
*An Analysis of an Individual's
Educational Development: The Basis
for Personally Oriented Action
Research*

Jack Whitehead

My purpose is to draw your attention to the development of a living form of educational theory. The theory is grounded in the lives of professional educators and their pupils and has the power to integrate within itself the traditional disciplines of education. Educational theory occupies an ambiguous position in the educational profession. Its importance is due to the fact that a profession supports its skills and techniques with a body of systematically produced theory. On the other hand, teachers tend to decry educational theory because of its lack of relationship to their practical skills and techniques.

My purpose in writing this chapter is to outline how I think a professionally credible educational theory could be generated and tested from a form of teacher action-research. I take teacher action-research to be a form of self-reflective inquiry undertaken by participants in educational contexts in order to improve the rationality and justice of:

- (a) their own educational practices,
- (b) their understanding of these practices,
- (c) the situations in which the practices are carried out.

‘It is most empowering when undertaken by participants collaboratively, though it is often undertaken by individuals sometimes in co-operation with “outsiders”’ (Kemmis and Carr, 1983).

I am assuming that a teacher action-researcher, who is interested in contributing to knowledge of the process of improving education within schools, will be faced by an academic community who will

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examine the legitimacy of the claim to knowledge. I am also assuming that a teacher-researcher is concerned to establish a direct relationship between the claim to know what he or she is doing and the pupils' educational development.

The educational analysis which follows is focused upon the nature of the validity of an individual action-researcher's claim to know his or her own educational development. The analysis outlines a form of educational theory which can be generated from professional practice and which can integrate the different contributions of the disciplines of education. Let me say at the beginning how I see the relationship between my own research and teacher action-research. In my work in a university I am paid to make a scholarly and acknowledged contribution to knowledge of my subject, education. I characterize my attempts to make this contribution a form of academic action-research. In my investigations of my own claims to know my own educational development I have explored the nature of a form of educational theory which is directly related to educational practice. My particular concerns have focused upon the academic legitimacy of an individual's claim to know his or her own educational development. I think that my findings will be of use to those teacher-researchers who wish to justify their own claims to knowledge to the academic community.

The approach to educational theory I am suggesting we adopt rests on a number of assumptions concerning both the idea of a 'living form of theory' and the personal and social criteria which can be used to criticize the theory. I use the term a 'living form of theory' to distinguish the suggested approach from the 'linguistic form' in which traditional theories are presented for criticism. In a living approach to educational theory I am suggesting that teacher action-researchers present their claims to know how and why they are attempting to overcome practical educational problems in this form:

I experience a problem when some of my educational values
are negated in my practice.
I imagine a solution to my problem.
I act in the direction of the solution.
I evaluate the outcomes of my actions.
I modify my problems, ideas and actions in the light of my
evaluations.

For educational theory to be directly related to educational practice it must have the power to explain an individual's development. One of

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the major problems which has led to the discrediting of traditional forms of educational theory was that they could not produce adequate explanations for the educational development of individuals. A theory should also be able to answer questions concerning why things happen. In the approach to educational theory advocated here the 'why' questions are answered in terms of 'value'. Like Ilyenkov (1982) I take 'value' to be a human goal for the sake of which we struggle to give our lives their particular form. In relation to the enquiry I take it that the experience of the negation of educational values moves the enquiry forward and that the values are taken, by the holder, to be concrete universal laws in the sense that we hold our educational values with universal intent.

Questions concerning the academic legitimacy of a claim to knowledge are often focused upon the criticism of a particular piece of work. The work being criticized can be a single hypothesis or theory (Popper 1972) or a research programme (Lakatos 1972). Whatever is being criticized is known as the unit of appraisal. In criticizing a claim to knowledge it is important to be clear about the unit and the standards of judgment which can legitimately be used in the criticism. There is some dispute amongst philosophers about the nature of the standards which can be used to criticize a claim to knowledge.

The unit of appraisal in my conception of educational theory is the individual's claim to know his or her own educational development. Although this unit may appear strange to most educational researchers I think that it is clearly comprehensible. The standards of judgment are however more difficult to communicate. I use both personal and social standards in justifying my own claims to know my own educational development. In using personal criteria I draw upon the work of Michael Polanyi. I am grateful for *Personal Knowledge* (1958) because in my case Polanyi fulfilled his purpose of 'stripping away the crippling mutilations which centuries of objectivist thought have imposed on the minds of men'. The personal criteria I use in making a claim to know my own educational development include Polanyi's values of respect and commitment.

To claim validity for a statement merely declares that it ought to be accepted by everyone because everyone ought to be able to see it ... The affirmation of a scientific truth has an obligatory character; in this it is like all other valuations that are declared universal by our own respect for them. (Polanyi and Prosch, 1975)

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It is the act of commitment in its full structure that saves personal knowledge from being merely subjective. Intellectual commitment is a responsible decision, in submission to the compelling claims of what in good conscience I conceive to be true. It is an act of hope, striving to fulfil an obligation within a personal situation for which I am not responsible and which therefore determines my calling. This hope and this obligation are expressed in the universal intent of personal knowledge.

... Any conclusion, whether given as a surmise or claimed as a certainty, represents a commitment of the person who arrives at it. No one can utter more than a responsible commitment of his own, and this completely fulfils his responsibility for finding the truth and telling it. Whether or not it is the truth can be hazarded only by another, equally responsible commitment. (Polanyi, 1958.)

In grounding my epistemology in *Personal Knowledge* I am conscious that I have taken a decision to understand the world from my own point of view, as a person claiming originality and exercising his personal judgment responsibly with universal intent. This commitment determines the nature of the unit of appraisal in my claim to knowledge. The unit is the individual's claim to know his or her own educational development.

The social criteria I use to criticize my claim to knowledge appear to conform to Habermas' view on what claims to validity I am making if I wish to participate in a process of reaching understanding with you. Habermas (1979) says that I must choose a comprehensible expression so that we can understand one another. I must have the intention of communicating a true proposition so that we can share my claim to knowledge. I must want to express my intentions truthfully so that we can believe what I say. Finally, I must choose an utterance that is right so that we can accept what I say and we can agree with one another with respect to a recognized normative background. Moreover, communicative action can continue undisturbed only as long as participants suppose that the validity claims they reciprocally raise are justified.

From this I take it that the action-researcher has a responsibility to present a claim to knowledge for public criticism in a way which is comprehensible. The researcher must justify the propositional content of what he or she asserts, and justify the values which are used to

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give a form to the researcher's life in education. The researcher must be authentic in the sense of wanting to express his intentions truthfully. Habermas says, and I agree, that a claim to authenticity can only be realized in interaction: 'in the interaction it will be shown in time, whether the other side is "in truth or honestly" participating or is only pretending to engage in communicative action'.

The personal and social standards I use to judge the academic legitimacy of my claim to knowledge are the values I use in giving my life its particular form in education. In judging my own claim to educational knowledge I use the following logical, scientific, ethical and aesthetic values. In such a brief space all I can hope to do is to sketch out the general principles of my position and to draw your attention to the locations where the position is being worked out in more detail in practice. The most difficult problem to be overcome in presenting my ideas to others in a comprehensible way concerns the logic of my position. As a dialectician I am aware of the attacks on dialectical logic by such eminent Western philosophers as Karl Popper. Popper (1963) dismisses the use of dialectical logic in the presentation of theories as based on nothing better than a loose and woolly way of speaking. His case rests on the way he thinks about contradictions. The point at issue has been clearly put by Ilyenkov (1977).

Contradiction as the concrete unity of mutually exclusive opposites is the real nucleus of dialectics, its central category ... but no small difficulty immediately arises as soon as matters touch on 'subjective dialectics', on dialectics as the logic of thinking. If any object is a living contradiction, what must the thought (statement about the object) be that expresses it? Can and should an objective contradiction find reflection in thought? And if so, in what form?

Formal logicians such as Popper (1963) hold that any theory which contains contradictions is entirely useless as a theory. This view is based upon a linguistic presentation of theory. In this paper I am drawing your attention to the locations (Note 1) where a living form of educational theory is being produced. The theory is embodied in the lives of practitioners who exist as living contradictions. The inclusion of 'I' as a living contradiction within a theoretical presentation creates problems if we attempt this presentation in a purely propositional form because the propositional logic holds that we cannot have two mutually exclusive statements which are true simultaneously.

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In my own development I am conscious of attempting to overcome the experience of myself as a living contradiction in order to minimize the tensions between, for example, values negated in practice and the current practice. I am also conscious of the need to give a form to my life and of the need for meaning and purpose. If I attempt to describe my development in a purely propositional form I will fail to communicate my meaning because of the existence of 'I' as a living contradiction in my development. The central problem is how to present a dialectical claim to knowledge in a publicly criticizable form. My own presentation is in the form of ten research reports (Whitehead 1982) produced over the past ten years as I have explored my existence in terms of 'I' as a living contradiction in the School of Education of the University of Bath. The table in Appendix 1 summarizes the educational analysis of my educational development. I would also draw your attention to the work of colleagues and students of mine, past and present, who are struggling in a similar way to improve the quality of education (see Note 2). By drawing your attention to where the theory is being generated and tested in practice, I hope to emphasize that it is embodied in the form of life of practitioners rather than existing in a propositional form within textbooks on library shelves.

This is not to deny that the propositional form can have significance for the genesis of educational theory. On the contrary the standards I use to justify my claim to know my own development as a scientific form of life are drawn from Popper's (1972) views on the logic of scientific discovery. The main difference between the traditional view of educational theory and the dialectical approach is that the traditional view was presented in a propositional form which excluded dialectical logic. The dialectical approach is presented in terms of the forms of life of individuals in education and shows how propositional forms exist within the forms of life.

In using Popper's work I check to see whether or not the claim to know my own educational development conforms to the cycle of experiencing and formulating problems, imagining a solution, acting on the imagined solution, evaluating the outcomes and modifying the problems and ideas. This capacity of the dialectical approach to integrate within itself the insights from a propositional form is what gives the approach its power to integrate the concepts of the disciplines of education. I think that this power rests upon the imaginative capacity of individuals to relate the concepts to their practical concerns. For example as the individual encounters personal and social constraints in his or her attempts to improve the quality of

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education in schools, the concepts from the psychology or sociology of education might prove useful in helping to overcome the barriers to improvement. The form I suggested above for the presentation of our claims to know our own educational development has the capacity to allow the inclusions of the concepts from the disciplines of education whilst being itself irreducible to the form of any of the present disciplines of education.

As the individual presents a claim to educational knowledge the academic community will be able to judge whether or not the work demonstrates an understanding of contemporary accounts in the different disciplines of education. It might also be the case that the claims to educational knowledge could point out deficiencies in the present state of development of the disciplines of education.

Because of a desire to give a correct account of the nature of educational theory I want to hold up the value-laden nature of my claim to knowledge for public criticism. I want you to understand and accept for good reasons, the normative background of my ethical values.

I recognize a major problem, almost as great as the problem of contradiction, as soon as I attempt to communicate the ethical values in my claim to know my educational development. The problem is grounded in the principle known as the autonomy of ethics. This principle, usually attributed to Hume (1738) and upheld by linguistic philosophers, holds that statements of value and statements of fact form logically independent realms of discourse. In my educational development matters of fact and matters of value are integrated in my experience of practical problems of the kind, 'How do I improve this process of education here?'. How then do I present a claim to know my educational development in a way that truly represents this integration?

I can talk about the ethical values I use in making decisions which give a form to my life in education. I can use value-words such as those of consideration of interest, worthwhile activities, respect for persons and democratic forms of social control (Peters 1966). The meanings of my ethical values are however embodied in my educational practice. Their meanings emerge in the course of my attempts to overcome their negation (Feyerabend, 1975). In order to communicate these meanings I think that it is necessary to present visual records of that practice. I must show you where I am experiencing the denial of my educational values, give a public formulation of my problems in terms of the denial and I must present a programme of activities which I believe will overcome the denial. I must show you

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my actions and hold up my evaluations of those actions for your criticism. In this way it is possible for an individual to hold up a claim to know his or her educational development as an ethical form of life for public scrutiny. The individual can thus generate a personal form of educational theory and submit it for public test.

However, since the meaning of values cannot be expressed in a purely linguistic form of discourse, they must, as I have said, be shown in action. Hence, it will be necessary for whoever is validating the claim to knowledge to use ostensive, as well as linguistic, criticism, in judging this aspect of the claim to knowledge. In judging the legitimacy of a value-laden claim to knowledge the individual is faced with the problem of justifying one set of values against another. In recent Islamic publications (Abdullah 1982), for example, the Western view of democracy has been declared inimical to educational theory viewed from an Islamic perspective. My own justification for my educational values is grounded within Polanyi's view of personal knowledge. Given that I am using a particular set of values in attempting to give my life its particular form in education, I am committed to examining the implications of attempting to overcome the experience of the negation of these values, in a way which fulfils Habermas' views on the validity claims I must fulfil if I am to reach an understanding with you. If our values conflict it seems to me inevitable that we are engaged in a political struggle. Conflict is most intensive when particular forms of life cut across those of others to the extent of one form negating the value-laden practice of another.

In the justification of a claim for scientific status for the individual's claim to know his or her own educational development I advocated the use of criteria from the work of Popper. To judge the logical status of the claim I suggested the use of a dialectical logic based on the work of Ilyenkov. To judge the ethical status I explained that my values were embodied in practice and that public criticism of the ethical base of my claim would require a form of ostensive criticism in which I must present visual records of my practice. I recognize that the cultural relativity of ethical values presents a serious problem for educators in a multicultural society who are asked to justify their own educational values. How the problem is being resolved must be shown and criticized in practice.

The final criterion is concerned with the notion of authenticity. This is a difficult concept to define because I think of education as a form of art in the sense that the individual is attempting to give a form to his or her life in a way which does not violate the integrity of other individuals. The aesthetic standard I use in judging the authenticity of

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the claim to knowledge requires an approach I have termed, following Holbrook (1979), 'indwelling'. Its use involves an ability on the part of the reader to empathize (through written, aural and visual records) with another individual's form of life as it is presented in a claim to knowledge and, through 'delicate intuitions, imagination and respect' (Russell, 1916), to judge whether or not the form of life can be seen in terms of the quality of human relationships in which the unity of humanity appears to be possible.

Just as the artist attempts to give a form to his or her material, so teachers, who are practicing the art of education, are giving a form to their own lives in education and assisting their pupils to do the same. When the artist presents his or her work, the appreciation of it will come as the viewer spends time 'reliving the work of its creator' (Lipps in Holbrook, 1979). In a similar way, in judging the aesthetic form of a claim to know another individual's form of life in education, the reader must attempt to identify with the process in which that individual struggled to give a form to his or her life in education. In affirming or rejecting the claim to knowledge as embodying an aesthetic form of life it is necessary, I think, for the reader to judge whether the quality of the actions presented in the claim to knowledge has violated the integrity of an individual or the unity of humanity as a whole. I say this because education has, for me, significance not only for its personal influence but also for its role in the world as a whole.

In offering the unit of appraisal and the standards of judgment which I think can be used by educational action-researchers to establish the academic legitimacy of their claims to knowledge I wish to emphasize that the logic of education proposed by Hirst and Peters (1970) is mistaken: '... facts are only relevant to practical decisions about educational matters in so far as they are made relevant by some general view of what we are about when we are educating people. It is the purpose of this book to show the ways in which a view of education must impose such a structure on our practical decisions.'

In my view of educational theory the theory is essentially transformatory. Structures may exist in the process of transformation but they must not be *imposed* on the individual. The idea of imposing a structure is inconsistent with the view of educational knowledge proposed above. I would remind readers that they should always bear Polanyi's point in mind and approach their own claims to knowledge in a creative and critical way as individuals who have made a decision to understand the world from their own point of view, and who are claiming originality and exercising their judgments

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with universal intent. For the sake of the development of the profession of education they should also feel obliged to offer their claims to knowledge in an open forum for rational criticism.

Every educational action-researcher has a part to play in the development of the profession. Teacher action-researchers must be prepared to make public the educational theory which is embodied in their practices. Academic action-researchers must be prepared to help to establish the standards of judgment which are appropriate for judging the validity of such claims to knowledge. Administrator action-researchers must be prepared to show in what sense their activities are sustaining or improving the quality of education with the pupils in their institutions. My own work is concerned with assisting teacher action-researchers to justify their professional claims to know what they are doing through the provision of standards of judgment which themselves can stand the test of public and rational criticism. The only reason I have for writing this Chapter is the hope that it will lead you to contact some of those action-researchers who are participating in the programme or who are described in the bibliography and notes. Through such contact we hope that a shared form of educational theory will be generated and tested in our professional practices. We believe that this will lead to improvement in the quality of education in our educational and other social institutions.

Notes

1 *The Need for a Conference*

The past five years have seen an upsurge in the potential of action research as a way of relating practical and theoretical work in education, and thereby improving the quality of classroom learning. A number of our higher degree students have submitted dissertations using an action research approach and an increasing number of students are registering with us because of the work we do in this area. Because of the work either completed or in progress we are now able to organize a one-day conference which we hope will bring teachers, academics and administrators together. We hope to develop a network of action researchers and also to contribute to in-service days and to DES courses which could help teachers to explore the nature of their educational practice.

2 The ideas in this Chapter have developed over a number of years through the collaboration, criticism and support of colleagues and students. In particular I have benefited from the support of Dr. Cyril Selmes and Mary Tasker in the School of Education at the University of Bath and from the unpublished Masters Degree dissertations, listed below, of students who

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have worked with me to improve the quality of education in both theory and practice.

- BARRETT, M. (1982) 'An approach to the in-service professional development of teachers', University of Bath.
- FORREST, M. (1983) 'The teacher as researcher — the use of historical artefacts in primary schools', University of Bath.
- FOSTER, D. (1982) 'Explanations for teachers' attempts to improve the quality of education for their pupils', University of Bath.
- GREEN, B. (1979) 'Personal dialectics in educational theory and educational research methodology', University of London.
- HAYES, G. (1980) 'An investigation of educational practice in the classroom', University of Bath.
- PETERS, C. (1980) 'Research into the evaluation of youth work', University of Bath.

References

- ABDULLAH, M. (1982) *Educational Theory: A Koranic Perspective*, Saudi Arabia, Umm Al-Qura University.
- FEYERABEND, P. (1975) *Against Method*, London, Verso.
- HABERMAS, J. (1979) *Communication and the Evolution of Society*, London, Heinemann.
- HIRST, P. and PETERS, R.S. (1970) *The Logic of Education*, London, Routledge and Kegan Paul.
- HOLBROOK, D. (1980) *What It Means To Be Human*, unpublished manuscript, Cambridge, Kings College.
- HUME, D. (1738) *Treatise on Human Nature*, Oxford, Oxford University Press.
- ILYENKOV, E. (1982) *The Dialectic of the Abstract and the Concrete in Marx's Capital*, Moscow, Progress Publishers.
- ILYENKOV, E. (1977) *Dialectical Logic*, Moscow, Progress Publishers.
- KEMMIS, S. and CARR, W. (1983) *Becoming Critical — Knowing Through Action Research*, Deakin, Deakin University Press.
- KOSOK, (1976) 'The systematization of dialectical logic for the study of development and change', in *Human Development*, 19, pp. 325–350.
- MEDAWAR, P. (1969) *Induction and Intuition in Scientific Thought*, London Methuen.
- MITROFF, I. and KILMAN, R. (1978) *Methodological Approaches To Social Science*, San Francisco, Jossey-Bass.
- PETERS, R.S. (1966) *Ethics and Education*, London, Allen and Unwin.
- POLANYI, M. (1958) *Personal Knowledge*, London, Routledge and Kegan Paul.
- POLANYI, M. and PROSCH, H. (1975) *Meaning*, Chicago, University of Chicago Press.
- POPPER, K. (1963) *Conjectures and Refutations*, London, Routledge and Kegan Paul.
- WHITEHEAD, A.J. (1982) 'Assessing and evaluating an individual's educational development', *Assessment and Evaluation in Higher Education*, 7, 1, pp. 22–47.

Appendix 1

The Form of Life of a Living Contradiction

<i>Report</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9/10</i>
Medawar's phase of scientific enquiry	critical	creative	critical	creative	critical	creative	critical	creative	critical
The Popperian schema	s ₁	—	s ₂	—	s ₃	—	s ₄	—	s ₅
Mitroff's and Kilman's methodological approach	analytic scientist	—	conceptual theorist	—	conceptual humanist	—	particular humanist	—	—
Kosok's self-linearizing form	A non-linear dialectic process depicted as a self-linearizing form which reveals transition structures (in the schemas and critical phases) as nodal points of self-reflection								

2.5

Whitehead, J. (1989) Creating a Living Educational Theory from Questions of the Kind, 'How do I improve my Practice?'
Cambridge Journal of Education, Vol. 19, No.1, pp. 41-52.

Creating a Living Educational Theory from Questions of the Kind, 'How do I Improve my Practice?'

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Have you ever made a claim to know your own educational development and subjected the claim to public criticism? If you have, what does such a claim to educational knowledge look like?

I'm assuming that all readers of this journal will at some time have asked themselves questions of the kind, 'How do I improve my practice?', and will have endeavoured to improve some aspect of their practice. I believe that a systematic reflection on such a process provides insights into the nature of the descriptions and explanations which we would accept as valid accounts of our educational development. I claim that a living educational theory will be produced from such accounts.

The idea that philosophers interpret the world whilst the point is to improve it is not a new idea. I have been urging my fellow academics for some years (Whitehead, 1972) to carry out an investigation into their own educational development as they question themselves on how they are improving their practice. I believe that academics who write about educational theory should do just that: make a claim to know their development and subject it to public criticism. In this way I believe that they will come to see that it is possible to create a living educational theory which can be related directly to practice.

PRODUCING A LIVING EDUCATIONAL THEORY

The traditional view is that a theory is a general explanatory framework which can generate descriptions and explanations for empirically observed regularities and the behaviour of individual cases. The explanations are offered in the conceptual terms of propositions which define determinate relationships between variables. Piagetian cognitive stage theory is a classical example of such a theory. By their nature concepts involve grasping principles thus ensuring that theories are presented in general terms.

A commitment to the propositional form can also be seen, surprisingly, in those researchers who are committed to a reflexive approach to understanding. For example, Kilpatrick's (1951) view on the importance of dialogue in educational

theory is presented in a propositional form. A more recent example in the work of Gitlin & Goldstein (1987) on a dialogical approach to understanding shows the authors presenting their case within a propositional form. Whilst I can recognise the importance of what they say, about teachers forming relationships that enable school change to be based on a joint inquiry into what is really appropriate, I believe that the propositional form of presentation will prevent them getting closer to answering their final, dialogical question, "How can we encourage the conditions necessary for teachers to enter into a dialogue aimed at understanding?"

Even those academics one would expect to understand the need to create an alternative to the propositional form of theory remain within it. For example, Donald Schön (1983) points out that "when someone reflects-in-action, he becomes a researcher in the practice context. He is not dependent on the categories of established theory and technique, but constructs a new theory of the unique case".

Schön is however committed to the fundamental category of established theory in holding to the propositional form,

Theories are theories regardless of their origin: there are practical, common-sense theories as well as academic or scientific theories. A theory is not necessarily accepted, good, or true; it is only a set of interconnected propositions that have the same referent—the subject of the theory. Their interconnectedness is reflected in the logic of relationships among propositions: change in propositions at one point in the theory entails changes in propositions elsewhere in it.

Theories are vehicles for explanation, prediction, explanatory theory explains events by setting forth propositions from which these events may be inferred, a predictive theory sets forth propositions from which inferences about future events may be made, and a theory of control describes the conditions under which events of a certain kind may be made to occur. In each case, the theory has an 'if...then...' form. (Argyris & Schön, 1975)

I am arguing that the propositional form is masking the living form and content of an educational theory which can generate valid descriptions and explanations for the educational development of individuals. This is not to deny the importance of propositional forms of understanding. I am arguing for a reconstruction of educational theory into a living form of question and answer which includes propositional contributions from the traditional disciplines of education.

Gadamer (1975) points out that despite Plato we are still not ready for a logic of question and answer. He says that Collingwood (1978) helped to move us forward but that he died before he could develop this logic in a systematic way. Collingwood points out that if the meaning of a proposition is relative to the question it answers, its truth must be relative to the same thing. I agree with his point that meaning, agreement and contradiction, truth and falsehood, do not belong to propositions in their own right, they belong only to propositions as the answers to questions.

In saying that the theory should be in a living form, I recognise that this creates

a fundamental problem. The way academics think about theory is constrained by propositional logic. All academics working in the field of educational theory present the theory in terms of propositional relationships. However, the purpose of my own text is to direct your attention to the living individuals and the contexts within which a living theory is being produced (Lomax, 1986). Again I wish to stress that this is not to deny the importance of propositional forms of understanding. In a living educational theory the logic of the propositional forms, whilst existing within the explanations given by practitioners in making sense of their practice, does not characterise the explanation. Rather the explanation is characterised by the logic of question and answer used in the exploration of questions of the form, 'How do I improve my practice?'

In developing such an approach I have had to come to terms with questions concerning an appropriate methodology for enquiries such as, 'How do I improve this process of education here?'. In looking at video-tapes of my practice I have had to confront the questions which arise on recognising the 'I' in the question as existing as a living contradiction. In the production of an explanation for my practice I have had to question how to include and present values whose meaning can only be clarified in the course of their emergence in practice. I have had to face questions related to validity and generalisability. I have also had to question the power relations which influence the academic legitimacy of a living educational theory.

In such a short article all I can do is outline the present state of my thinking in relation to these questions.

(1) 'HOW DO I IMPROVE MY PRACTICE?'—A QUESTION OF METHODOLOGY

If we look at the locations where a living form of educational theory is being produced (Lomax, 1986; McNiff, 1988) we can trace the development of a number of teacher-researchers who have used the following form of action/reflection cycle for presenting their claims to know their own educational development as they investigate questions of the form, "How do I improve this process of education here?"

I experience problems when my educational values are negated in my practice.

I imagine ways of overcoming my problems.

I act on a chosen solution.

I evaluate the outcomes of my actions.

I modify my problems, ideas and actions in the light of my evaluations... (and the cycle continues).

This form of enquiry falls within the tradition of action research. It can be distinguished from other approaches in the tradition through its inclusion of 'I' as a living contradiction within the presentation of a claim to educational knowledge.

(2) A QUESTION OF ACKNOWLEDGING ONE'S EXISTENCE AS A LIVING CONTRADICTION

My insights about the nature of educational theory have been influenced by viewing video-tapes of my classroom practice. I could see that the 'I' in the question 'How do I improve this process of education here?', existed as a living contradiction. By this I mean that 'I' contained two mutually exclusive opposites, the experience of holding educational values and the experience of their negation.

I searched the back issues of *Educational Theory* to see if I could find details of similar experiences reported by other researchers. I began to appreciate how the crucial issues of logic and values continued to reappear in the journal. From Cunningham's (1953) analysis of the 'Extensional limits of Aristotelean logic', through Mosier's (1967), 'From enquiry logic to symbolic logic', to Tostberg's (1976), 'Observations of the logic bases of educational policy', the debate about the logical basis of educational theory continues to rage in the literature.

A similar debate can be seen in the realm of values. We have 'The role of value theory in education' (Butler, 1954), 'Are values verifiable?' (Bayles, 1960), 'Education and some moves towards a value methodology' (Clayton, 1969) and 'Knowledge and values' (Smith, 1976). What these articles pick out is the continuing concern of educational researchers with the fundamental problems of logic and value in the production of educational theory.

I began to understand the concrete problems experienced by adherents to dialectical and propositional logics when they try to establish a sustained dialogue. The nucleus of dialectics, contradiction, is eliminated from descriptions and explanations presented in the propositional form (Popper, 1963). Dialecticians claim that the propositional form masks the dialectical nature of reality (Marcuse, 1964). I traced the tension between these logics to differences between Plato and Aristotle. In the *Phaedrus*, Socrates tells us that there are two ways of coming to know. We break things down into their separate components and we hold things together under a general idea. He says that those thinkers who can hold both the one and the many together he calls dialecticians. Aristotle, on the other hand demands, in his work on interpretation, that the questioner puts his question into a definite form and asks whether or not a person has a particular characteristic. Aristotle's propositional logic eliminates contradictions from correct thought.

An understanding of a living form developed, in my case, from the combination of the following insight from Wittgenstein with visual records of practice:

"I" is not the name of a person, nor "here" of a place, and "this" is not a name. But they are connected with names. Names are explained by means of them. It is also true that it is characteristic of physics not to use these words. (Wittgenstein, 1953)

Now 'I', 'this' and 'here', are contained within questions of the form, "How do I improve this process of education here?" In viewing video-tapes of our own educational practices I believe that we can see our own 'I's existing as living contradictions. This revelation, through the visual record, is crucial for the recon-

struction of educational theory. Yet there is a tendency to reduce the significance of 'I' as it appears on a page of text. It is so easy to see the word 'I' and think of this as simply referring to a person. The 'I' remains formal and is rarely examined for content in itself. When you view yourself on video you can see and experience your 'I' containing content in itself. By this I mean that you see yourself as a living contradiction, holding educational values whilst at the same time negating them. Is it not such tension, caused by this contradiction, which moves us to imagine alternative ways of improving our situation? By integrating such contradictions in the presentations of our claims to know our educational practice we can construct descriptions and explanations for the educational development of individuals (King, 1987). Rather than conceive educational theory as a set of propositional relations from which we generate such descriptions and explanations, I am suggesting we produce educational theory in the living form of dialogues (Larter, 1987; Jensen, 1987) which have their focus in the descriptions and explanations which practitioners are producing for their own value-laden practice.

(3) HOW DO WE SHOW OUR VALUES IN ACTION?

The reason that values are fundamental to educational theory is that education is a value-laden practical activity. We cannot distinguish a process as education without making a value-judgement. I am taking such values to be the human goals which we use to give our lives their particular form. These values, which are embodied in our practice, are often referred to in terms such as freedom, justice, democracy (Peters, 1966) and love and productive work (Fromm, 1960). When offering an explanation for an individual's educational development these values can be used as reasons for action. For example, if a person is experiencing the negation of freedom, yet believes that he/she should be free, then the reason why he/she is acting to become free can be given in terms of freedom, i.e. I am acting in this way because I value my freedom. If someone asks why you are working to overcome anti-democratic forces in the work place then I believe that a commitment to the value of democracy would count as a reason to explain your actions. I do not believe that values are the type of qualities whose meanings can be communicated solely through a propositional form. I think values are embodied in our practice and their meaning can be communicated in the course of their emergence in practice. To understand the values, which move our educational development forward, I think we should start with records of our experience of their negation (Larter, 1985, 1987). I want to stress the importance of the visual records of our practice. In using such records we can both experience ourselves as living contradictions and communicate our understanding of the value-laden practical activity of education.

Through the use of video-tape the teachers can engage in dialogues with colleagues about their practice. They can show the places where their values are negated. A clear understanding of these values can be shown to emerge in practice through time and struggle (Jensen, 1987). The kind of theory I have in mind forms part of the educational practices of the individuals concerned. It is not a theory which can be constituted into a propositional form. It is a description and

explanation of practice which is part of the living form of the practice itself. I have suggested a dialogical form enables such a theory to be presented for public criticism. Within this form the action reflection cycle has been found (Lomax, 1986) to be an appropriate way of investigating questions of the kind, "How do we improve this process of education here?" In this cycle we can study the gradual emergence of our values through time as we struggle to overcome the experience of their negation. We can describe and explain an individual's attempts to improve his or her educational practice (Foster, 1980). This approach to educational theory is being developed in a community of educational researchers who are committed to forming and sustaining a dialogical community (Bernstein, 1983) and who are willing to offer, for public criticism, records of their practice which are integrated within their claims to know this practice (Lomax, 1986). I am suggesting that a form of question and answer can also show how to incorporate insights in the conceptual terms of the traditional forms of knowledge whilst acknowledging the existence of ourselves as living contradictions as we refer to the records of our practice.

(4) HOW DO WE KNOW THAT WHAT THE RESEARCHER SAYS IS TRUE?—A QUESTION OF VALIDITY

Questions of validity are fundamentally important in all research which is concerned with the generation and testing of theory. Researchers need to know what to use as the unit of appraisal and the standards of judgement in order to test a claim to educational knowledge. I suggest that the unit of appraisal is the individual's claim to know his or her educational development. Within this unit of appraisal I use methodological, logical, ethical and aesthetic standards to judge the validity of the claim to knowledge (Whitehead & Foster, 1984).

Whilst most researchers may find it strange to take a unit of appraisal as their claim to know their educational development I think the unit is clearly comprehensible. My commitment to this unit owes a great deal to the work of Michael Polanyi. As I read *Personal Knowledge* (Polanyi, 1958), and reflected on my positivist approach to research (Whitehead, 1972), Polanyi's work fulfilled its purpose of "stripping away the crippling mutilations which centuries of objectivist thought have imposed on the minds of men".

In grounding my epistemology in *Personal Knowledge* I am conscious that I have taken a decision to understand the world from my own point of view, as a person claiming originality and exercising his personal judgement responsibly with universal intent. This commitment determines the nature of the unit of appraisal in my claim to knowledge. The unit is the individual's claim to know his or her own educational development. (Whitehead, 1985)

I have given above some indication of the nature of the standards of judgement I use to test the validity of an individual's claim to know their own educational development. The questions I ask in judging the validity of the claim include,

- (a) Was the enquiry carried out in a systematic way? One methodological criterion I have used is the action reflection cycle described above (Foster, 1980; Forrest, 1983).
- (b) Are the values used to distinguish the claim to knowledge as educational knowledge clearly shown and justified?
- (c) Does the claim contain evidence of a critical accommodation of propositional contributions from the traditional disciples of education?
- (d) Are the assertions made in the claim clearly justified?
- (e) Is there evidence of an enquiring and critical approach to an educational problem?

I characterise the application of these criteria as an approach to social validation. They are related to Habermas' view on the claims to validity I am making if I wish to participate in a process of reaching understanding with you. Habermas (1976) says that I must choose a comprehensible expression so that we can understand one another. I must have the intention of communicating a true proposition so that we can share my claim to knowledge. I must want to express my intentions truthfully so that we can believe what I say. Finally, I must choose an utterance that is right so that we can accept what I say and we can agree with one another with respect to a recognized normative background. Moreover, communicative action can continue undisturbed only as long as participants suppose that the validity claims they reciprocally raise are justified. However, such claims to knowledge may conform to acceptable standards of judgement yet still raise questions about their generalisability.

(5) HOW CAN WE MOVE FROM THE INDIVIDUAL TO THE UNIVERSAL?—A QUESTION OF GENERALISABILITY

Instead of thinking of an educational theory in terms of a set of propositional relationships between linguistic concepts I am proposing a view of educational theory as a dynamic and living form whose content changes with the developing public conversations of those involved in its creation (Whitehead & Lomax, 1987). The theory is constituted by the practitioners' public descriptions and explanations of their own practice. The theory is located not solely within these accounts but in the relationship between the accounts and the practice. It is this relationship which constitutes the descriptions and explanations as a living form of theory. In being generated from the practices of individuals it has the capacity to relate directly to those practices. To the extent that the values underpinning the practices, the dialogues of question and answer and the systematic form of action/reflection cycle, are shared assumptions within this research community, then we are constructing an educational theory with some potential for generalisability. The 'general' in a living theory still refers to 'all' but instead of being represented in a linguistic concept, 'all' refers to the shared form of life between the individuals constituting the theory. Now history shows us that new ideas have often met with scepticism, rejection or hostility from those who are working within the dominant paradigm.

Researchers who are trying to make original and acknowledged contributions to their subject, education, might expect powerful opposition to their ideas.

(6) WHICH POWER RELATIONS INFLUENCE THE ACADEMIC LEGITIMACY OF A LIVING EDUCATIONAL THEORY?—A QUESTION OF THE POLITICS OF TRUTH

My enquiry has led me to the question of how to support those power relations which support the autonomy of practical rationality within education. As part of this enquiry I think it important to examine the power relations which are distorting, undermining and systematically blocking the development of dialogical communities:

In addition to the attempt to recover and reclaim the autonomy of practical rationality and show its relevance to all domains of culture, we realize that today the type of dialogical communities that are required for its flourishing are being distorted, undermined, and systematically blocked from coming into existence.... But today, when we seek for concrete exemplars of the types of dialogical communities in which practical rationality flourishes, we are at a much greater loss. Yet we can recognize how deeply rooted this frustrated aspiration is in human life." (Bernstein, 1983)

Whilst this part of my enquiry is still embryonic I am continuing to study my own educational development as I engage with the following three problems.

A crucial issue in gaining academic legitimacy for a particular view of educational theory concerns the institutional arrangements for appointing examiners for Research Degrees in Education. For example, in some institutions a student is not permitted, under any circumstances, to question the competence of an examiner once the examiner has been appointed by the Senate. Given that the academics in one such institution have committed themselves to the statement, "A University has a moral purpose in society in the sense of upholding certain standards of truth, freedom and democracy", this raises a question on how the academics are upholding these values.

I wish to question the power relations which sustain the view that competence is a matter of appointment rather than of judgement, on the grounds that any academic judgement should, as a matter of principle, be open to criticism and to the possibility of incompetence. Could any academic keep his or her integrity and at the same time accept the truth of power which sustains the view that no questions of competence can be raised in the light of actual judgements?

I argue that, on principle, the power of truth is served by permitting such a challenge in relation to an examiner's judgement rather than seeing competence to be a procedural matter of appointment.

The second problem concerns the problem of self-identification in texts for publication. A problem I would have had in sending this work to a journal such as *Educational Theory*. The problem follows from a central point in this paper that

academics and practitioners should identify themselves in their work context and, at some point in their research, offer for public criticism a claim to know their own educational development. However, the guidelines and procedures of the staff of *Educational Theory* state:

Manuscripts are subjected to a double-blind reviewing process (i.e. reviewers do not know the identity of authors, the authors will not learn the identity of reviewers)...

To preserve the advantages of blind reviewing, authors should avoid self-identification in the text as well as the footnotes of their manuscripts.

In asking that an alternative form of presentation is considered by the readership of such journals as *Educational Theory*, a presentation which demands self-identification, I am conscious of entering, as Walker (1985) says, long-standing and fiercely defended positions in the history and philosophy of science. I do not enter such a debate lightly. I have found it necessary to engage with such politics of educational knowledge for the sake of developing an educational theory which can be directly related to the educational development of individuals.

The third problem is one in which the power relations in the academic community support the power of truth against the truth of power. I am thinking about the problem of testing one's ideas against those of others. In supporting the power of truth against the truth of power, academics offer their ideas for public criticism in a forum where the power of rationality in the force of better argument is paramount. Acknowledging mistakes is a fundamental part in developing our ideas.

In his paper, 'Educational theory, practical philosophy and action research', Elliott (1987) treats Hirst (1983) rather gently and chooses a statement which does not fully acknowledge Hirst's mistake in advocating the "disciplines approach to educational theory":

It is not so much that what I wrote in 1966 was mistaken as that what I omitted led to a distorting emphasis. Educational theory I still see as concerned with determining rationally defensible principles for educational practice. (Hirst, 1983)

Because our views about educational theory affect the way we see human existence I believe it imperative to acknowledge that mistakes have been made and to understand the nature of these mistakes so that we can move forward.

Paul Hirst has in fact made a most generous acknowledgement that he was mistaken in his view of educational theory:

In many characterisations of educational theory, my own included, principles justified in this way have until recently been regarded as at best pragmatic maxims having a first crude and superficial justification in practice that in any rationally developed theory would be replaced by principles with more fundamental, theoretical, justification. That now seems to me to be a mistake. (Hirst, 1983)

I believe both Hirst and Elliott are making a mistake in their view of

rationality. They both subscribe to a view of rationality which leads them to use a propositional form of discourse in their characterisations of educational theory. What I am advocating is that the propositional form of discourse in the disciplines of education should be incorporated within a living form of theory. This theory should not be seen in purely propositional terms. It should be seen to exist in the lives of practitioners as they reflect on the implications of asking themselves questions of the kind, 'How do I improve my practice?'

What I wish to do is to push Elliott's position forward. I think Gadamer points the way, but his propositional logic does not permit him to make the creative leap to a new synthesis.

Elliott points out that in developing our understanding we have to risk our values and beliefs. As we open ourselves to the things we seek to understand they will force us to become aware of problematic pre-judgements and to criticise them in the light of new meanings.

Let us be clear about my purpose. I am attempting to make an acknowledged and scholarly contribution to knowledge of my subject, education. This purpose is part of my contract of employment as a university academic. I have chosen the field of educational theory because I am committed to the profession of education and believe that it needs a theory which can adequately describe and explain the educational development of individuals. I am writing as a professional in education. In saying this I want to distinguish my activities from those of a philosopher, psychologist, sociologist or historian. I value their contributions to education but I do not believe that educational theory can be adequately characterised by any of them. I believe the limits of philosophers, whose work I have benefited from, such as Elliott, Carr (1986) and Hirst, are limited by the propositional form of their discourse. As philosophers, rather than educationalists, they have not taken the leap necessary to comprehend the nature of educational theory. I am saying that educationalists, through studying their own attempts to answer questions such as, 'How do I improve my practice?', are constructing a living educational theory within which the work of Hirst, Carr, Elliott, Habermas and Gadamer, is usefully integrated (Eames, 1987, 1988; Larter, 1987).

It seems to me to be crucial to ask the right questions in Collingwood's sense of moving our enquiry forward. In his work on 'Educational theory and social change', Pritchard (1988) says that the questions are: "How much do we wish to see? How much do we wish to understand? What conceptions, and alternative conceptions, of human practices do we have that will enable us to enhance and significantly enrich life and well-being?"

Pritchard argues that we urgently need studies within educational theory which will serve to demystify institutions and to unmask ideologies. He concludes,

It is evident that the attempt to 'raid' the disciplines of education and to use materials drawn from these areas without considerable theoretical understanding and support is ill-advised and, ultimately, is based upon an incoherent conception of the theory of education.

My worry is that Pritchard's questions are still grounded within the conceptual

forms of the disciplines of education. In order to construct an educational theory for professional practice I believe we will have to face the practical and theoretical implications of asking ourselves questions of the kind, 'How do I improve my practice?'

In the past I have been critical of academics who are unwilling to study their own educational development and subject their claim to know this development to social validation (Whitehead & Foster, 1984). It seems that Whitty (1986) voices a similar criticism in the context of the work of American and Australian sociologists on the politics and sociology of education:

Yet, if the prescriptions of these writers are not to remain purely rhetorical, there is an urgent need for them to engage in an active exploration of the implications of their work among the political constituencies in whose interests it is supposedly being carried out.

I hope to demonstrate my own engagement by investigating how relations which support the power of truth against the truth of power influence my own educational development. These influences are emerging as I engage with the politics of truth within arenas such as the educational research associations and institutions of higher education.

In conclusion I identify with a conversation between Giles Deleuze and Michel Foucault which considers the necessity for the practitioner of speaking on his or her own behalf:

You were the first to teach us something absolutely fundamental: the indignity of speaking for others. We ridiculed representation and said it was finished, but we failed to draw the consequences of this 'theoretical' conversion—to appreciate the theoretical fact that only those directly concerned can speak in a practical way on their own behalf. (Foucault, 1980)

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REFERENCES

- ARGYRIS, C. & SCHÖN, D. (1975) *Theory in Practice. Increasing Professional Effectiveness* (London, Jossey Bass).
- BAYLES, E.E. (1960) Are values verifiable? *Educational Theory*, 20, pp. 71–78
- BERNSTEIN, R.J. (1983) *Beyond Objectivism and Relativism* (Oxford, Basil Blackwell).
- BUTLER, D.J. (1954) The role of value theory in educational theory, *Educational Theory*, 4, pp. 69–77.
- CARR, W. (1986) Theories of theory and practice, *Journal of Philosophy of Education*, 20, pp. 177–186.
- CLAYTON, A.S. (1969) Education and some moves towards a value methodology, *Educational Theory*, 19, pp. 198–200.
- COLLINGWOOD, R.G. (1978) *An Autobiography*, Ch. 5, Question and answer, (Oxford, Oxford University Press).
- CUNNINGHAM, E.C. (1953) Extensional limits of Aristotelean logic, *Educational Theory*, 3, pp. 92–107
- EAMES, K. (1987) The growth of a teacher-researcher's attempt to understand, writing, redrafting, learning and autonomy in the examination years, M. Phil., University of Bath.

- EAMES, K. (1988) Evaluating a teacher researcher's choice of action research, *Assessment and Evaluation in Higher Education*, 13(3), pp. 212–218.
- ELLIOTT, J. (1987) Educational theory, practical philosophy and action research, *British Journal of Educational Studies*, 35(2), pp. 149–169.
- FORREST, M. (1983) The teacher as researcher—the use of historical artefacts in primary schools, MEd dissertation, University of Bath.
- FOSTER, D. (1980) Explanations for teachers' attempts to improve the process of education for their pupils, MEd dissertation, University of Bath.
- FOUCAULT, M. (1980) in C. GORDON (Ed.) *Power Knowledge* (London, Harvester).
- FROMM, E. (1960) *Fear of Freedom* (London, Routledge & Kegan Paul).
- GADAMER, H.G. (1975) *Truth and Method* (London, Sheed & Ward).
- GITLIN, A. & GOLDSTEIN, S. (1987) A dialogical approach to understanding: horizontal evaluation, *Educational Theory*, 37(1), pp. 17–29.
- HABERMAS, J. (1976) *Communication and the Evolution of Society* (London, Routledge & Kegan Paul).
- HIRST, P.H. (Ed.) (1983) *Educational Theory and its Foundation Disciplines* (London, Routledge).
- JENSEN, M. (1987) A creative approach to the teaching of English in the examination years, MPhil, University of Bath.
- KILPATRICK, W. (1951) Crucial issues in current educational theory, *Educational Theory*, 1, pp. 1–8.
- KING, R. (1987) An action inquiry into day release in further education, MPhil, University of Bath.
- LARTER, A. (1985) *What ought I to have done? An examination of events surrounding a racist poem*, paper presented at the symposium, 'Action Research, Educational Theory and the Politics of Educational Knowledge', at BERA 1985.
- LARTER, A. (1987) An action research approach to classroom discussion in the examination years, M.Phil., University of Bath.
- LOMAX, P. (1986) Action researcher's action research; a symposium, *British Journal of In-Service Education*, 13, University of Sheffield, 30 August 1985, pp. 42–50.
- MARCUSE, H. (1964) *One Dimensional Man* (London, Routledge & Kegan Paul).
- MCFIFF, J. (1988) *Action Research—principles and practice* (London, Macmillan).
- MOSIER, R.D. (1967) From enquiry logic to symbolic logic, *Educational Theory*, 17, pp. 32–38.
- PETERS, R.S. (1966) *Ethics and Education* (London, Allen & Unwin).
- POLANYI, M. (1958) *Personal Knowledge* (Oxford, Oxford University Press).
- POPPER, K. (1963) *Conjectures and Refutations* (Oxford, Oxford University Press).
- PRITCHARD, M. (1988) Educational theory and social change, *Cambridge Journal of Education*, 18, pp. 99–109.
- SCHÖN, D. (1983) *The Reflective Practitioner* (New York, Basic Books).
- SMITH, P. G. (1976) Knowledge and values, *Educational Theory*, 26, pp. 29–39.
- TOSTBERG, R.E. (1976) Observations of the logical bases of educational policy, *Educational Theory*, 26, pp. 74–82.
- WALKER, R. (1985) *Doing Research* (London, Methuen).
- WHITEHEAD, J. (1972) A preliminary investigation of the process through which adolescents acquire scientific understanding, unpublished MA dissertation, University of London.
- WHITEHEAD, J. (1985) An analysis of an individual's educational development: the basis for personally oriented action research, in: M. SHIPMAN (Ed.) *Educational Research: principles, policies and practices* (London, Falmer).
- WHITEHEAD, J. & FOSTER, D. (1984) Action research and professional educational development, *Cambridge Action Research Network Bulletin*, 6, pp. 41–45.
- WHITEHEAD, J. & LOMAX, P. (1987) Action research and the politics of educational knowledge, *British Educational Research Journal*, 13, pp. 175–190.
- WHITTY, G. (1986) Recent American and Australian approaches to the sociology and politics of education: review article, *Educational Theory*, 36, pp. 81–89.
- WITTGENSTEIN, L. (1953) *Philosophical Investigations*. (Oxford, Basil Blackwell).