The distance between educational researchers and classroom teachers benefits disinterested observation, but dispossesses the researchers of participatory modes of understanding. In attempting to resolve this problem, some researchers have developed the theory and practice of teachers as researchers, similar to Kurt Lewin's action research. Lewin argued for a system of analysis, fact finding, conceptualization, planning, and execution, and then a repetition of the whole cycle. The process involves the participants of the social world under investigation at every stage. Although not at the forefront of research developments in education, the impact of action research in education is seen in the trend toward reconceptualizing the field in more participatory terms.

Action research has several essential features: (1) an interest in participatory democratic processes for social and intellectual reconstruction; (2) a linking of the development of theory and practice; (3) a means for producing authentic critiques of practice; and (4) the development and strategic use of programs of social action as tools. Action research is sufficiently well established in Australia to have substantive and methodological problems that need to be solved. (PS)
Why is it that the great army of teachers of Australian school children do not come to our conferences? It is not because we have concerns more profound or more esoteric than Australian teachers, but because our concerns are not (by and large) their concerns. We have taken the manifold world of schooling and broken it up into bits more amenable to our analyses; we have adopted a perspective on schooling which allows us to view it as if it were a foreign culture. We do the former so that our analyses can be the more trenchant and so that our understanding of schools as social, economic and psychological systems can be placed within wider frameworks of social, economic and psychological understandings. We do the latter so that we have a means of overcoming the biases and susceptibilities of participatory ways of understanding – so that we can develop a platform from which the world of schooling may be seen as a limited whole which may be comprehended "objectively". It is a natural consequence of our analytical fragmentation of the world of schooling and our abrogation of participatory ways of understanding that we no longer speak the language of teachers and students, that our concerns are not their concerns.

Those who do come to our conferences from the world of practice are policy-makers (or researchers, curriculum developers and evaluators whose role it is to serve policy-makers). We form a natural alliance with them: like policymakers, we deal in advice; like policymakers we instrumentalise the world of practice under the aspect of our theories. The ethnographer Harry Wolcott (1977) sees the world of educators as "moiety-like": as divided into two broad social groups with different but related concerns: teachers and "technocrats". Educational researchers, administrators and policy-makers, he argues, are technocrats.

The observation that our work is not valued by teachers sufficiently for them to be here is not trite, though we have developed stock responses to explain or excuse the present state of affairs. We are "specialists".

† A paper presented to the Annual Meeting of the Australian Association for Research in Education, Sydney, November 6-9, 1980. The research reported in this paper is partially supported by the Education Research and Development Committee through the project "Research on Action Research".
they are "generalists"; we are "theoreticians", they are "practitioners": we are "scientists", they are the "field" about which our science is written.

We hope that our work will provide a source from which can issue a reconstruction of the world of schooling. There are two primary means by which we hope this reconstruction may be achieved: by application of the principles our science develops, or by insight into and understanding of the world of schooling based on reinterpreting that world from fresh perspectives. The first is a technical interest, the second a practical one (Habermas, 1972). The first approach construes educational systems as technologies for delivering knowledge and seeks to improve them as technology; the second construes education as a life-world that may be improved by understanding it under a different aspect (for example, by seeing schooling as a means of reproducing a meritocratic social structure).

Both these approaches to educational inquiry provide roles for the non-participant researcher. In the first case, the researcher appears in white overalls, re-designing and adjusting the great machine. In the second case, the researcher is seen in leather armchair, revising the language by which the life-world of education is discussed and understood. The caricatures are too glib, of course, but there is a truth behind the satire: that these approaches preserve a distance between the researcher and the researched which, on the one hand, preserves the independence of our fortunes from those of our "subjects", and, on the other, creates the necessity for bridges across the chasm we have created: "application" or "reinterpretation" (translation of our understandings into words or symbols which can enter the lingua franca of practitioners).

It is argued that this disinterest is necessary if we are to improve or extend the "technology" or the "language" of practice. How else could knowledge reach beyond the confines of tradition, habit, system, or expectation? Against this, it may be argued that any means of "development" which does not, from the outset, involve development of the consciousness of practitioners necessarily creates a gap between those who possess knowledge which claims to be of vital importance in the development of practice and those who must have it for their work.

It is my belief, however, that it is we, the educational researchers, who have been dispossessed. In giving up the participatory modes of understanding of practice, we have distanced ourselves from the problems we intend to solve, or the lived experience we intend to interpret. We must justify ourselves to our "subjects" in terms of the (to-be-demonstrated) utility of the educational methods we propose, or the (to-be-experienced) validity and significance of the interpretations we offer.

There are a great many educational researchers of my acquaintance who experience the niggling of this crisis of legitimation (simultaneously of their own work and of the work of education). Yet refuges are available in undeclared and unexamined metaphysical or ideological assumptions (in doctrinaire philosophies of science or political beliefs), the elegance of analytical formulations, the 'mob-rule reassurance of a research literature, or the limited and pragmatic goal of techniques that "work".
Still other researchers have come to terms with the problem in a different way. They have attempted to realise conditions under which they and the teachers whose work they hope to affect may form self-reflective communities of professionals as a basis for the simultaneous development of educational theory and practice. Some at least - most notably Lawrence Stenhouse (1975, 1980), and John Elliott and Clem Adelman (1973a, 1973b) and John Elliott (1976, 1978) in recent years - have seen their function largely in terms of educational midwifery: helping at the birth of the theory and practice of teachers as researchers, but hoping that the future development of the notion might take place in a self-critical community of professional educators.

This notion of teachers as researchers has attracted widespread interest in educational research, curriculum development, educational evaluation and in-service education. The interest is not new: indeed, it is best understood as a reawakening of interest in the notion of action research.

ACTION RESEARCH: RETROSPECT

The term "action research" was coined by the social psychologist Kurt Lewin in about 1944 (Marrow, 1969). He used the term to describe a form of research which could marry the experimental approach of social science with programs of social action in response to major social problems of the day. Through action research, Lewin argued, advances in theory and needed social changes might simultaneously be achieved.

Action research, according to Lewin, "consisted in analysis, fact-finding, conceptualisation, planning, execution, more fact-finding or evaluation; and then a repetition of this whole circle of activities; indeed a spiral of such circles" (Sanford, 1970, p.4; see Lewin, 1946, 1947, 1952).

Figure 1 represents this "spiral", attempting to incorporate the essential elements of Lewin's formulation:
It is critical to note that the "plan" in Lewin's formulation is a plan for a program of social action. Lewin argued that knowledge (theory) about social action could develop from observation of the effects of actions in context; simultaneously, social needs and aspirations might be met because action programs were aimed at addressing them directly (as action, not as principles which might later be applied in action).

It is also critical to note that participants in the social world under investigation were to be involved in every stage of the action research cycle. Early experiments had showed the power of group decision in producing commitment and changes in attitudes and behaviour; action research was an attempt to incorporate group consciousness systematically into the research process.
Clearly, Lewin's formulation pressed against the boundaries of the prevailing epistemology. The "subjects" of research were now to take a central role in its formulation and execution; the research community was giving up its hitherto unchallenged hegemony in the social process of the generation of knowledge about social processes. Action research was (and is) an expression of an essentially democratic spirit in social research.

Some authors (like Corey, 1953) suggest that action research as an idea was first formulated by Collier, between 1933 and 1945 Commissioner of Indian Affairs for the U.S. Bureau of Indian Affairs. In 1945, Collier published a paper, "United States Indian administration as a laboratory of ethnic relations". He advocated "research and then more research" as essential to the program of improving the lot of the oppressed American Indians by democratic means. The kind of research needed was field research which responded to pressing social problems. On the basis of experience with this kind of research he concluded:

Prescriptions of doing and prescriptions of avoidance are alike written plain be experiences. I have stated our ideal, that research should be evoked by needs of action, should be integrative of many disciplines, should involve the administrator and the layman, and should feed itself into action. In the actual event we have carried on research of this kind - and we have also carried on research that was specialised, unintegrative and unconnected with action. In the latter case we have not meant to proceed in such a way, but have been forced into what we believed was the less productive method by administrative limitations, by premature, unforeseen stoppages of the enterprises, or by personal equations. We have learned that the action-evoked, action-serving, integrative and layman-participating way of research is incomparably more productive of social results than the specialised and isolated way, and also we think we have proved that it makes discoveries more central, more universal, more functional and more true for the nascent social sciences. But let me emphasize that this kind of research makes demands on the research worker that are far more severe than those made by the specialised and isolated kind. It requires of him a more advanced and many-sided training, and in addition a type of mind and personality which can sustain, in suspension, complex wholes which can entertain - yes, and be drawn and impelled by - human values and policy purposes while yet holding them disinterestedly far away. Such research lays, on the participating administrator, too, a new kind of demand, and compels him to make in turn new kinds of demands on the system within which he works. And it requires elbowroom in the time dimension...I do suggest, however, that in the direction here implied, social science is now verging on a new epoch of methodology, of aim and of use, with all that this implies regarding careers for young minds and preparation for such careers. (pp.300-01)

It would be a mistake to see Collier as the sole originator of such a grand conception of social research. He used the term "research-action" to describe his idea of the process. But it is also true that he saw the process as cyclical: "action-research, research-action" (p.293).

Hodgkinson (1957), in a critique of action research, argues that the ideas which took shape in action research can be traced back to the beginnings of the scientific study of education at the turn of the century, that is, the use of scientific methods to study educational practices. In particular, he draws
attention to the work of progressive educators inspired by the ideas of John Dewey. He quotes Dewey's *The Sources of a Science of Education* (1929):

> The answer is that (1) educational practices provide the data, the subject-matter, which form the problems of inquiry...These educational practices are also (2) the final test of value of the conclusions of all researches...Actual activities in educating test the worth of scientific results...They may be scientific in some other field, but not in education until they serve educational purposes, and whether they really serve or not can be found out only in practice. (p.33)

But the continuity of concern for research on education and its application in practice is far from adequate as an explanation of the emergence of action research as a new species of inquiry in education. In fact, it was precisely the continuity of that concern which stood in the way of the development of action research as a distinct species of inquiry.

In social science, especially psychology, the relation between theory and practice was understood to be a problem of application of the results of scientific researches. The model of the physical sciences had been a commanding one for educational sciences from perhaps 1920 onwards. The 1930’s and 1940’s saw behaviourism establish itself as pre-eminent among the contending approaches to psychological theory and methodology. It was as if the problems of practice could only be addressed from a firm, positive foundation in theory; from an adequate theory, enlightened practice might be expected to flow.

The power of the action research approach, by contrast, lay in its frank recognition of social problems, experienced in society at large, as the impulse to inquiry. If powerful theories were to be developed, they must address significant problems: theory and action might develop together from application of the scientific approach (rather than the findings of research).

What, then, were the problems which impelled the originators of action research?

The Second World War is crucial as a factor in understanding the rise of action research. The war raged around truly ideological themes: democracy and totalitarianism, egalitarianism and racial supremacy, the coexistence and subordination of peoples. It galvanised views about democratic decision-making processes and participation in those processes by those affected by the decisions, about the rights of individuals and cultural and ethnic minorities to have their views heard and their special needs considered, and about tolerance for different views. In the wake of the war a major group of social psychological studies of prejudice, authoritarianism and dogmatism were undertaken, often by psychologists who had themselves been the objects of prejudice as Jews in pre-War Germany (for example, Adorno et al., 1950, who studied the authoritarian personality). American social psychologists turned their concerns towards problems of prejudice within American society - the problems of minority groups and of changing attitudes towards them because a central field in social psychology. Especially significant was the problem of intergroup relations.

But changing patterns of American society in other areas had also thrown up significant social problems. Industrialisation had brought with it a familiar pattern of migration from rural to urban areas; factory workers from rural areas performed differently from those experienced in factory life. There were major problems of production, some of which were related to the expectations of workers about the amount they could produce in a day, some related to the
alienating conditions of factory life which gave workers no voice in decisions about production.

The social psychologist Lewin was intensely concerned with all of these problems. A German Jew, he had fled Germany in 1933. He is best known, perhaps, for his development of a "field-theoretic" approach in social psychology, but, apart from "action research", he was also the originator of the terms "group dynamics" and "sensitivity training".

Lewin's student and biographer, Alfred Marrow, depicts Lewin as an energetic, lively, sparkling intelligence, always open to questions posed by real incidents and concrete events. But he was also deeply concerned with questions of social action: persecution had driven him from Germany, so he was concerned about the broad social conditions which made prejudice possible. Moreover, Lewin appears to have been an intuitive leader of co-operative groups: he always worked best in critical dialogue with colleagues or groups of students. He was naturally drawn to study group processes.

Lewin saw that if social psychology was to contribute to action, it must be open to action as a source of its problems. But theory posed problems too: it would be wrong to describe him as motivated only by practical concerns. He had a long-term view of the complementary development of social scientific theory and social practice. Nevertheless, the magnitude and the significance of the problems of contemporary society drew Lewin from the university into consultancy relations with factories and social organisations, and eventually led him to establish a research institute which could be more "active" in developing social programs that traditionally-withdrawn academic research establishments could be. This was the Research Center for Group Dynamics, based at the Massachusetts Institute of Technology (though it subsequently moved, after Lewin's death in 1947, to the University of Michigan). This Center was the base from which Lewin developed many significant action research projects.

In the days before "action research" was coined as the label for the process, Lewin had worked in industrial consultancies. During the War, he participated (with the anthropologist Margaret Mead, among others) in studies of American food habits, which included attempts to change the food habits of different groups. These studies led to explorations of leadership and group decision. But the research on intergroup relations provided perhaps the most fruitful field for action research which involved social programs to change attitudes and behaviour between and within ethnic groups.

Lewin's influence on social psychology has been described as so pervasive that it is difficult to identify particular fields of greatest contribution. In a sense, though, he remained on the edges of the psychological establishment of the time. Perhaps this is because he challenged an orthodoxy about the role of the social scientist as disinterested, "objective" observer of human affairs.

It is this change of role that marks action research off from other approaches to the problem of the relation between theory and practice. Inevitably, the action researcher becomes involved in creating change not in artificial settings where effects can be studied and reported dispassionately, but in the real world of social practice. In action research, the intention to affect social practice stands shoulder to shoulder with the intention to understand it.
The social problems manifested in and provoked by the Second World War created a new environment for social science, an environment in which the earliest action researchers believed that they could no longer pursue only understanding. They had been drawn into the field of action.

It was not long before Lewin's ideas on action research were being taken up widely. The most significant papers in the establishment of the bona fides of the method, though, were written by Lewin himself or by his students and colleagues from his time at Iowa (before establishing the Center at M.I.T.) and co-workers on projects at the Commission of Community Interrelations of the American Jewish Congress (e.g., Lippitt and Radke, 1946; Chen, Cook and Harding, 1948).

The idea of action research was absorbed into education almost as soon as it originated. Lewin himself worked in action research programs with teachers and teacher educators. But his ideas were taken up most evidently in the work of the Horace Mann-Lincoln Institute of Teachers' College, Columbia University. The Institute was already engaged in curriculum development for social reconstruction and collaborative research with teachers, schools and school districts. Action research was a method which synthesised a range of contemporary concerns and provided a dynamic for collaborative programs of action in the schools. It was taken up quickly and influenced many of the Institute's projects in curriculum, teaching practice and supervision.

Action research existed as a rallying cry in the work of the Horace Mann-Lincoln Institute from about 1946 (Goodson, et al., 1946). By 1949, however, it was becoming especially identified with the name of Stephen Corey; over the next few years, Corey was to become its chief advocate in American education (e.g., Corey, 1949, 1950, 1952, 1953).

Soon the Institute had a major program of action research underway, generating a large number of reports of action research (see Wann, 1953, and Hodgkinson, 1957, for representative bibliographies). Elsewhere, too, action research was becoming accepted and tried.

But the years 1953-1957 saw the beginnings of a decline of interest in action research, at least, in education. Wiles (1953) called for a sharpening of the concept of action research: it seemed to be all things to all men: research, in-service education, evaluation and supervision. Similarly, Corman (1957) wondered whether it was research or teaching. And, in the same year, Hodgkinson (1957) delivered a sharp critique of action research, condemning it as methodologically poor (in terms of statistical procedures), time-consuming, lacking follow-up investigation, incompatible with notions of general (rather than local) development of education systems, conceptually unclear, and, according to the epistemological canons of the day, unscientific.

There is not space in this paper to document the history of the decline of action research. Four interrelated factors seem to be involved. First, there was a retreat to the academy by researchers for whom the political economy of research production was best served by theoretic research and alliances with policy-makers rather than practitioners, called by Sanford (1970) a separation of action from research. Second, there was an attack.
on the methodology itself: though action research had challenged the prevailing epistemology of positivistic research, it had not gone close to overthrowing it. Moreover, the guiding image of action research had been retrogressively interpreted and reinterpreted for (expected) positivist audiences until it lost its power as a model of the research process and became merely a version of positivistic research suitable only for teachers as "amateur" researchers. Third, there were questions about whether action research had lived up to its promises in curriculum development and the improvement of school practices (Hodgkinson, 1957). It may also be that the progressive "usefulness" of action research to practitioners themselves was a consequence of the retrogressive adaptation of action research towards the theoretic and policy-oriented interests of the academic advocates of action research. And finally, there was a rise of other action-oriented and practically-relevant methods for educational inquiry, as the curriculum development movement of the late 1950's and early 1960's provoked the development of educational evaluation (curriculum evaluation, program evaluation, school evaluation) with a bewildering variety of methodologies, guiding images and epistemologies. The availability of these "alternatives" to action research may have abetted its displacement, while still providing an outlet for the practice-oriented impulse to inquiry among researchers.

The decline of major public interest in action research as a form of participatory research able to link theory and practice in the self-reflective and systematically "experimental" enterprise of a community of professional researcher-practitioners was, however, as evanescent as its period of major public development. It may be said that action research in education gathered its impetus in the years 1944-53 and declined from 1953-57, to be replaced by other action-oriented and practically-relevant methods of inquiry.

Through the 1960's and 1970's, however, action research continued in social program work. It re-emerged in education in the early seventies in Britain, partly because there had been continuing interest in it in other fields, especially (in Britain) through the work of the Tavistock Institute for Human Relations. An account of this work up to 1970 may be found in Robert N. Rapoport's "Three dilemmas in action research" (1970). It seems that the Tavistock interest in action research provided a model for its adoption with teachers in the United Kingdom.

A large number of references may be found to action research in the period since 1957, after which time, it has been claimed, action research was no longer a major force in shaping American educational research. Nevertheless, it was "championed" by some eminent social scientists in that country from time to time throughout the post-1957 period (e.g., Campbell, 1974a; Sanford, 1970; Shumsky, 1958).

There has been a significant revival of interest in the notion in the United Kingdom (already indicated) and there are some signs of reawakening interest in educational research in the United States (e.g., Oliver, 1980). In Australia, too, there is a growing awareness of its potential (e.g., through the Schools Commission and in the work of a number of researchers, policy-makers and practitioners around the country).

The current revival of interest in action research reflects contemporary trends and issues not unlike those of the mid-1940's. There is, for example, a
strong interest among educational researchers in helping practitioners deal with problems of practice. Secondly, a broad methodological interest has developed in recent years in interpretative methods (for example: Hamilton et al., 1977; Kemmis, 1980; MacDonald and Walker, 1973; Parlett and Hamilton, 1976; Smith and Pohland, 1974; Stake, 1975; Welsott, 1977) which indicates growing interest among researchers in defining the problems of the fields in ways which represent the understandings of practitioners. Thirdly, there is a growth of collaborative curricular development and evaluation work. At least one aim of collaboration is to build practitioner commitment to the research enterprise. Fourthly, there is an explicit ideological commitment to addressing social and political problems of education through participatory research carried out by practitioners on problems of immediate and more general public concern, for example, in school-level evaluation as an aspect of social and general public accountability (see Davis, 1980) or in research on the uses of language in classroom learning (e.g. Curriculum Development Centre, 1973). In short, there is a trend towards reconceptualising the field of educational research in more participatory terms with regard to its problem sources, subject matters, methods, knowledge products and community of inquirers (see Schwab, 1974).

It might be argued that these trends are simply towards practicality. Indeed, Schwab (1969) has argued strongly for development of the arts of practical deliberation in distinction from theoretic research, and a large number of curriculum researchers have taken up the argument (for example, Reid, 1978; Walker, 1971, 1973). But taking the concerns of practitioners seriously has led to a more profound interest in their concerns: emancipating them from the concerns of professional researchers and making them researchers in their own right (for example, Stonehouse, 1975, 1980; Kemmis, 1980b21). It is this deepening interest in awakening critical self-reflection among practitioners that has provoked interest in critical theory among some methodologists of educational research.

A DEVELOPING EPISTEMOLOGICAL FOUNDATION: CRITICAL THEORY

There is not space in this paper to indicate the depth and extent of the trends in epistemology and philosophy of social science which suggests that action research may once again become a major force in educational research. It is sufficient to our present purposes simply to indicate some aspects of critical social science which may underpin a revival of interest in action research methodology. However, although developments in critical social science provide such a basis, present formulations of critical theory have tended to be so abstract as to defy practical implementation in educational research22. Action research, I believe, provides workable procedures through which the aspirations of critical theory might be realised.

McTaggart and Fitzpatrick (1980) have pointed out some of the essential features of the critical approach and propose a form of action research which embodies the emancipatory interest of critical social science.

As McTaggart and Fitzpatrick show, there is a commonality of intent between action research and critical social science. Firstly, both share an interest in process for the organisation of enlightenment (conscientisation) in communities bound by common interests. In distinction from the technical and practical interests of most educational research mentioned in the introduction to
action research and critical social science share an emancipatory
knowledge-constitutive interest. That is to say, they share an interest in
liberating communities of inquirers from the dictates of tradition, habit,
bureaucratic systemisation and individual expectations. But the emancipatory
interest is far from a sceptical response which breaks free of systemisation
without establishing an orderly process for social and intellectual recon-
struction. On the contrary, action research and critical social science
embdy participatory democratic processes for social and intellectual reconstruction.

It is true that Lewin's formulation of these participatory processes for the
organisation of enlightenment is more technically-oriented. Indeed, Lewin
described it in terms of "social management" or "social engineering" (e.g. Lewin,
1947) before those terms came to have the even more technical connotations
they have today. But Lewin was clearly impressed by the power of action
research epistemology to generate enlightenment in a participant community.

Second, both approaches embody a linking of the development of theory
and practice through the efforts of a community of inquirers. According to
positivistic and interpretative approaches, theory and practice may be developed
separately. In action research, as in critical social science, any separation spells
the end of the enterprise (see Sanford, 1970). Here again, however, one finds
Lewin more willing to accept theoretical advance (without necessary practical
advance) as indicative of progress; in Habermas, the two are mutually
interdependent.

Thirdly, and in consequence of the joint development of theory and
practice, both action research and critical social science provide the means for
producing authentic critiques of practice, that is, critiques which are grounded
in the life circumstances of the inquirers, yet able to transcend these
circumstances through the development of "scientific discourse" (Habermas,
1974) about it. What is significant here is that critical social science involves
a process of objectification of its subject-matter (the social lives of those in the
community of inquirers); it does not treat it "objectively" as frozen or inert. In
doing so, it preserves the possibility of a reflexive social science (one which can
comment on social life and be incorporated within participants' understandings
without becoming less true of the situations studied). It transcends "subject-
ivism" and "objectivism" in an explicit dialectic between the "subject-world" and
the "object-world". Though Lewin does not confront this problem directly, it
seems evident that his general interest was in the development of social critique
based on democratic control of the knowing (research) process.

Finally, it is clear that both action research and critical social science
share an interest in the development and strategic use of programs of social
action as tools for improving (simultaneously) both practice and knowledge-about
practice. D.T. Campbell (1969, 1977) explores the notion of "reforms as
experiments" in a similar spirit, but Campbell's formulation is ultimately
technical, not emancipatory, despite his familiarity with action research as a
form of social research and development. What distinguishes Campbell's work
from that of Lewin and Habermas is his rationalism: theory is the basis for the
principled development and justification of practice; theoretic developments are
to be sought independently of the degree to which they influence the
consciousness of practitioners. For Lewin and Habermas, social action can only
be justified by reference to the commitments and authentic insights of
practitioners.

There are significant differences between the epistemology of action
research in the middle 1940's and the critical social science of more recent
years. The prevailing conceptions of social science differ markedly, and one can
imagine that the neo-Marxist intellectual framework of critical social science
would have been repugnant to a decidedly anti-Marxist research community (at least in the U.S.) in the years immediately following the Second World War. Most importantly, however, discussions of action research from the 1940's have a technical "flavour" which does not appear in critical social science: action research, in Lewin's view, was more than a technology for change (see, for example, Lewin, 1946), but his papers often discuss it in technological terms. It was probably this technical rhetoric which permitted the retrogressive reinterpreation of action research discussed earlier.

Critical social science appears as a far more complete epistemology than Lewin's action research. It has been the argument of this paper that historical circumstances, as well as Lewin's personal vision of a "practical" yet theoretically-sophisticated social science, shaped action research as a precursor of critical social science (in the chronological if not the causal sense) in educational research.

Why then discuss action research at all? There are two main reasons: first, action research already has a place in the history of educational and social research upon which contemporary practitioners can build; and second, because action research provides a simple, practicable guiding image for doing critical social science which theoretical accounts have so far failed to furnish. This latter reason is compelling: the failure of critical social science to attract more than a few adherents in contemporary educational research is probably due (more than anything else) to a stubborn refusal of European critical theorists to democratise (and thus justify) their methods by making them intellectually accessible to a wide audience. Educational researchers have lacked both a way of doing critical social science and the epistemological foundations by which it may be justified. Yet critical social science does provide a remedy for the crisis of legitimation mentioned in the introduction to this paper: a means of simultaneously developing theory and practice, and defining a socially-responsible role for the researcher as a participant in the self-reflective community of practitioners.

ACTION RESEARCH IN AUSTRALIA

The ERDC "Research on Action Research" Project (directed by the author) has begun to gather together some of the diverse strands of interest in action research in Australia. It can be identified (explicitly or implicitly) in work in teacher-research, curriculum development, i.e. service education, school-level evaluation and teacher education. In some cases, projects are avowedly "action research" projects: in other cases, they are action research in all but name (for example, the work of the Tasmanian Education Department as part of the Schools Commission's School-Level Evaluation Initiative; Tasmanian Education Department, 1980).

Preliminary analysis suggests that the theoretical prospects for action research are only moderate, if "theoretical" pay-off is measured in terms of the literature of professional educational researchers. There are pay-offs in terms of theories of language and learning and the theoretical/methodological literature of evaluation, but by and large the knowledge pay-offs of action research are for practitioners rather than "academic" researchers. If theoretical pay-off is defined in terms of the development of critical communities of practitioners, then the results are far more encouraging. This, after all, is the aim of both action research and critical social science. It remains to be seen
whether the pay-off can be sustained in a research literature established by practitioners for practitioners; if it can, then dissemination of the fruits of action research might take place across wider frontiers. The Classroom Action Research Network established by John Elliott and the Ford Teaching Project provides a model of what might be achieved.

The organisational and practical prospects for action research are good, it seems. Interest in school-based curriculum, school-based in-service education, school-level evaluation and practitioner research has established a range of modes of work (individual, co-operative, collaborative between schools and tertiary institutions), a variety of foci (school improvement, curriculum improvement, the improvement of classroom practice), and a variety of support mechanisms (tertiary institutions, Schools Commission, education department consultants, etc.) for action research. Despite widespread fears about trends to centralisation in some quarters of Australian education (the Green Paper in Victoria, "back to the basics" rhetoric, national assessment of school performance, etc.), many Australian teachers, consultants and researchers who have developed a taste for critical self-reflection through action research seem unwilling to give it up. Though it is demanding of time and individual effort, requires the development of new skills and perspectives, and opens individual teachers and schools to criticism (when they allow others to see that they are willing to confront problems and issues rather than deny them), it is nevertheless valued by many who have explored its possibilities. But there is evidence, too, that some teachers and schools find the enterprise insufficiently rewarding. It may promise more than it can deliver, it may create political problems in implementation of action plans, it may polarise staff, it may be used mischievously to "prove" that one alternative educational strategy is better than another, it may fail to come to grips with complex issues sufficiently quickly, it may be superficial, and it may breed dependency on "legitimate" facilitators of the action research process in tertiary institutions or education departments.

Nevertheless, there is evidence that action research in Australia is a field sufficiently well-developed to have significant substantive and methodological problems. Not the least of these is that of defining the boundaries of action research and the limits of its potential. These are among the problems currently being investigated by the ERDC "Research on Action Research" Project.
NOTES:

1 cf. J.T. Hastings: "That these techniques have been and will continue to be useful for some parts of some of our problems is obvious. Unfortunately, we have frequently failed to note that considering them 'the right' methods may cause us to alter the very nature of the problems on which we work. Certainly such emphasis will narrow our conceptual field in our attacks on educational problems" (p.127).

2 cf. Kemmis, 1978 on "componentisation".

3 cf. Kemmis, 1980a on "conviviality" and "the technologisation of reason".

4 For an analysis of this problem, see Carr, 1980a, 1980b.

5 cf. Freire's notion of "conscientization". Berger, Berger and Kellner have this to say explaining the notion: "Originally the term, as used by Freire, simply meant that adults could be taught anything more readily if the teaching was related to the primary concerns of their everyday life. (Freire was originally concerned with teaching literacy). The term, however, has come to mean much more than that, both in Freire's own work and in its wide diffusion among radical intellectuals throughout Latin America. Conscientization now means the entire transformation of the consciousness of people that would make them understand the political parameters of their existence and the possibilities of changing their situation by political action. Conscientization is a precondition of liberation. People will be able to liberate themselves from social and political oppression only if they first liberate themselves from the patterns of thought imposed by the oppressors" (pp.175-76).

6 See J. Habermas Legitimation Crisis (1973).

7 Consider, for example, the contradictions experienced by Neville Bennett (1976) who, originally an advocate of "informal" education, found "formal" methods generally more "successful" - while failing to note that the positivistic epistemology on which his research methods were based was in opposition to the epistemology of "informal" education. (See J. Piaget "The New Methods: Their Psychological Foundations", in J. Piaget Science of Education and Psychology of the Child, originally written in 1935, for a discussion of the epistemology of "informal" approaches).

8 cf. Ben Morris: "Can those who carry out educational research safely ignore that part of their subject [philosophy] which underlies their own investigations? Although in practice, I should not expect every report on a piece of educational research to raise all the assumptions on which it is based or to touch on all the implications of its results, nevertheless, I think that we ignore them at our peril. For if we do so, we cannot claim to be educationists, but must be content with being a species of laboratory technicians without the right to any expert voice in matters of educational policy. If we are merely technicians, we cannot claim to be able to criticize the educational foundations and implications of our own work. This means quite simply that we cannot claim to know what we are doing" (pp.60-61).
cf. Sir Isaac Newton's remark: "I do not know what I may appear to the world, but to myself I seem to have been only a boy playing on the seashore, and diverting myself in now and then finding a smoother pebble or a prettier shell than ordinary, whilst the great ocean of truth lay undiscovered before me".

As, for example, in the success of the DISTAR program which, while it may produce increases in measured learning outcomes, does so at the expense of creating conditions for learning which foster dependence, and the technologisation and bureaucratisation of consciousness (cf. Berger, Berger and Kellner, 1973) as against the liberation of the individual and the learning group through knowledge.

These ideas are closely parallel to some of the central notions of critical theory as expressed by Jurgen Habermas (1972, 1974). We have not yet established the degree to which Habermas's ideas and those of Lewin could be a common expression of trends in German philosophy of social science prior to the Second World War. Yet we do not need to "force" the ideas of Lewin into the framework of critical theory to pick up the resonances: the perspectives share a common concern with unconstrained communication, participatory processes, a focus on problems of concern and consequence to participants, and an active role for the research process as an operational rationality able systematically to remake social conditions on a major scale. There are, of course, major differences: especially in Lewin's somewhat technical perspective on the research process (to be distinguished from Habermas's "emancipatory" perspective on the process of critical social science).

These two papers were important in creating the public "image" of action research. It is of interest, however, that elements of the Chein, Cook and Harding paper betray a more conventional view of action research than Lewin's view of its potential. To anticipate: it is significant, in view of the relative demise of action research over the following decade, that the Chein, Cook and Harding paper discussed action research in terms much closer to the prevailing philosophy of social science. One wonders whether, had Lewin lived, the notion might have been more securely established and have gained an even wider acceptance in the social research of the 1950's and beyond.

I am indebted to Lori Beckett, a research student at Deakin University, for historical work in this area.

The process of reinterpretation from Lewin to Chein, Cook and Harding (1948) and Benne, et al. (1948), to Corey (1953) and Taba and Noel (1957) suggests that the adaptation was retrogressive, towards a redefinition of action research in positivistic terms. Lori Beckett's work at Deakin University provides some evidence that the process was retrogressive in this sense.

This hypothesis is to be explored in future research; certainly Sanford (1970) argues that there was a "drift" of interests among academic researchers away from the problems of the field as defined by its practitioners. See also M. Rein (1976) and I. Deutscher and M. Gold (1979).
See Kemmis (1980a) for one critical perspective on this development.

Lewin had visited Britain in 1933 and 1936 and established links with Eric Trist who, with A.T.M. Wilson prepared a proposal to the Rockefeller Foundation which led to the establishment of the Tavistock Institute. Lewin's Research Center for Group Dynamics at M.I.T. and the Tavistock Institute remained in close contact and jointly established the journal Human Relations (for which Lewin wrote four articles).

This is the only explicit reference to action research in the early work of Elliott and Adelman and the Ford Teaching Project. Elliott (personal communication) indicates that Lawrence Stenhouse was also a source for him on action research; the author has not yet established Stenhouse's sources.

John Elliott (personal communication) suggests that there is also an interest in action research in continental Europe. Brock-Utne (1980) gives an account of some German language literature on the subject between 1966 and 1978, referring especially to the work of Prof. Wolfgang Klafki. In the German literature the link between action research and critical social science is apparently quite explicit. It is hoped that the "Research on Action Research" Project will be able to follow up this line from German sources.

We will return to some of these Australian initiatives in a later section.

The interest is parallel with Freire's notion of conscientization. See See note 5 above.

Few practitioners have the fortitude to tackle Habermas as a possible solution to their problems of methodology.

Knowledge-constitutive interests are the interests which guide and shape inquiry. (See Habermas, 1972; the Appendix gives a succinct formulation).

As Habermas (1974) remarks, in discourse, the compulsions of action are virtualised (p.19).

In his "Qualitative Knowing and Action Research" (1974a). Campbell acknowledges Lewin's influence on his thought. It is also evident in his "evolutionary epistemology" (1970, 1974b) that he adopts an extremely sophisticated position on the evolution of knowledge. It would seem quite possible that Campbell could embody the two sets of ideas (about the evolution of knowledge and the organised development of practice) and generate a powerful contemporary model of action research.

It is important to note that action research in social work did not seem to undergo the retrogressive reinterpretation that action research in education underwent. Indeed, in social work it is still alive at least in the United Kingdom, North America and Australia. In particular, it has been linked with citizens' action campaigns: clearly an embodiment of the democratic spirit breathed into it at its birth.
Positivist social science has been singularly successful in establishing its guiding image as the guiding image for research. Hence Habermas's sharply critical comments on scientism (science's belief in its own efficacy) in discussing the reinterpretation of epistemology as philosophy of science (Habermas, 1972; the criticism is plain in the Introduction, and argued through in the remainder of the volume).

The Interim Report of the project (Kennis, 1980b) to ERDC indicates something of the range of contemporary interest.

Based at the Cambridge Institute of Education, Shaftesbury Road, Cambridge, England. The Network publishes a bulletin for its members which disseminates action research experience among action researchers.

At a recent meeting of some Victorian action researchers at Deakin University, the following issues were among those mentioned as requiring discussion, analysis and "experimentation": the functions of reporting; the potential of various techniques; the theoretical foundations of action research; the roles available to students, parents and the school community in action research; action research on learning for students; the role of action research in school-level evaluation and accountability; problems of information-sharing; and substantive concerns especially suited to action research (e.g. assessment and reporting).
REFERENCES:


Campbell, D.T., "Qualitative Knowing in Action Research". Northwestern University (mimeo); transcript of the Kurt Lewin Memorial Address presented to the Annual Meeting of the American Psychological Association, September 1, 1974a.


Collier, J., United States Indian Administration as a laboratory of ethnic relations. Social Research, 1945, 12, 265-305.

Corey, S.M., Action research, fundamental research and educational practices. Teachers College Record, 1949, 50, 509-14.


Elliott, J., and Adelman, C., Reflecting where the action is: The design of the Ford Teaching Project. Education for Teaching, 1973a, 92, 8-20.


Kemmis, S., "Program Evaluation in Distance Education; Against the Technologisation of Reason", in J.D. Armstrong and R.E. Store (eds.) Evaluation in Distance Education. Townsville, Queensland: Townsville College of Advanced Education, 1980a.


Oliver, B., Action research for in-service training, Educational Leadership, February, 1980, 394-95.


Tasmanian Education Department. Submission to the Schools Commission's School-Level Evaluation Initiative, 1980.


Wiles, K., Can we sharpen the concept of action research? *Educational Leadership*, 1953, 10, 408-10.