"Dilemma Analysis":
A contribution to methodology for action research

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"...There is a deep-seated (and largely uninvestigated) disjunction between the common-sense knowledge held by the educational community and the operational framework used by educational research" (Hamilton, 1980). This is a well-known complaint, whose symptoms and origins are related to those of the classical Theory/Practice syndrome. Recently, however, serious attempts at a remedy have been proposed, namely the methodological paradigms of case-study (Walker, 1980) and action research (Elliott and Whitehead, 1980; Nixon, 1981). In both of these paradigms the research activity is formulated in such a way that it may be carried out largely by practitioners themselves, in the form of self-evaluation studies involving observing and interviewing colleagues and pupils.

The value (actual and potential) of this work is very considerable, but it raises a number of crucial questions of methodology. In this paper I wish to explore some of these questions, and subsequently to present a practical method for data analysis appropriate to action research.

Action Research and Methodology
A good example of current thinking about teachers’ action research is the recent volume edited by Jon Nixon (1981). Although Nixon refers to "the range of research techniques available for use in the classroom" (p. 143) he also emphasizes the dependence of teachers’ research on individual inclinations, personal skills, and institutional constraints (p. 7) and the need for "the emergence of ... an appropriate ... research tradition" (p. 195). This seems like an

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admission that, although the criteria for such a tradition can be specified ("qualitative rather than quantitative measurement"); a concern with "specific instances rather than generalities" (p. 145)), the details of the appropriate "techniques" remain to be worked out. The limitations of the techniques currently used can be illustrated from the substantive accounts in Nixon's book. How can formal and predetermined observation schedules (pp. 117-20) be used in the absence of facilities for inter-observer cross-checking? What sort of personal diary (p. 51, p. 60) leads to effective critical self-evaluation? How do "categories and dimensions" for interpretation "emerge" from interview transcripts, and how are hypotheses "derived" (p. 91)? How are hypotheses "open to testing by others" (p. 91) if, as Nixon says, "the contexts which (the teacher-researchers) were seeking to understand were in each case unique" (p. 196)? What, finally, is the relationship between anecdote, reflection, and generalization (p. 19)? Although I pose these questions rhetorically, I do not imply that they cannot be answered, but on the contrary that they urgently need answers.

One might summarize the above points as follows: the action-research/case-study tradition does have a methodology for the creation of data, but not (as yet) for the interpretation of data. We are shown how the descriptive journal, the observer's field-notes, and the open-ended interview are utilized to create accounts of events which will confront the practitioner's current pragmatic assumptions and definitions; we are shown the potential value of this process (in terms of increasing teachers' sensitivity) and the problem it poses for individual and collective professional equilibrium. What we are not shown is how the teacher can or should handle the data thus collected. On the one hand, there are descriptions of personal learning which seem to suggest the necessary pre-existence of precisely those skills and sensitivities which action-research is supposed to foster (pp. 50-1); other accounts admit a reliance on academic theoretical perspectives derived from in-service higher degree courses (p. 92); while a third group suggests borrowing directly techniques devised for the quite different epistemological parameters of conventional social science (e.g. those of Kelly and Flanders (pp. 117-9, p. 155)).

While not wishing to deny the values of procedures such as triangulation (Elliott, 1979) and cyclical project redefinition (Elliott, 1981), I would argue that there is a need for the clear delineation of specific techniques for data interpretation in action-research work, and to this end I wish to explore a problem which emerged in my own work as an immediate practical issue: how do you carry out an interpretative analysis of restricted data, i.e. data which, although voluminous, can make no claim to be generally representative? The problem is crucial: in order to justify the effort of the project, the analysis must in some way demonstrate sufficient validity to seem a plausible basis for decision-making and (if a number of staff are involved in the decisions) to convince colleagues. In other words the question of the validity of an interpretation cannot be ducked by saying that contexts are unique: of course they are, but interpretations of the specific event are always made and evaluated in the light of relatively generalizable categories—the dichotomy "general/specific" is itself simplistic. The only way of avoiding the issue of validity is by asserting that the major value of the research process has been the stimulation and sensitization of the researcher, which may appear engagingly modest, but also carries an implication that the other parties to the research have been exploited: nothing has been learned which is generalizable to their interests (see Nixon, p. 107).

The Problem of Interpreting Interview Transcripts
The points in the previous section became important practical issues for me during an action-research project on Teaching Practice (see Winter, 1980a,b). Having made transcripts of unstructured interviews with students, teachers, pupils, and fellow supervisors, I was then faced with the problem of how to collate and interpret all this material to generate a document which would be usable and illuminating in further discussions with students, teachers, and colleagues concerning the adequacy or otherwise of current Teaching Practice arrangements.

To illustrate the problem of interpretation, consider the following extract from an interview with one teacher about one student's practice.

Teacher: There was not much improvement. She came in adequate and she went out adequate. I know that she did not make much impression on the class because the children still treated me as the teacher, even though I made it clear that Miss X was in charge.
R. Winter: She thought that by the end she had improved her confidence.

T.: She talked more. But this was only about her boyfriend. Her conversation about the children remained negative. . . . She didn’t seem to “give”. She didn’t change in response to advice. The standard of her writing on wall-charts etc. was poor, but this did not improve even after hints had been dropped. I felt that I would have needed to give very direct instructions as to what to do, and I didn’t think this was my role. At the end I felt, “I’m not getting through”, and so I felt, “Oh well, I give up.” I felt she did not have the energy to follow up suggestions. One teacher gave her a lot of material on the Romans, but she didn’t use any of it. She didn’t seem to build up a relationship with any other members of staff. There was nothing really wrong, but there was no impetus, no enthusiasm no joy. She didn’t seem to have any ideas; she didn’t seem to know how to get the work moving.

R. W.: You know she had a difficult problem of control on her last practice?

T.: Yes. It needs to be a very exceptional student who can respond in a positive and determined way to failure. This is where men are often so much better than women. There’s a problem of the feminine role, isn’t there? A sense that they can always “fall back on marriage” . . . I feel that on a final practice like this one it is not a teachers’ role to “give ideas”. That is the College’s job. The teacher is there simply to give help with the implementation of the student’s ideas within the specific set-up of that particular school.

This is just one of eleven accounts by different teachers of different students, concerned with widely differing issues. How can eleven such scripts be summarized? How can a coherent and unified account be generated from distinctive and diverse material? There are three widely used methods, each of which seems inadequate.

1) Content analysis
This involves creating a hierarchy of significance based on counting the number of times a concept or opinion occurs in the scripts. But since the interviews were purposely unstructured (so that the researcher could learn from the interviewees rather than interrogate them in the light of predetermined concerns) the scripts are all elaborately idiosyncratic. Thus, no-one else complained that a student’s work lacked “joy” or stated that it might not be part of the teacher’s role to “give ideas”, but these comments seem important expressions of this teacher’s sense of what is at stake. With such detailed scripts, the number of “concepts” would be very large; with such a small number of scripts, however, most ideas would only be mentioned a few times. Consequently this method tends to break down the structured subtlety of the individual scripts while only generating the most platitudinous overall interpretation. Content analysis, then, is only appropriate for a relatively large number of closely-structured responses.

2) Thematic Induction
The method here is to rely on repeated readings followed by intuition: “themes emerge from data”. In the case of this script, one might focus on the teacher’s pedagogic ideology of “joy” and “impetus”, her dislike of “negative” reactions, her highly conditional willingness to support the student, and on her sexism (or is it feminism?). The problem here is that the inductive process has no procedural check. Thematic induction is fine as a first stage in a lengthy participant observation study such as those of the symbolic interactionist tradition (e.g. Glaser and Strauss, 1967) where the injunction is to use one set of insights as a basis for structuring further fieldwork in a series of phases alternating between data collection and analysis. But for practising teachers, researching in their free periods and in the evening, between yesterday’s marking and tomorrow’s preparation, the time-scale and the resource dimension are different: a dozen interviews have with difficulty been fitted in over a period of two terms; now a report needs to be written in a couple of weeks over the holiday in readiness for a staff-meeting on the first day of next term: there is no possibility of further phases of data collection. Under such constraints the method of thematic induction tends to become little more than the invocation of a set of prior concerns and values, and an intuitive selection of opinions and anecdotes, whose basis is both unexplicated and irredeemably personal. The plausibility of the account may in the end rest on little more than the standing of the researcher among the group of colleagues, and/or on whether they (happen to) agree.
3) Theoretical exemplification

The third possibility is to base the analysis of the scripts on social science theory. In the present instance one might see the teacher’s comments as exemplifying a certain model of the teacher’s authority, involving a child-centred ideology (‘joy’, ‘enthusiasm’, ‘positive attitudes’) ambiguously combined with a resolute dominance (‘being in charge’) and conscious toughness towards failure. The complexities inherent in this stance can be linked to the similarly ambiguous institutionalized patterns of authority in sexual and family relationships, which the teacher also specifically invokes. This in turn can be placed in the context of a general theory of social structure —concerning, for example, either the social functions of authority and the strains of tension management, or alternatively a critical theory of authoritarianism as ideology and alienation.

But with such a small number of scripts, interpretations like this cannot be checked: data from the scripts is merely used to exemplify predetermined formulations. The interpretation organizes the data, but does not learn from it. As a method for producing an action-research report it suffers from the same difficulty as thematic induction: it creates an imposed interpretation: since it does not derive from the data, it hardly seems to justify the effort of collecting it. Nor is it likely to seem persuasive to colleagues who differ in opinions and values, and who probably share only scepticism with regard to social science theory. Even the recently published work of Berlak and Berlak (1981), which seems to have a number of affinities with the approach I am suggesting, does not completely escape these difficulties: their theoretical framework is derived from their initial data, but (a) the process of derivation is unclear, and (b) the framework is presented as a highly abstract typology (a ‘language’) which subsequent researchers are asked to ‘apply’ to their own contexts.

"Dilemma Analysis" as a Method for Summarizing Interview Data

It was as an attempt to resolve these difficulties, as I experienced them when confronted by the mass of interview data on teaching practice, that the following procedures, which I have termed 'Dilemma Analysis', were adopted. I do not claim that as a method it is without problems, merely that it is a step forward. It is presented in three stages: 1) the nature of the specific action-research task, 2) the theoretical basis of the method, 3) the procedural sequence.

1) The nature of the action-research task

A teaching practice, in common with many social situations, involves interaction between different parties who, as a consequence of their different roles in the situation have different aims, priorities, and definitions of reality. Also, the situation creates a hierarchy of power and status between these roles. Hence, some of the problems typically encountered will rest on a failure by one party to appreciate the point of view of the other parties involved. The task I formulated for myself, as a teaching practice supervisor/researcher, was to attempt to transcend my view as a supervisor in order to create an account of the T.P. situation which would be faithful to the views of students, classroom teachers, and pupils, as well as those of fellow supervisors. This account had to gain the assent of all parties so that it could be used to illuminate for each party the point of view of the others, as a practical contribution to preparation for T.P. The different views therefore had to be presented plausibly as parallel rationalities, without the hierarchical valuation which conventionally discriminates between them. In other words, the analysis had to gain acceptance as ‘objective’, evoking the main areas of tension in the situation without generating immediate controversy by seeming partisan, which would of course lead to its being rejected in such terms as: “It’s just your point of view as a supervisor” or alternatively: “You’ve gone over to the other side.” The action-research task then, in this case, and not (I think) untypically, was precisely that of creating an account of a situation which would be seen by a variety of others as convincing, i.e. as ‘valid’.

2) The theoretical basis of the method

It was earlier argued that basing an interpretation directly on social theory inevitably creates an interpretation imposed by the researcher. However, I suggest that this difficulty can be overcome by providing a theoretical basis for the method rather than the interpretation. This entails working with a different level of theory, namely theory concerned not with patterns of motives, ideologies, or institutional
structures and relationships, but with the most general characteristics of social reality itself. Hammersley (1980) uses the terms "substantive" and "formal" theory to articulate a similar distinction. Roughly then, I wish to distinguish between "substantive theory" which guides the interpretation of specific data and "formal theory" which guides the specific method for interpreting any data appropriate for that method.

The formal theory which guides the method of Dilemma Analysis is what could loosely be called the sociological conception of "contradiction", which is used here in the form of a series of general, indeed all-embracing postulates: that social organizations at all levels (from the classroom to the State) are constellations of (actual or potential) conflicts of interest; that personality structures are split and convoluted; that the individual's conceptualization is systematically ambivalent or dislocated; that motives are mixed, purposes are contradictory, and relationships are ambiguous; and that the formulation of practical action is unendingly beset by dilemmas. Hence a statement of an opinion in an interview is taken to be a marginal option which conceals a larger awareness of the potential appeal and validity of different and even opposed points of view. (This is an elaboration of Winter, 1980b, p. 68.) On this basis, then, it became intelligible to analyze the interview transcripts not in terms of particular opinions, but in terms of the issues about which various opinions were held. The method is called "Dilemma Analysis" precisely to emphasize the systematic complexity of the situations within which those concerned have to adopt (provisionally at least) a strategy. Beneath the analysis lie the conceptual underpinnings of Marxist and Freudian theory; at the literal surface of the analysis is the relatively non-controversial notion of the paradoxical nature of social existence.

3) The procedural sequence of dilemma analysis

Altogether I conducted open-ended interviews with (or collected written statements from) 22 students, 16 supervisors, 11 teachers, and 50 pupils (the latter in groups of 5 or 6—infant, junior, and secondary) concerning their experience of teaching practice. Each group of statements (those of students, teachers, supervisors, and pupils) was analyzed into a number of expressions of dilemma, tension, or contradiction, which were classified as Ambiguities, Judgements, and Problems. This classification, although by no means always clear-cut, tries to embrace the following distinctions. Among the various tensions experienced, some are background awarenesses of inevitable and deep-seated complexities of the situation, which are tolerable because they are not directly linked with any required courses of action. These are termed "Ambiguities", "Judgements" and "Problems", in contrast, do refer directly to required courses of action: "Judgements" are those courses of action which are rendered complex but, as it were, "interesting" by the tensions and ambiguities in the situation; i.e. the complexity is not seen in negative terms—it is not "wrong", but merely a requisite skillfulness. "Problems" on the other hand are those courses of action where the tensions and ambiguities actually seem to undermine the validity, the rationality of the action required.

Using this organizing principle, the material was condensed into four “Perspective Documents”, each one summarizing the responses of teachers, students, supervisors, and pupils respectively. The technique for this involved (a) formulating the dilemmas at roughly the same level of abstraction at which they were originally presented in the interview scripts, (b) choosing as a starting point the most elaborated formulation of any given dilemma from among the various statements in the scripts, (c) formulating each dilemma so that it balanced non-controversially between the potentially opposed points of view, and (d) building up the Perspective for each role by adding together the various dilemmas thus formulated. The aim behind these procedures was that although the Perspective Document would be a more elaborated formulation than that which any individual had spontaneously articulated, it should gain assent as what any individual in that situation "might well" articulate.

The Perspective Documents were "checked back" with 25 students, 28 teachers, and 10 supervisors, respectively. (This was not possible with the pupils' Document of course because of its linguistic complexity.) In this way it was ascertained that the Documents did indeed seem to be highly acceptable as analyses to those whose views they purported to represent. This was essential, since the method was specifically intended to formulate an overall perspective in such a way as to transcend any particular attitudes of opinion.

The resulting analysis of teaching practice constitutes a sort of "mapping" of the interlocking perspectives. By basing the method on the formal rather than the substantive level of theory, the account
generated has the appearance not of an academically derived analysis, but of a formally structured summary of practitioners’ own analyses.

An Example
These procedures can be illustrated with reference to the interview quoted previously. From this one script four areas of complexity, tension, or contradiction were identified as follows:—

1) The complexity of the student role:
   The student should be in control of the children;
   The student should generate enthusiasm among the children.

2) The complexity of the student's development:
   The student needs specific skills (writing on wall charts);
   The student needs general energy, optimism, and resilience.

3) The complexity of the student/teacher relationship:
   The teacher is required to give advice and make resources available;
   The student is required to know how to take advantage of these.

4) The complexity of the teacher's task:
   The teacher should help a student up to a certain point;
   The teacher should not be expected to compensate for all the weaknesses of a poor student.

Procedurally, at this stage, the notions of complexity, tension, and contradiction make explicit the criterion of relevance for the inclusion and formulation of ideas from the script. (Hence the reference to "the feminine role" only registers above in terms of the requirement of student "optimism" and the teacher's stern attitude to student weakness.) In this way the researcher does not confront the script armed only with implicit prior assumptions and intuitions of relevance.

This procedure was repeated for all eleven teacher interviews. The preliminary lists of contradictions from all the scripts were collated, condensed, and organized using the principles listed previously. The three-fold division into Ambiguities, Judgements, and Problems was then introduced. The whole process generated the "Teachers' Perspective Document" reproduced in full below.

THE TEACHERS' PERSPECTIVE DOCUMENT
A) AMBIGUITIES

1) The Nature of Teaching
   a) On the one hand teaching is an art, depending on instinctive feelings and reactions, which a person may have or may develop, but which cannot directly be taught;
   On the other hand teaching is a science, depending on detailed, skilful techniques, which can directly be taught.
   b) On the one hand teaching consists of developing and managing a personal relationship with pupils;
   On the other hand teaching consists of explaining and organizing pupils' work.

2) The Relationship between Teacher and Pupils
   a) On the one hand students may bring a welcome, even if rather artificial novelty and stimulus to a class;
   On the other hand students may bring an unwelcome, temporary disruption to a class.
   b) On the one hand teachers feel a sense of obligation to students; to leave them alone with the class to try out their own approach and learn from their mistakes, and to offer support and positive advice;
   On the other hand teachers feel a sense of obligation to the children and to the profession as a whole; to stay with the class, to insist on continuity of approach, to help the student only to the extent that the student shows willingness and competence, and to be frankly critical in assessing and advising a weak student.

3) The Relationship between the Teacher, the Student, and the Supervisor
   On the one hand teachers (as senior members of the profession) collaborate with supervisors in assessing and guiding students (as novices);
   On the other hand teachers (as realistic classroom practitioners) collaborate with students in managing the visits of supervisors (as unrealistic theorists).

B) JUDGEMENTS

1) Concerning How to Help Students
   a) Teachers help students by combining (or often having to choose between) the following:—
material resources; emotional support; criticism and advice; examples of teaching technique for students to observe and emulate; freedom for students to try things out and learn from their mistakes.

b) On the one hand teachers have superior experience, expertise, and knowledge of the children (and so can give direct advice);
   On the other hand teachers and students are individuals and a teaching style is a highly personal matter (so that any advice must be adapted by the student).

c) On the one hand teachers need to observe students in order to offer guidance;
   On the other hand the students’ performance (the object of guidance) is distorted by the fact of being observed.

2) Concerning the assessment of students
   On the one hand a lesson can only be assessed in the light of (a) specialized expertise, and (b) the particular individual’s approach;
   On the other hand a lesson can be assessed in the light of general principles common to all teaching.

C) PROBLEMS

1) Concerning the gap between Teaching Practice and Real Teaching
   T.P. is a short-term performance emphasizing variety of media and aids, display of detailed planning and painstaking effort by the student, and the production by pupils of attractive, visible material;
   BUT
   Real teaching requires the mastery of a long-term routine, capacity for effective improvisation, economy of effort, the fulfilling of general pastoral responsibilities and the communication to pupils of skills and information.

2) Concerning the Gap between College Courses and Real Teaching
   In college courses students learn about theories of education by being taught them by theoretically orientated lecturers;
   BUT
   The craft of real classroom teaching is learned in schools by observing practitioners at work and by experience of a wide range of practical classroom situations.

3) Concerning the Relationships between College and Schools during T.P.
   Teachers have detailed knowledge of the students’ T.P. situation, and are thus in a position to act in partnership with the College in placing, guiding, and assessing students;
   BUT
   Colleges do not treat school staff as partners during T.P., and school staff are thus doubtful as to how best to contribute to the T.P. process.

Conclusion
The complete analysis of the teaching practice situation generated by this method included of course three other documents, resembling the teachers’ perspective above in format and style, and representing the views of students, supervisors, and pupils respectively. This set of documents has been used as the basis for discussions, just before a T.P. begins, between myself (as supervisor), the student, and the teacher(s) involved, concerning how best to handle, during that particular practice, the various problematic aspects noted at one point or another in the documents. The value of the four documents in these discussions is that they present with equal rational force and elaboration points of view which are otherwise subordinated in the usual hierarchy of status and hence of ‘credibility’ (Becker, 1970). In particular, therefore, the documents help to legitimate and support student contributions to the discussions, which might otherwise easily become presentations of what the school and the Faculty “want” from the student.

Reasons of space prevent the inclusion of all four Perspective Documents here, since in this paper I have been concerned merely to explain and illustrate Dilemma Analysis as a method. My argument has been that this method produces an analysis which is fully responsive to the concerns and definitions of interviewees. It retains something of the structural complexity of the original statements, and produces a thematic ordering whose coherence does not depend on academics’ theories of practitioners’ behaviour, nor simply on researchers’ hunches and prior commitments. Hence, from the limited amounts of diverse qualitative data such as a teacher might collect in the course of an action-research project, this method can be used to generate a summary interpretation which is plausible and thus of practical value in the complex context from which it was derived.
NOTES AND REFERENCES

Any reader who would like a copy of the complete set of Teaching Practice Perspective Documents should send a stamped, addressed A4 envelope (enclosing a 50p postal order) to: The Educational Research Unit, Faculty of Education, Arts and Humanities, Chelmer Institute of Higher Education, Sawyers Hall Lane, Brentwood, Essex.


