Draft showing data in context negotiated simul- taneously with interviewees. Draft rewritten in response to respondent critiques. Final report public.	Naturalistic autobiographical data has inherent dramatic form. Rashomon effect - multiple perspectives. Dramatic imperative over-rides inter- viewee's discretionary impulse. Surrogate experience for the reader. Yields better under- standings of what has happened, challenges social beliefs under- lying program policy and action.
FAIRNESS	Draft report confidential to interviewee group. Re-written to satisfy interviewee criticism. But in negotiation the evaluator presses: (a) audience concerns and needs (b) dramatic values	Interviewee participation. Form of the report fore- shadowed by the form of the interview. Individual testi- mony highly valued. Natural language maximises accessibili- ty to non-specialist readers and to subjects.
VALIDITY	Individual bias, censorship, inaccuracy subject to correction through consultation with knowledgeable and multi-variate constituency. Account open to external challenge based on cited testimony or back-up tapes. But - artistic values may intrude.	'Pluralist' endorsement of account as accurate, relevant, balanced. Triangulation of oral histories. Autobiographical emphasis. Appeals to reader's own experience.

T A B L E   B

---

W E A K N E S S E S

---

Selective but mindless record.  
Data overload.  
Favours the articulate.  
Machine-Phobia.  
Visible data lost.

---

High risk testimony encouraged.  
Consequences of disclosure  
difficult to estimate.  
Over-reliant on interviewer  
integrity and interviewee  
judgement.

---

Off-the-cuff data. Freedom  
to lie. Pressure on inter-  
viewee to be 'interesting'.  
Machine-Phobia. Over-reliant  
on interviewee self-knowledge.

---

---

W E A K N E S S E S

---

Costly.  
Time-consuming.  
Obsolescent.  
Loss of valuable data.  
Inadequacy of verbal record.

---

Interviewee asked to release not  
knowing:  
(a) how the data will be reported  
(b) norms of disclosure.  
Interviewee may be poor judge of  
own interests. Transcripts  
lower self-esteem.

---

No data on the context of response  
Relies overmuch on the inter-  
viewee's belief in and commit-  
ment to the evaluation mission.

---

---

W E A K N E S S E S

---

Slow delivery.  
Lacking in scientific  
respectability.  
Inconclusiveness.  
Over-lengthy due to irreducible  
obligations to individuals.  
Costly to produce and dis-  
seminate.

---

Evaluator allocates 'star'  
and 'support' status. Evaluator  
alone has all the data. Inter-  
viewee cannot retract released  
data.

---

Context of generation disappears.  
Role and influence of evaluator  
under-emphasised. Formal  
imperatives over-ride substantive.  
Genre makes the account dis-  
missable as factoid.

---

The organisational rationale of the profiles makes the conventional distinction between data generation, data processing, and data reporting, dealing with each as a separate, though not always separable, phase of interviewing practice. Following our earlier argument that interviews need to be penetrative, fair and valid we have used the criteria of effectiveness, fairness and validity to examine the claims made for each practice at each stage of the operation. Finally we have used the columns of the charts to separate the formal properties of the interviews from the claims and criticisms we think are associable with them.

The result is a highly condensed but we hope not impenetrable codification of two uses of the unstructured interview. We apologise for the dense and cryptic form of the entries in each of the fifty four boxes, and for the large number of entries. We wanted to make it possible for the reader not just to compare and contrast the profiles, but to reconstruct the realities they attempt to represent. The rest of this paper assumes that the reader has familiarised him/herself with the charts.

No profile is offered of an approach to interviewing that combines both recording techniques. It might be argued that duplication of technique could mitigate weaknesses, but the strength of counter arguments based on the compounding of constraints, mutually exclusive benefits, or simply the labour intensity of such an approach probably explains why interviewers choose one or other. That such a choice is a choice about the nature of the data itself is what we have tried to establish.

Note-taking is the traditional tool of many fields of research and has, consequently, become strongly associated with the researcher's freedom to investigate, analyse and theorise. Time and usage have largely conspired to reduce the debate over its appropriateness. Tape-recording, on the other hand, is by comparison, a relative upstart. Its inception in research was, and still is, attended by misgivings over the ethics of surveillance, its appropriateness and sensitivity. While the charts examine one comparative usage of the instruments with particular regard to effectiveness, fairness and validity, they do so within the boundary of an overall concern for democratising influences each may have upon evaluation. In this context there is an interesting dichotomy between some of the leading exponents

of each technique. Whereas notes have, in themselves, not suggested a strong and consistent model of practice and the ethics of note-taking appear to be re-written by each evaluator, in tape-recording, if the interests of respondents are to be upheld, certain principles and practices seem to be required. In many ways, exploiting the properties of the tape to mitigate the dangers of misrepresentation ensures a certain democratic procedure. It would seem that whereas for the democratic model, principles and procedures create an actively participative constituency and a restraint of academic or bureaucratic usurpation (as much a constraint upon the evaluator as anyone else), within note-taking democracy must reside in the intent of the evaluator.

We have then divergent political forms, one in which the evaluator assumes personal responsibility for the integrity, validity and appropriateness of the account and one in which the evaluator, faced with this problem, tries to devolve some of that responsibility upon all the constituency members of the evaluation. Tape-recording is seen as integral to the democratisation of evaluation process because it provides complete texts of participant accounts which remain as objective data throughout the programme to its completion and beyond. It remains a protection and defence for each participant and enables him to assume first person, direct action status within the evaluation. Thus the possibility of evaluator control appears to be restricted. But is it merely delayed?

In the tape-recording interview we have profiled it can be argued (see Jenkins 1980) that the stage by stage transfer of power from interviewee to interviewer maximally disadvantages the respondents. In this sense the whole procedure can be seen as a fly trap of the patient spider. Notes, on the other hand, produce a more complex infusion of evaluator influence. Decisions cannot be delayed but are the stuff of transaction. Note-taking is a continuous process of synthetic transformation and must always face major problems of systematic error and bias.

Lou Smith, a note-taker, approaches these pitfalls by invoking the collected viewpoints of insider groups and individuals as safeguards against a hardening and monolithic interpretation of the case. However, these viewpoints, these diverse rationales are not kept in their intact syntactical forms by the note-taker but require *\*attending and*

*conceptualising styles similar to those that the audience use."*

(Smith 1981). Here is one way in which note-taking may shape the language of evaluation reporting. A note-taker is more likely to think in terms of 'vicarious experience' and 'false consciousness' than a tape-recordist, because such terms are part of the genre of literature. A tape-recordist need only say, 'Attend to the actual words.' Literary forms and devices provide a number of useful guidelines for the note-taker. Take Smith's description of the overall product: '*Eventually we have an outline which holds. It has a structure reflecting three major dimensions: integrity, complexity and creativity. By integrity I mean it has a theme, a thesis, a point of view.*' And he goes on to compare the development of an evaluation with that of a picture, poem or novel which: '*seems to develop something of a life of its own*'.

Whilst the same pressures are on the tape-recorder user to find communicable forms he has fewer options if he is committed to preserving the epistemologies (political structures) of respondents. His prime concern is exploring live evidence with the reader. He must hold to heterogeneity. Thus the natural outcome of the tape is theatre (Tom Stoppard: "*Writing plays is the only respectable way you can contradict yourself in public.*"). But notes, whilst wishing for similar outcomes, have the added complication of providing a product in a traditional narrative form which must uphold its integrity through the quality of its language. Like it or not, the pressure is on the evaluator to tell a good coherent story. At the negotiation phase of a democratic evaluation what is negotiated by the note-taker must invite, implicitly, an approval of narrative quality and style. In all but the final stage of negotiation of tape-based extracts, there are no such features to tax the respondent. He is asked to authenticate live data. He retains control over a unitary form. In final drafts the literary confusions remain for the notetaken summary of summaries, but it is only at this stage that tape-based accounts become as perplexing for the negotiating respondent. Now, a text is supplied in which his words are embedded, displayed in arrangement with the words of others in a form whose meaning for and impact upon an audience is extremely difficult to judge. In both cases final drafts are, as often as not, faits accomplis of form and substance (see House 1981) which may do little to deliver promises of respondent control.

Despite their more overt denial of democratic process, note-based accounts conform to the expectations of literate audiences in a way that the more documentary forms suggested by tapes do not. For naturalism read narrative-imperative. Style seduces. We all want to be part of a good story. The writer retains favour through literary largesse.

On a more practical level, the evaluator is often part of a team or, if working alone, he may have adopted a plan of action which requires feedback and advice to a project. Lou Smith writes about sitting with the rest of the team and brainstorming, using read-out notes as a stimulus to provide a profile of a programme. Notes here can be seen as relatively frictionless when compared with tapes. Tapes are caught in time-locked confidentiality until the processes of transcription and negotiated use have been completed. In any case they take a lot of listening to and are not easy to skim. Tapes lack the flexibility of use that makes notes attractive. Notes remain the best communication device within the action of a programme. Exactly what is communicated and its ad hoc validity, is what is at question.

Glazer and Strauss in their grounded theory work defend the investigator's right to *'analyse his data and decide(s) what data to collect next and where to find them, in order to develop his theory, as it emerges.'* (Glazer & Strauss, 1967). Translated to evaluation such an assertion needs to be qualified by the evaluator's responsibility for programme-specific theories and understandings, and his response to the issue of whose theories and understandings take primacy. Nevertheless we have a sense here of what Smith (1981), following Malinowski, means by extolling foreshadowing in preference to preconceiving in naturalistic evaluation. The task is more daunting for the note-keeper than the tape-user. Note-taken interviews have necessarily a greater interrogative edge and a greater reliance on what is already known (conceptualised). The need for concise mnemonics on paper and the requirement for progressive refinement in the interests of the final synthesis increases the chances of slippage from foreshadowing to preconceiving. In comparison, the very obduracy of tapes in terms of processing and the respondents' control over them together delay the evaluator's ability to get on with discovering and organizing emergent issues and establishing priorities.

Concluding Comment

There are no absolute distinctions in the nature and quality of interviews based on different recording techniques. The influence of evaluator values and intents is such that the distinctions become blurred with greater skill and experience. Nor would we imply an inescapable partition between evaluations resulting from use of one or the other technique leading to totally distinct accounts. But, at different stages in the conduct and use of interviews, each technique has sufficient inherent idiosyncrasy for it to constrain or enhance what evaluators are trying to accomplish. The complexion of the whole evaluation may be affected by the choice of recording technique.

It should be emphasised finally that we have dealt here with only one evaluation instrument, the unstructured interview, and with one focus, the gathering and representation of the participant experience of educational programmes. The extent to which the priorities and values we have emphasised in this context lose their force in the broader, arguably less problematic canvass of the total evaluation mission we leave to another time.

REFERENCES

- Glaser, B. and Strauss, A. (1967) The Discovery of Grounded Theory  
Chicago: Aldine.
- Guba, E. and Lincoln, Y. (1981) Effective Evaluation. London,  
Jossey-Bass.
- Hastings, J.T. (1966) Curriculum Evaluation: The Whys of the Outcomes. Journal  
of Educational Measurement.
- House, E.R. (1981) Evaluating with Validity.  
New York, Sage Publications.
- Jenkins, D. (1980) 'An Adversary's account of Safari's  
Ethics Of Case Study'. In Helen  
Simons (ed) Towards a Science Of  
The Singular. Centre for Applied  
Research in Education, Norwich,  
University of East Anglia.
- Johnson, John M. (1975) Doing Fieldwork Research. London  
Collier MacMillan, The Free Press.
- MacDonald, B. (1976) 'Evaluation And The Control Of  
Education'. In D. Tawney (Ed.)  
Curriculum Evaluation Today:  
Trends and Implications, Schools  
Council Research Studies. London,  
MacMillan Education.
- Smith, L. (1981) 'An Evolving Logic of Participant  
Observation, Educational Ethnography  
and Other Case Studies'. In Shulman  
L. (Ed.) Review of Research in  
Education, Chicago. Peacock Press.
- Stake, R. (1967) 'The Countenance of Educational  
Evaluation'. Teacher's College  
Record, 68 No. 7.

Additional Recommended Reading

- Adelman, C. (ed) (1981) Uttering Muttering. Collecting, Using and Reporting Talk for Social and Educational Research. London, Grant MacIntyre.
- Denny, T. (1978) 'Story Telling and Educational Understanding'. Occasional Paper No. 12, Evaluation Center, College of Education, Western Michigan University, Kalamazoo, Michigan.
- Logan, T. and Kushner, S. (1982) 'Inside the Processing Problem. Managing Complexity and Ambiguity in the Processing of Naturalistic Data'. Centre for Applied Research in Education, Norwich. University of East Anglia.
- MacDonald, B. (1981) 'Interviewing in Case Study Evaluation' C.E.D.R. Quarterly Vol. 14, No.4.
- Simons, H. (1977) 'Conversation Piece: The Practice of Interviewing in Case Study Research'. In Nigel Norris (ed.) 'Safari': Theory and Practice. Occasional Publications 4. Centre for Applied Research in Education, Norwich. University of East Anglia.