Anita Malinen

Kokolb

Mezirow

ReRevans

ScSchön

Towards the essence of

adult experiential learning



Anita Malinen

TOWARDS THE ESSENCE OF ADULT EXPERIANTIAL LEARNING

A reading of the theories of Knowles, Kolb, Mezirow, Revans and Schön

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CONTENTS

PREFACE	7
1 THE THEME OF ADULT EXPERIENTIAL LEARNING IN RESEARCH	11
Theory building in adult education Towards a deeper understanding of adult experiential learning	
2 THEORETICAL UNDERPINNINGS AND METHODOLOGY	18
Sources Generating the research problems Methodological principles: hermeneutical text interpretation and	21
the grounded theory method	
3 KNOWLEDGE AND KNOWING IN ADULT EXPERIENTIAL LEARNING	29
The nature and qualities of knowledge	
the basic operations of 'understanding'	
4 INDIVIDUAL DIMENSIONS OF ADULT EXPERIENTIAL LEARNING	55
What experience?	
experience -modifying process	89

5 SOCIAL DIMENSIONS OF	
ADULT EXPERIENTIAL LEARNING	101
The epistemological dimension of adult experiential learning The existential dimension of adult experiential learning Necessary responsibilities for an adult educator	116
6 CONCLUSION	
Towards a formal theory of adult experiential learning?	
Methodological soundness of the research process	
Directions for future research and practice	
NOTES	151
REFERENCES	160

This book is dedicated to the memory of my father.

"The most we can do is look more closely."

– Umberto Eco –

PREFACE

This book is a crystallization of my long-standing interest and involvement in adult experiential learning. Its origins go back over a decade. It was experience of teaching and administrative duties concerning adults as learners that re-aroused my interest in the topic of adult learning. My experiences as an educator forced me to question the previous knowledge I had acquired about learning and education. I began to wonder if there were other theories that might better explain the adult learning process. As a teacher of adults, I had begun to find most books on learning theory increasingly unsatisfactory as explanations. Moreover, each theory provided a particular picture of learning that highlighted some aspects and obscured others. The gap between theory and practice seemed profound and difficult to bridge. This book is the result of my continuing quest to unite the two.

Although these preliminary investigations did not answer my questions in any way, they suggested to me that a deeper mystery was to be found here than I had initially suspected. In any case, I soon came to the conclusion that adult experiential learning is such a fascinating and complex phenomenon that it is worth investigating thoroughly. My interest in these questions was further stimulated when I took up the study of philosophy. Philosophy has been an important source of inspiration over the past years, even though it has left me with more questions than answers. I have, however, encountered concepts and ideas that have challenged my previous 'knowing' about learning and teaching profoundly. Another important source of inspiration have been the students I have been teaching all these years; they have given me the opportunity to try out my theoretical understanding and ideas in practice.

By now I know with certainty that going deeper into the phenomenon of adult experiential learning can help us to answer to question of how adults learn. This complex phenomenon challenges me even more now than earlier. A series of unanswered and unexplored questions await solutions. Although seeking pure and simple universalities never ends, I do believe that it is possible to discover and develop a simple, integrated adult learning theory. In essence, I have conducted much the same process of theory building as described in this book. Studying various adult learning theories for their usefulness ultimately became a matter of developing my personal theory of adult learning. Now, however, I am in a position to refine that theory further. I hope too that readers of this book in turn will refine their personal theories as they read with a critical and analytical eye, bearing in mind that although the search for pure and simple universalities never ends, we should nonetheless never give it up. In this way we may eventually bridge with the gap between theory and practice.

I am greatly indebted to many people without whose help and support this project would never have been completed. First of all, I wish to express my deepest gratitude to my supervisor, Professor Tapio Vaherva, who has guided and encouraged me throughout my research effort. It has been a real privilege and pleasure to work with such an experienced adult educator. He has gently pushed me towards bringing my research to a conclusion by keeping me on - task with his regular, but kind queries of "How's it coming along?". However, he has also understood that the life of the adult scholar is not limited solely to research. I would also like to thank Professor Sirkka Hirsjärvi whose valuable work for the promotion of post-graduate studies in the Department of Education was also of great help to me as it was to others. Thanks are due, also, to Professor Juhani Aaltola, who at the outset guided me towards the fascinating world of philosophy by posing "difficult" questions concerning my research topic. My thanks also go to Professor Annikki Järvinen and Distinguished Professor Stephen Brookfield, for the useful comments they gave me on the final version of the study.

A very special word of thanks is due to Veli Verronen, lecturer in philosophy. His lectures and seminars and the conversation about philosophy we had are among my special memories in writing this book. Out of the wealth of his knowledge of philosophy, he has provided many of the clues that have stimulated my research. My gratitude for his continuous interest and enthusiasm is deeply felt.

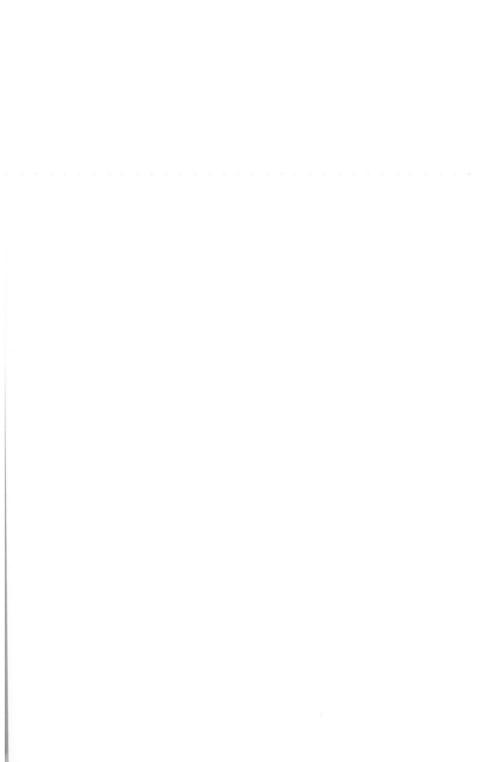
I feel privileged because many colleagues and friends have followed the research process with particular interest and have shared their ideas, experiences and comments with me. Discussions with them have been crucial as sources of inspiration and as sounding boards for the ideas that I have attempted to develop. Especially, I wish to thank my colleague, Pekka Penttinen, for his cooperation and friendship during the various stages of my research work. He has helped me with patience and kindness from the very beginning from assistance with technical problems with my computer to thorough-going discussions about research methodology.

I also thank Michael Freeman, for his careful and thorough attention to my manuscript. He has not only corrected language mistakes, but also suggested ways of improving and focusing the argumentation. Thanks are due, also, to Juha Virkki for his editorial expertise and kindness. I also thank SoPhi for publishing this work.

Above all, I wish to thank my nearest and dearest at home - Harri, my husband, and my daughter, Hanna, for their patience and support. Their presence in my life is always a very precious and refreshing source of inspiration. I am greatly indebted to my parents, Marjatta and Viljo, for their endless support and help during all stages of my education and research career. My husband and my mother deserve special thanks for their help in taking care of Hanna during the most intensive periods of writing. These four have supported me in ways they will never know.

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Jyväskylä, February 2000 Anita Malinen



1 THE THEME OF ADULT EXPERIENTIAL LEARNING IN RESEARCH

Theory building in adult education

This study is motivated by a certain practical and theoretical dissatisfaction. As an adult educator, I have often been confused by the gap between practice and theory. Unfortunately, the adult learning process is not generally carried out in the way described in books concerning adult learning. Building conceptual models and theories can thus be seen a kind of intellectual exercise without an urgent need to prove them true or false in practice (see Brookfield 1992; see also Kontiainen 1991, 42). But theorizing in itself is not a sufficient justification. Underlying all formal theorizing is a larger purpose having to do with improving some aspect of existence, whether it be physical, psychological, political or educational (Brookfield 1992). Usher (1989a), moreover, emphasizes that the purpose of educational theory is essentially pragmatic in helping its practitioners to enhance and refine their understanding and their praxis.

What are the reasons for this gap? The most serious 'fault' concerning theory-building attempts in adult education is that they are too specific, too narrow in scope (Brookfield 1989; 1992; Usher 1989b). We have many explanations, each of which contributes something to our understanding of adult learning. We have several micro-theories which have been proposed for context-specific purposes (e.g. facilitating self-directed learning or developing critical reflection). Sometimes these 'theories' are sets of assumptions concerning the best practices governing a very specific educational transaction. Some theories have focused primarily on defining the characteristics of adults or on designing strategies and

techniques for adult learning. Furthermore, some of them have concentrated on the cognitive and logical dimensions of the adult learner, whereas the affective and intuitive dimensions of the adult learner have been largely ignored (see Brookfield 1985; Wacks 1987). Theories may even employ global concepts, but these concepts are often poorly defined and ambiguously related to one another and everyday life. For these reasons theories are not accessible or understandable by practitioners. At present adult education 'theory' seems to be a collection of bits of more or less theoretical knowledge, lacking in focus and integration (see Lawson 1992; Merriam 1987; Usher 1989a; 1991; see also Bright 1989a). On the whole, there exists too much ambiguity produced by too many facts, viewpoints and perspectives. In no sense can such sets of assumptions be considered to be all-inclusive, "grand" theories of adult education (Brookfield 1992). Nevertheless, they have contributed to the generation of many academic orthodoxies (see e.g. Brookfield 1985; 1989). And these orthodoxies have had a powerful influence both on research and practice in adult education. A researcher might, for example, build a lifetime of research on the self-directed learning process upon a weak analysis of what self-directedness itself is (cf. Scriven 1988). On the other hand, practitioners unfortunately have often uncritically accepted these orthodoxies and applied them mechanically in their own activities

To sum up, the area of adult education research is fragmented; there has been little follow-up and continuity (see Courtney 1986; Garrison 1994; Usher 1989b). In fact, adult education research could be said to be still in a pre-paradigmatic state. Or would it be better to characterize it as suffering from paradigmatic plurality (see Brookfield 1984b; 1989; Merriam 1987)? As a consequence, the development of formal theory building in adult education is at a very early stage. Therefore, the search for the all-embracing, universally generalizable theory upon which to base the study and practice of adult education is a present and urgent challenge for researchers (see e.g. Brookfield 1992; Garrison 1992; Lawson 1989; Rachal 1986). This search for a formal theory of adult education should continue by identifying the fundamental concepts and issues underlying the pre-eminent theoretical frameworks (see e.g. Brookfield 1984b; 1989; Glaser 1978, 144-146). Researchers should be seeking to reduce the number of concepts, thus unifying, or at least moderating, the existing plurality in an intelligible way. This is the only way our conceptual and theoretical understanding of adult education will be advanced and the only way adult education research will ever

be taken seriously as an autonomous academic field of study (Brookfield 1988a; Rubenson 1982; see also Kontiainen 1991, 52).

A part of evaluation what theory building has been done involves delineating what a theory of adult education might look like, and what criteria might be used for judging its significance (Merriam 1987; see also Steutel 1988). Brookfield (1992) has presented an interesting analytical challenge by suggesting three categories of criteria for formal theory building in adult education. Epistemological criteria (discreteness, empirical grounding, researchability, comprehensiveness) refer to the ways in which we come to know that the categories of knowledge comprising a formal theory are judged to be intellectually sound. Communicative criteria (communicative clarity, invitational tone, connectedness, prescriptive policing), in turn, refer to judging the assessibility and clearness of a theory. The final category, critically analytic criteria (assumptive awareness, ethical attention, contextual sensitivity, reformulative consistency, value-judgmental explicitness), describe the ways in which a body of theoretical work is subjected to constant critical analysis by its own proponents. Even though the origins of these criteria lie in the realm of informal discourse; they challenge researchers to attempt formal theory building. I agree with Brookfield that proposing a common set of criteria is an important step in developing a dialogue among researchers and theorists engaged in formal theorizing in very diverse contexts.

I would like to propose that, in particular, five of Brookfield's criteria should challenge researchers in adult education to further formal theory building. These five criteria are precisely those, which mesh well with the conceptual analysis. The others are more connected to its the empirical and practical aspects. Firstly, the criterion of connectedness proposed by Brookfield demands that theoretical assertions can be understood by practitioners as having some kind of connection to their own activities. Many theoretical efforts do meet this criterion. However, it seems that formal theory is more readily applicable than substantive theory to different classes of substantive areas (Glaser 1978, 156). Thus, the more formal or general the theory is the more useful it is for practitioners in diverse contexts. Secondly, the criterion of discreteness refers to the extent to which a body of theoretical ideas is seen to refer to a phenomenon that is discrete, distinct and separate. Brookfield proposes two choices for researchers in order to satisfy this criterion. They can concentrate on specific aspects of practice – for example nature of teaching-learning transactions, the development of critical reflection

– which are observable across diverse contexts. For this kind of analysis he proposes applying the Glaser and Strauss method of constant comparison. On the other hand, researchers can restrict their theoretical analyses to sharply defined fields of practice (e.g. continuing professional education, literacy) and try to develop middle range, substantive theories applicable only within each of these fields. The first alternative has, however, the most potential for developing a formal theory with the greatest level of generality. For example, by examining how adults learn across diverse contexts, we come to a deeper understanding of the nature and rhythm of this process and to an appreciation of how it is affected by contextual features. A "grand" theory of adult learning may follow.

Thirdly, the criterion of comprehensiveness refers to the extent to which any formal theory accounts for all aspects of the phenomenon studied. For example, we have recently many middle range theories around the theme of adult learning (e.g. autobiographical learning, self-directed learning, developing learning), but a more comprehensive theory is still missing. Fourthly, the criterion of assumptive awareness asks if the assumptions underlying formal theoretical elaborations are made explicit. Assessment of these underlying theoretical roots and foundations of the theories is, however, a matter of immediate urgency. Finally, these four criteria are naturally followed by the criterion of reformulative consistency, which refers to the extent to which a theory changes over time in response to new research, to critical analyses, and to the theorist's own interpretive leaps forward. Generating more discrete and comprehensive theory is an ever-developing entity (see Glaser & Strauss 1974, 9, 32), which gradually may influence to the development of more accessible terminology, too. This, in turn, may help practitioners, so that theorizing does not remain as a mere intellectual exercise in an ivory tower.

More specifically, what then is meant by a 'formal theory of adult education'? Nearly all definitions incorporate the notion that a theory is a set of interrelated ideas, principles, or concepts that attempts to explain a certain phenomenon. Confusion occurs since the terms "model", "framework", "conceptual scheme", or "system" are used interchangeably with the term theory (Merriam 1987; Strauss & Corbin 1991, 147). A formal theory of adult education could be defined as an integrated, comprehensive entity with a high degree of universality concerning the basic phenomena in this area — e.g. the process of adult learning. Thus, the basic building blocks of a formal theory would be concepts with a specific set of properties that illuminate this basic phenomenon

(Glaser & Strauss 1974, 35-43; Strauss & Corbin 1991, 29, 74). I propose with Brookfield (1992) that such a formal theory of adult education emerges from a clarifying study of existing substantive or middle range theories dealing with adult learning in many different types of situations or contexts (see Denzin 1970, 120; Glaser 1978, Glaser & Strauss 1974, 79; Lawson 1989; Strauss & Corbin 1991, 174-175). These substantive theories typically have important general relevance for the development of a grounded formal theory (Glaser 1978, 146). I agree, however, with Glaser and Strauss (1974) that a formal theory is not a perfected and final product, but instead it is a process, an ever-developing entity (p. 9, 32; my partial italics).

Towards a deeper understanding of adult experiential learning

The aim of this study is to search the essences of one central phenomenon in the area of adult education - adult experiential learning. It has, as a somewhat new educational orthodoxy, tended to attract most those interested in adult education - especially educators in very diverse contexts. Experiential learning is often seen in an overwhelmingly positive and liberating light. The term 'experiential learning' is, however, used in many distinct and differing ways: sometimes it is understood as a large paradigm or framework of adult education, sometimes as one of many 'techniques' of teaching adults (see Criticos 1996; see also Weil & McGill 1990a). Why is this piece of conceptual analysis needed? The picture of adult experiential learning that emerges is confusing. Adult experiential learning is a complex, vague and ambiguous phenomenon. which is still inadequately defined, conceptually suspect - and even poorly researched (see Garrison 1994; Merriam 1987; Smith 1987). On the other hand, its theoretical and philosophical foundations are fragmented and confusing (see e.g. Boud 1990; Edwards 1994; Weil & McGill 1990b; see also Saddington 1998). There are too many interpretations and priorities among the theorists and practitioners that no single, clear definition of these foundations could be constructed. It could be claimed that conceptual ambiguity and semantic chaos surround definitions of adult experiential learning. I doubt, if its true total meaning yet been encapsulated in current definitions (cf. Scriven 1988).

This kind of paradigmatic plurality and lack of agreement regarding the proper foundations and realm of adult experiential learning mean that an assessment of the work of the chief exponents in this area is particularly important. Theory-building attempts concerning adult experiential learning need to be examined more thoroughly. I shall assess the theory-building efforts concerning adult experiential learning attempted so far and try to contribute to a deeper understanding of the nature of this phenomenon. I try to reduce conceptual confusion and develop an alternative conceptualization of it. Accordingly, I am concerned with formal theory building in the area of adult experiential learning. This means asking "inconvenient" questions: What are the basic premises of current theories? What are the most important arguments? Are these arguments sufficient? Are the arguments convincing? How dense in conceptual detail are the theories? Are there any unfounded generalizations? Are there more opinions than facts? Are there any hidden arguments? In sum: what are the possibilities and the limits of these particular theories in explaining and understanding adult experiential learning?

In investigation of these theory building efforts three different approaches are possible: descriptive, rescriptive and prescriptive (Steutel 1988). This piece of conceptual analysis could be defined primarily as rescriptive. Because adult experiential learning is concerned with complicated concepts, highly resistant and ultimately irreducible to a purely linguistic explication, much of it cannot fairly be subjected to simple, conceptual re-definition. It follows that this conceptual analysis has to be done by analyzing, and not by re-placing, complex concepts. (see Scriven 1988; Steutel 1988.) For current central concepts of education the descriptive method is suitable, but the outcome has to correspond to current frameworks of central educational concepts. Rescriptive analysis is best for developing alternative concepts. It starts by drawing attention to certain theoretical defects and inadequacies in the relations between current concepts. The driving force behind rescriptive research is thus a kind of intellectual dissatisfaction with the existing configurations of the central concepts. Rescriptive analysis will inevitably point to the more or less theoretical adequacy of the alternative central concepts compared to existing forms of conceptualization. In this study, it should result thus in a proposal to employ a revised conceptualization of adult experiential learning, which means, from a theoretical viewpoint, more adequate concepts than those current central concepts concerning this phenomenon.

This revised conceptualization should be also theoretically relevant and theoretically interesting (Steutel 1988; see also Niiniluoto 1984, 154), because each of these re-definitions is involved in the continuing re-structuring of the total phenomenon under scrutiny. Conceptual analysis of this kind can never be completed, since it exists only within the context of debate, re-assessment and re-definition. Therefore, as a researcher, I am not seeking Yes or No answers, but my crucial aim is to suggest a revised conceptualization of adult experiential learning and to maintain an open dialogue (Schriven 1988; Wilson & Hutchinson 1991; see also Brookfield 1992). Accordingly, this study is part of the ever-developing entity of adult education theory, part of the process of refining the theory of adult experiential learning.

2 THEORETICAL UNDERPINNINGS AND METHODOLOGY

Sources

For the purposes of this investigation I selected five landmark theories: the andragogical approach of Malcolm Knowles, the experiential learning theory of David Kolb, the transformation theory of adult learning developed by Jack Mezirow, the Action Learning approach developed by Reginald Revans and finally the 'reflection-in-action' theory of Donald Schön.

Knowles developed his andragogical approach - "the art and science of helping adults learn" (1980, 43) - to more than four decades. At the beginning he regarded this approach as the antithesis of pedagogical model of learning. Andragogy was good and pedagogy was bad. He turned since the dichotomy into a continuum and presents these approaches as two parallel sets of assumptions about learners and learning that need to be checked out in each situation. As a result, the andragogical approach has become a general theory about learning (Knowles 1989, 113). Knowles' philosophical orientation has its roots in humanistic psychology, pragmatism, existentialism and behaviorism (see Jarvis 1991). John Dewey, Eduard Lindeman, Abraham Maslow and Carl Rogers exist as the theoretical background to his theorizing. Knowles accepts – even glories in – the criticism that he is a philosophical eclectic or situationalist who applies his philosophical beliefs differentially to different situations. He claims to be free from any single ideological dogma. Furthermore, he says that andragogy is "a conceptual framework that serves as a basis for an emergent theory" (1989, 111-112; my italics). His book The adult learner. A neglected species is essential for the purposes of this conceptual analysis.

Perhaps the most famous perspective on adult experiential learning is that of David Kolb. Kolb himself defines experiential learning as "a

program profoundly re-creating our personal lives and social systems" (1984, 18). It is a guiding philosophy and conceptual rationale as well as a practical educational tool for lifelong learning (ibid.). His basic ideas are introduced in his book Experiential learning. Experience as the source of learning and development published in 1984. It is an integration of fifteen years' research on learning styles and learning process. According to Kolb "the experiential learning model pursues a framework for examining and strengthening the critical linkages among education, work and personal development" (1984, 4; my italics). Kolb's model has had a significant impact on management training and professional development research (see e.g. Sugarman 1985). It is tied clearly to the work of John Dewey, Kurt Lewin and Jean Piaget. His current research focuses on learning and the role of conversation in learning (Hāmālāinen & Siirala 1998).

Jack Mezirow's chief contribution in the area of theory building is Transformation Theory of adult learning, "a learning theory centered on meaning" (1991c, xii). It is intended to be "a comprehensive, idealized and universal model consisting of the generic structures, elements and processes of adult learning" (1994b; my italics). Jack Mezirow wrote many articles with this theme during the 1980s. His basic ideas are summarized in his book *Transformative dimensions of adult learning* (1991c). He is an instance of reformulative consistency and re-interpretation; since 1978 he has continuously modified and specified his theory (see Mezirow 1994, 1996, 1998). Mezirow sets his theory within a clearly recognized and carefully argued philosophical context, that of Habermas' critical theory — especially theory of communicative action.

Revans defines Action Learning as "an empirical approach to the treatment of problems and opportunities offered in conditions of change (ignorance, risk and confusion)" (1982, 710-711; my italics). He claims that Action Learning is "as old as humanity, illustrated in the Old Testament, justified in the New and implicit in classical philosophy" (1985, 13). Revans has been developing Action Learning programs for over 40 years. The earliest programme was set up with the National Association of Colliery Managers in 1952. Action Learning focuses on practice and management education. It was intended as an approach to the resolution of management difficulties and management development – not as an educational instrument. Revans' major ideas were first introduced in a number of articles. These have since been collected in the book *The origins and growth of Action Learning* (1982).

Schön's 'reflection-in-action' -theory is thoroughly presented in *Educating the reflective practitioner* (1988). He is mainly interested in pro-

fessional education and re-building John Dewey's theory of inquiry. Underlying Schön's view is a constructionist view of reality as opposed to the traditional positivist epistemology of practice and the objectivist view of reality. "Reflective practicum" is aimed "at helping students acquire the kinds of artistry essential to competence in the intermediate zones of practice" (Schön 1988, 18). Much of Schön's theorizing is based on aesthetic exemplars (e.g. an architectual studio, a musical apprenticeship, psychoanalytic supervision) and occupational interests (Grimmet 1989). Schön's work has attracted researchers especially in the field of teacher education. In recent years Schön's research interest has focused on three areas: practice knowledge and reflective practice, design research and organizational learning.

These landmark theories can be regarded as suggesting five different lenses through which this complex phenomenon, adult experiential learning, can be viewed. My choice of just these five writers is more particularly motivated by three reasons. Firstly, the basic criterion for selection was an idea of the theoretical relevance of these theories for developing a formal theory (see Glaser 1978, 150; Niiniluoto 1984, 154; Strauss & Corbin 1991, 176-177). They include concepts that are deemed significant in recent research concerning adult experiential learning, and they provide a broad and diverse range of theoretical ideas on this area (Glaser 1978, 150). The second reason refers to the claim by Glaser and Strauss (1974) that, although formal theory can be generated directly from data, it is most desirable – and usually necessary - to generate formal theory building from a substantive one (p. 79-80, 88-90; see also Glaser 1978, 144). Formal theory can thus proceed out of published theory. The theory under development is not, however, limited to those concepts that exist in theories under study (Glaser & Strauss 1974, 36; see also Strauss & Corbin 1991, 112). My final reason for selecting these five theoretists is that they are major figures in both practice and research in adult education. Their theories have invited a substantial body of further research, critique and refinement in very diverse contexts. Accordingly, they have continuously modified their previous formulations and to the same degree their positions in the field of adult education. At the moment no one of them has a readily apparent superiority over the others. From the formal theoretical viewpoint, the cultural composition of the source material – four Americans and one Briton – is not a problem, since the basic criterion for selecting theoretically relevant materials is ideas that fit the theoretical areas under study and the state of knowledge of the field. It is of less importance how much of an author or

Generating the research problems

The original texts written by these theorists constitute the 'raw data' of this study (see Palonen 1988, 127). Texts as sources have, however, the problem of oversupply. Therefore, I separated from this raw data, which constitutes all own texts of these writers, the core material. By core material I mean a limited number of sources (or parts of texts) which are then used systematically in research (see Palonen 1988, 117-118). This source limitation is possible, because a text is like a 'relief'; its various topics are not all at the same altitude (Ricoeur 1991, 158).

Accordingly, the texts, as a whole, need to be read. I read the texts through as many times as seemed necessary in order to grasp the whole text in the light of particular phenomenon I am investigating. Careful and thorough reading is necessary, since the decisions concerning nature of the research problems, which are sought 'from texts', cannot be made until the researcher knows the source material well enough (Palonen 1988, 140). My manner of reading was hermeneutical: the entity of the text was the only entity concerning understanding and every new time of reading revealed more and directed the text towards its real possibilities (see Varto 1991). I maintained an adult experiential learning focus of interest in reading in guidance of my individual sense of what may be important or essential. Certainly my 'theory-ladenness' or preconceptions² influenced my reading.

By having read the texts a number of times I had already a sense of what is "important". This judgment of importance is thus not a pure guess (see Ricoeur 1991, 162-167), even though it is based mainly on great many readings and thinking and generating ideas (see Glaser 1978, 11). Accordingly, all unnecessary information was eliminated from the material and the rest was organized for the purpose of analysis, and thus prepared for answering those questions for which it has been collected. I reconstructed the texts by eliminating and transfering information, since it is essential to limit the number of concepts to the minimum required by the conceptual analysis and formal theory generation (Brookfield 1992; Glaser 1978, 150; Merriam 1987; Schriven 1988). Concentration on certain aspects of the text makes a deeper and more precise analysis possible (Haapala 1991; Ricoeur 1991, 158; Strauss & Corbin 1991, 37). This re-construction produced fifteen

summaries, which are not only the basis of the analysis, but also tools for specification of the research problems and the methods of analysis to be used in the further examination of the texts.

After preliminary reading I broke down the phenomenon of adult experiential learning into three broad categories of more specific questions, into the strategy of questioning (see e.g. Gadamer 1988; Palonen 1988, 138-143).

A. Research problems concerning *knowledge* and *knowing* in adult experiential learning. Here the analysis focuses on the clarification of two areas of questions which constitute the main problems of this area:

- (1) How is knowledge and knowing defined? What is the content of knowledge?
- (2) What are the subjective conditions of knowing?

The second category of questions focuses on the clarification of individual dimensions of adult experiential learning.

- B. Research problems concerning the conception of *individual* dimensions of adult experiential learning. Four areas of questions are considered essential here:
 - (1) What is meant by 'experience'? What is the position and meaning of the learner's experience in the learning process?
 - (2) How do adults learn? What is meant by 'reflection' in the learning process?
 - (3) What kind of role does action play in the learning process?
 - (4) What are the individual consequences of learning?

The third research task follows naturally from the two earlier problem areas and concerns the social dimensions of the adult experiential learning process.

C. Research problems concerning the conception of the *social* dimensions of adult experiential learning. Three areas of questions are considered essential here:

(1) In what kind of context does learning occur?

- (2) What kind of role does interaction play in the learning process?
- (3) What does educating an adult mean? What qualities are required for an adult educator?

In striving towards a more comprehensive, more integrated view of adult experiential learning, the theoretical relevance and centrality of the concepts used is crucial (see e.g. Brookfield 1992; Glaser 1978, 150; Kontiainen 1991, 6; Strauss & Corbin 1991, 190). These categories of questions may suffice to cover and identify phenomenon under study, since in the literature concerning the philosophy of education, for example, it is often emphasized that knowledge, teaching and learning are concepts that will bring us to the heart of the educational process (see e.g. Hamlyn 1978; Soltis 1968, 67; Strauss & Corbin 1991, 38). By examination of these concepts, we shall "find ourselves deeply immersed in those ideas which are most relevant to the classroom situation" (Soltis 1968, 67). If one of these three concepts is forgotten. a comprehensive view is not possible. On the other hand, these research problems aim to meet also the needs of flexibility and freedom in exploring this particular phenomenon in depth. The chosen framework and research problems should not be like a Procrustean bed into which 'empirical facts' i.e. texts are forced in. Instead, there should always be room for modification, re-building, and re-shaping of research problems on the basis of the texts (see Kelle 1993; Popper 1977a).

Methodological principles: hermeneutical text interpretation and the grounded theory method

There is a variety of interpretative procedures available to interpreters of written texts (Schriven 1988). How, then, does one select appropriate methods in response to this conceptual consideration since the aim is to reduce the conceptual confusion in the area of adult experiential learning? I have chosen two research methodologies – the grounded theory method and hermeneutical text interpretation – as a way of analyzing this complex phenomenon (see Hutchinson 1986; Wilson & Hutchinson 1991). The grounded theory method offers a useful, systematic approach to generate a formal theory on the basis of the five landmark theories. The principles of hermeneutical text interpretation

guide my manner of reading in order to catch the right *sense* of texts (Vandenberg 1995). In particular, both approaches can be applied to conceptual analysis and theory building in striving towards a better understanding of complex phenomenena (see e.g. Brookfield 1992; Schriven 1988; Soltis 1968).

The grounded theory method

The grounded theory method claims that there is much value in the conceptual ordering of research data into a body of theory, whether it be substantive or formal. It permits *structured entry* to concept specification, not conceptual definition (Glaser 1978, 3, 64; Glaser & Strauss 1974, 25; Strauss & Corbin 1991, 115.) Writing a grounded theory is a careful, systematic "construction job" without theoretical completeness (Glaser 1978, 124, 130). *The conceptual idea* is *its essence*. The grounded theory approach – developed by Glaser and Strauss in the 1960s – uses a systematic set of procedures to develop a grounded theory about the phenomenon under investigation. The basic structure of analysis is simple: the researcher engages in constant dialogue with the data through repetitive questioning and constant comparison (Glaser & Strauss 1974, 62-63). It means constantly re-designing and re-integrating *theoretical* notions: the theory is generated by the re-definition of the phenomenon (ibid., 101; my italics).

Both Glaser (1978) and Strauss (Strauss & Corbin 1991) have developed this approach further and propose more specific analytic and interpretative procedures that can be used to arrive at theories. These procedures include "coding" techniques for conceptualizing data³. Procedures will vary according to the purpose of the researcher, but the basic procedures are open coding, axial coding and selective coding. The purpose of open coding is to generate an emergent set of categories and their properties which together fit, work and are relevant for integrated theory (Glaser 1978, 56). The categories exist by themselves as conceptual elements of the theory, and are then developed in terms of their properties, i.e. conceptual aspects of a category, and dimensions. Both vary in degree of conceptual abstraction. (Glaser & Strauss 1974, 36; Strauss & Corbin 1991, 61-74). Therefore the data is broken down into discrete parts by staying open and keeping in mind the current categories (Glaser 1978, 46-47). This happens via two analytic procedures: the making of systematic comparisons and the asking of

questions (who? when? where? what? how? how much? why?). It is important to remember that what the theorist under study presents as his knowledge is, for the grounded theorist, data in a perspective (Glaser 1978, 33). The other essential analytic issue in this procedure is remember that conceptual categories and properties have a life apart from the evidence that gave rise to them (Glaser 1978, 146; Glaser & Strauss 1974, 36). Open coding is only to try to discover what categories and their relations fit and work best. In sum, it is sorting of ideas, not data; it is conceptual sorting. (Glaser 1978, 47, 116).

Axial coding is the second stage of the procedure. It refers to category specification, where it is tried to relate conceptual categories and properies to each other in new ways by making connections between categories and sub-categories. We are still concerned with the development of a category, but development beyond properties and dimensions. At the axial coding stage subcategories are related to their categories. Although open and axial coding are described as distinct analytic procedures, the researcher actually alternates continuously between them. Moreover, axial coding takes place through the same basic analytic procedures as open coding: the asking of questions and making of comparisons. (Strauss & Corbin 1991, 96-107.) Finally, becoming selective means focusing on a particular core category (Glaser 1978, 56-57). At the selective coding stage the categories are integrated to form a grounded theory, but the generation of the theory occurs around the core category. Integration is not very different from axial coding. It is just that it is done at a higher, more abstract level of analysis. (Strauss & Corbin 1991, 116-117.)

On the whole, all grounded theory procedures are aimed at identifying, developing and relating concepts (Strauss & Corbin 1991, 177; my italics). The discovery and specification of differences and similarities among and within categories is at the heart of grounded theory since differences add density and variation to the theory and deepen understanding. The constant interplay between proposing and checking is what "grounds" the theory. However, it is hard to be sure of the core relevance. Grounded theory is not proven; it is only suggested. (Glaser 1978, 154.) Accordingly, as noted earlier on page 15, this kind of theoretical formulation is not presented as a well-codified set of propositions, but instead as a running theoretical discussion, using conceptual categories and their properties (see Glaser & Strauss 1974, 31). Moreover, use of the grounded theory procedure may enable the researcher to think systematically about the data, and to relate it in several ways, although it is also possible for the researcher to develop her own coding families (Glaser 1978, 82).

Hermeneutical text interpretation

Interpretation of textual sources is needed in order to specify concepts and to construct grounded theory. Interpretation of textual sources means, in turn, "doing" hermeneutics. The text interpretation process in itself is a questioning and negotiation process, which is never linear and clearly defined. By interpretation is meant the process whereby readers *make sense* of written text, i.e. attempt to understand the language, theme(s) and meaning(s) of a text (see Leppänen 1993, 69; my italics). The borderline between reading and interpretation is not clearcut. It is probably impossible to decide where reading stops and interpretation begins: there is no reading without interpretation. Additionally, interpretation should be differentiated from critique. Interpretation means producing a text after the text, whereas critique is producing a text against the text (Scholes 1985, 24). The interpretation of a written text can be constructed in several different ways.

According to Ricoeur (1991, 113) hermeneutical reading is a dialectic of two attitudes, explanation and understanding. To explain is to bring out the structure, i.e. the internal relations of dependence, that constitute the text. To interpret is to follow the path of thought opened up by the text, to place oneself on route toward the orient of the text. (ibid., 212-122.) It is at the heart of reading that explanation and interpretation are indefinitely opposed and reconciled (ibid., 124). The exchange and reciprocity between these procedures will provide a good approximation of the dialectical character of the relation. Ricoeur considers this dialectic in two different ways: as proceeding from understanding to explanation, and as proceeding from explanation to understanding. Structural analysis can be considered as a stage - and a necessary one - between a naive interpretation and a critical interpretation, between a surface interpretation and a depth interpretation. Structural analysis reveals the depth semantics of a text. This depth semantics gives meaning to the whole process and constitutes the genuine object of understanding. The depth semantics of the text is not necessarily what the author intended to say, but what the text is about. It also requires a specific affinity between the reader and the kind of things the text is about. Ricoeur uses the expression "nonostensive reference of the text" by which he means the kind of world opened up by the depth semantics of the text. (Ricoeur 1991, 165.)

Understanding has less than ever to do with the author and the original situation. To understand a text is to follow its movement from

what it says to what it talks about. It wants to grasp the proposed worlds opened up by the references of the text. In this process the mediating role played by structural analysis constitutes both justification of this objective approach and a rectification of the subjective approach. Understanding is thus entirely mediated by the explanatory procedures that precede and accompany it. The final act of personal commitment cannot be excluded from the totality of objective and explanatory procedures that mediate it. This personal commitment does not eliminate the "hermeneutical circle". This circle remains an insuperable structure of knowledge when applied to human matters, but this qualification prevents it from becoming a vicious circle. Ultimately, the correlation between explanation and understanding, between understanding and explanation, is the "hermeneutical circle". (ibid., 162-167.) It then becomes possible to locate explanation and understanding at two different stages of a unique hermeneutical arc.

In particular, distanciation as a positive component of being for a text makes hermeneutical reading possible (Ricoeur 1991, 298; see also Palonen 1988, 78-82). The meaning of the text has a significant autonomy with respect to the author's original intention, the initial cultural situation of the discourse, and the original addressee (Ricoeur 1991, 298; see also Palonen 1988, 78). A text is thus autonomous in relation to the subjective intentions of its author. In this manner hermeneutics approximates to a condition of textual exegesis, where meaning enjoys a certain independence from an original first order reference and opens up a 'second order reference' in front of the text. An 'autonomous' text invites an unlimited series of readings - that is, an open horizon of interpretations. This historical transmission of meaning places reseachers in a hermeneutic circle where each interpretation is both preceded by a semantic horizon inherited from tradition and yet exposed to multiple subsequent re-readings by other interpreters. (Kearney 1987, 108-109.) The text thus decontextualizes itself, from both a sociological and psychological point of view, and is able to recontextualize itself differently in the act of reading. This emancipation of the text is the most fundamental condition for the recognition of a critical instance at the heart of interpretation. (Ricoeur 1991, 298-301.)

Although the text puts questions to the interpreter and thus has the *power to trigger* new knowledge and assumptions about the text, it is also a constraint for an interpreter. Texts have namely a great deal of *power to constrain* interpretation as behind the texts exists the deliberate author goal or intention. In addition, it is important to notice that, if

texts are considered as communicators, interpretation is not only a matter of readers' autonomy and projecting their subjectivity on the text, but also of paying careful attention to the text and trying to recover at least some of its authorial goals and premises. Otherwise Schleiermacher's claim that the ultimate aim of hermeneutics is to understand the author better that he understands himself ("man muss so gut verstehen und besser verstehen als der Schriftsteller") is not carried out (1974, 56). Finally, the situational, institutional and socio-cultural context is a constraint on interpretation.

To summarize, this study is ultimately a reading, writing and thinking activity, in which the researcher (I) and the texts continuously interact. In this study the interpretation of written texts is seen as a negotiation between author, written text, reader and context, not as a game of mastery in which one entity has absolute power, or even a decontextualized interaction between text and reader only (see Leppänen 1993, 106). The aim is to discover structures and concepts and achieve a better understanding of the phenomenon under scrutiny. Interpretation is, however, present at all stages of this study from the selection and the re-construction of sources up to text interpretation and theory generation. Research, in total, is always "interpretation" and the process of interpretation, in turn, is endless (Haapala 1991; Niiniluoto 1984; Palonen 1988, 13, 191; Strauss & Corbin 1991, 59). The most essential distinction is that between 'already understood' and 'understanding better' (Niiniluoto 1984, 193; Palonen 1988, 14-15). From this point of view, the research "findings" constitute a suggestion for a theoretical formulation of adult experiential learning, which should have three properties: integration, theoretical relevance and workability, i.e. enough theoretical variation to enable it to be applied to the many different contexts in which adult experiential learning may occur (see Brookfield 1992; Glaser 1978, 4-5, 134; Strauss & Corbin 1991, 109-114).

3 KNOWLEDGE AND KNOWING IN THEORIES OF ADULT EXPERIENTIAL LEARNING

This chapter considers the overall attitudes of Knowles, Kolb, Mezirow, Revans and Schön to knowledge and knowing. I am concerned only with selected aspects of knowledge. How these theorists define the quality of knowledge and knowing? What are the subjective conditions of knowing? Seeking answers to these epistemological questions proceeds through a Kantian approach. Kantian approach can be regarded as a series of lenses through which knowledge and knowing is perceived. Why choose Kant? One reason for selecting Kant is that he examined the structure of human experience and conditions required for knowledge. His aim was to show how everyday experience and knowledge of the world are possible. The other reason is the generality of Kant's theoretization, which makes it the most fundamental and therefore flexible enough to subsume this phenomenon under study. It gives heuristic devices for generation of conceptual ideas and for interpretation of the texts without forcing this "construction job" too much (see Kelle 1993). The third reason is that Kant attempted to provide a third alternative to Rationalism and Empiricism (Hamlyn 1978, 39-41). This compromise consists in trying to specify certain principles of human understanding, the application of which to experience is a necessary condition if that experience is to be objective. Notions of experiential learning can be said to position us towards this kind of compromise, too. Many of experiential learning theorists namely define their epistemological roots and positions as lying in pragmatism or constructivism, which are also some kind of compromises between Rationalism and Empiricism.

The nature and qualities of knowledge

I shall firstly examine basic definitions of a kind or the taking of an attitude on knowledge and knowing that are present in theories under study. In general, it could be said that these theoreticians have been less interested in the epistemological problems than the psychological questions concerning adult experiential learning – with the exception of Kolb. He claims that "hence, to understand knowledge, we must understand the psychology of the learning process, and to understand learning, we must understand epistemology – the origins, nature, methods and limits of knowledge" (1984, 37; my italics).

Kolb, Revans and Schön have one common feature. These three writers divide knowledge in two basic types, even if they name them differently. Kolb's basic differentiation is between *social*⁴ and *personal* knowledge.

Social knowledge5:

- the civilized objective accumulation of previous human cultural experience
- an independent, socially and culturally transmitted network of words, symbols, and images
- * is based solely on comprehension
- * stands alone from the personal experience of the user
- * shapes individual development by guiding people in their choices of experiences in a field of personal life space and physical reality that is expanding continuously
- * all social knowledge is learned
- * valid social knowledge is created
- * the course of individual development is shaped by *cultural system* of social knowledge

Personal knowledge:

- * the accumulation of the individual person's *subjective life ex*periences
- a combination of direct apprehensions of experience and the socially acquired comprehensions
- explains experience and guides actions
- * the result of the transaction between the form or structure of its external representational and transformational grammar (social knowledge) and the internal representational and transformation processes that the person has developed in his/her personal knowledge system

Revans contrasts programmed knowledge and questioning insight.

Programmed knowledge:

- * is connected with academically contrived "research" and debased booklearning
- * the product of technical instruction
- * is acquired through the *published* syllabus of the teaching institution
- * technical puzzles
- * domain of experts

Questioning insight:

- * is connected with responsible action, carrying penalties for failure, in the real world and Action Learning exercises
- * is to be sought through Action Learning
- * comes only with a recognition from within the self that one's perception of what is going on in the here-and-now falls far short of one's responsibility for doing something useful about it

Schön suggests a distinction between *professional knowledge* and *professional artistry*. Knowing-in-*practice* links these two kinds of knowledges to each other.

Professional knowledge:

- includes a store of theories, techniques, "facts", "procedures" and "rules"
- * constitutes a hierarchy of knowledge: basic science, applied science, the technical skills of day-to-day practice
- general, theoretical, propositional knowledge enjoys a privileged position

Knowing-in-practice:

- * increasingly tacit and spontaneous
- the tacit understandings have grown up around the repetitive experiences of a specialized practice

Professional artistry:

- * knowing is in action
- refers to the kind of competence practitioners sometimes display in unique, uncertain, and conflicting situations of practice
- refers to the sorts of know-how revealed in intelligent action, (e.g. a physical performance or a private operation)
- * is revealed by spontaneous, skilful execution in performance
- we are characteristically unable to make it verbally explicit
- knowing-in-action is converted to knowledge-in-action by act of description
- * a professional knowing-in-action is embedded in the socially and institutionally structured context

* is exercised in the institutional settings particular to the profession, organized in terms of its characteristic units of activity and its familiar types of practice situations

 constrained or facilitated by its common body of professional knowledge and its appreciative system shared by a community of practitioners (knowing-in-practice)

In contrast to these dichotomies, Mezirow differentiates three qualities of knowledge, which are located in the knowing subject. These three qualities are recipe knowledge, meaning perspectives and meaning schemes, and emancipatory knowledge.

A meaning perspective:

- refers to the structure of assumptions within which one's past experience assimilates and transforms new experience
- generalized set of habits of expectation
- an orienting frame of reference that we use in projecting our symbolic models
- * a (usually tacit) belief system for interpreting and evaluating the meaning of experience
- * forms, limits and distorts thinking, believing and feeling and learning
- * filters both perception and comprehension
- * more or less fully developed
- * may be dysfunctional in adult life
- * "preexisting systems of schematized and abstracted knowledge – beliefs, theories, propositions and schemas", that inaccurately represent the external world

Recipe i.e. nonreflective knowledge:

- * habituated actions, routines
- * culturally assimilated or "introjected": we have learned things that we have never been conscious of learning
- * tacit knowledge
- * can be transformed by bringing it into span of attention, explicating it and re-assessing its validity, consequences and usefulness, as is done in psychotherapy
- values and behavioral expectations are implemented through it

Meaning schemes:

- * the particular knowledge, beliefs, value judgments and feelings that become articulated in an interpretation
- * are derived from earlier, often unreflective interpretations
- * specific habits of expectation

- * three types: epistemic, sociolinguistic and psychological
- * epistemic premise distortions: distorted assumptions about the nature and use of knowledge
- sociolinguistic premise distortions: society and language arbitrarily shape and limit perception and understanding
- * psychological premise distortions: artifacts of our earlier experience have become dysfunctional in adulthood

- * the concrete manifestations of meaning perspectives
- * translate these general expectations into specific guides of actions
- * people interpret situations
- * guides the way they experience, feel, understand, judge and act in different situations
- * fit together within meaning perspectives, which represent the way a person looks at him/herself and relationships

Knowles' only explicit comments concerning knowledge are following:

"The purpose of education is primarily to transmit knowledge (with some nodding to skills, understandings, attitudes and values). The 'educated person' is a knowledgeable person. ... They would be knowledgeable too – but expandingly, not statically, knowledgeable." (1989, 132.)

"The way to produce competent people is to have them *acquire their knowledge* (and skills, understandings, attitudes, values and interests) in the context of its application." (Knowles 1989, 18-19.)

Kolb, Revans and Schön seem to agree upon the existence of some kind of 'objective' knowledge. Also Knowles and Mezirow (see above and page 32) accept the existence of 'objective' knowledge, but they refer to it more or less implicitly, and do not define it as clearly as the other three. This 'objective' knowledge is an independent entity, which is organized into a coherent and explicit form. It is like *a public data bank*, which consists of relatively stable structures (see Bohm & Peat 1989, 56). This 'objective' knowledge is very similar to what Popper (1977b) calls World 3 products of the human mind, which consist of cultural heritage "coded on material substrates" and theoretical systems. These World 3 products are, for example, scientific theories, scientific problems and works of art. It may be knowledge of propositions, of sensory objects, or of spiritual objects. In sum, 'objective' knowledge is mostly

in a propositional form, which is capable of being *universally accepted* as true of the world (see e.g. Hamlyn 1970, 103-104; Scruton 1996, 325). Accordingly, this *knowing that* -knowledge is usually accepted as a source of useful paradigms, concepts and metaphors or as the paradigm of theoretical success (see Bright 1989b; Scruton 1996, 325).

This independent entity of knowledge is located 'out there' and remains thus separated from a knowing subject. More precisely, it is located between Kant's two worlds, which are one of the determinate and knowable, the phenomenal and the other of the indeterminate and unknowable, the noumenal (Kant 1996, 212-316; see also Bowen 1981, 211, 217). How is it possible for 'objective' knowledge with these characteristics to have an impact on anything? Who are the carriers or agents of 'objective' knowledge? 'Objective' knowledge seems to be specialized knowledge carried out by special groups of people who perform on a regular basis activities that others do not. The 'objective' knowledge is thus distinguished from everyday or common sense knowledge shared by all adults. This store of 'objective' knowledge is expanding continuously as a function of the interaction between "special" knowing subjects and environment (see Hamlyn 1978, 54). On the whole, 'objective' knowledge is a social construction, made by human beings themselves (see e.g. Hamlyn 1978; Polkinghorne 1989).

The other quality of knowledge is heavily individual in character. How is this individual knowledge different from that of 'objective'? What are the basic distinctions between them? The characteristics of individual knowledge could be described with three words: subjective (as opposite to 'objective'), tacit (as opposite to public or common), connected in action (as opposite to located 'out there'). First and foremost, this individual knowledge is located in mind of a knowing subject. It is a tacit way of knowing, which, in turn, is characterized as implicit (it cannot be completely stated), holistic (each element is related to the whole), and unavailable (one cannot give a critical account of it) (see Roberts 1992, 269). Tacit knowing is more fundamental than propositional knowing: we can know more than we can tell and we can tell nothing without relying on our awareness of things we may not be able to tell (Polanyi 1964a, x). Furthermore, individual knowledge is connected in action. Especially Schön and Revans suggest an intimate relationship between knowing and action. They even identify knowing and doing:

[&]quot;... knowing and doing are inseparable" (Schön 1983, 163-165, 345).

"Artistry is an exercise of intelligence, a kind of knowing, though different in crucial respects from our standard model of professional knowledge. It is not inherently mysterious; it is rigorous in its own terms; and we can learn a great deal about it – within what limits, we should treat as an open question – by carefully studying the performance of unusually competent performers." (Schön 1988, 13.)

"... In management ... there is no effective knowing without also the capacity to do. To know is to be able to do. ..., so that one can demonstrate one's knowledge." (Revans 1982, 655.)

The above definitions bear some similarity to Aristotelian practical knowledge, since the purpose of Aristotelian practical knowledge is to act appropriately in the world (Usher 1989a). It could be characterized as knowing how -knowledge, which is a matter of skill and a matter of technique. Knowing how -skill is a skill, which is rationally acquired and rationally exercised. However, Schön describes knowledge, which is larger than practical knowing how of a technique (cf. Hamlyn 1970, 103-104). There seems to be something more to practical knowledge, that is, knowing what. Knowing what means the ability to feel what is right. A virtuous person knows what to feel, in the sense of spontaneously feeling what the situation demands - the right emotion, towards the right object and in the right degree (moral education, for example, has such knowledge as its goal) (see Scruton 1996, 326). The only way to acquire this kind of knowing what is by apprenticeship to a master and by imparting, since professional knowing can not be transmitted, but demonstrated. Could it be possible that distinction between knowing how and knowing what also makes a distinction between amateur knowing and professional knowing?

Finally, this individual knowledge is not subjective in negative sense, i.e. as sentimental, irrational or unscientific, but in the positive sense of artistic, aesthetic, sensitive, integrated and deep. From this point of view, it could be better to term it as personal, as Kolb does. Personal is neither subjective in negative sense nor objective. In fact, personal knowledge submits to requirements acknowledged by itself as independent of itself, and therefore it is not subjective in negative sense (see Polanyi 1964a, 300). Consequently, 'objective' knowledge is finally included and expressed in living and knowing subject. Kolb emphasizes this by saying that social knowledge "comes alive only in the personal

knowledge of the user" (1984, 131). Furthermore, "knowledge does not exist solely in books, mathematical formulas or philosophical systems; it requires active learners to interact with, interpret and elaborate these symbols" (ibid., 121) and "social knowledge cannot exist independently of the knower but must be continuously recreated in the knower's personal experience, ..." (ibid., 105). Also Schön refers to this by saving: "He (the practitioner) produces knowledge that is objective in the sense that he can discover error - for example, that he has not produced the change intended. But his knowledge is also personal; its validity is relative to his commitments to a particular appreciative system and overarching theory. His results will be compelling only for those who share his commitments." (1988, 79.) Thus the inherent structure of this fundamental act of personal knowing makes a knowing subject both necessarily participate in its shaping and acknowledge its results with universal intent (Polanyi 1964a, 65). As noticed earlier, Mezirow is interested mostly in individual knowledge, although he slightly refers to the existence of 'objective' knowledge (schematized and abstracted knowledge). Also he claims that "knowledge for the learner does not exist in books or in the experience of the educator. It exists only in the learner's ability to construe and reconstrue the meaning of an experience in his or her own terms" (1991c, 20; my italics).

The above descriptions appear to contain two different perspectives on the quality of tacit knowledge. The more common definition is Schön's. Tacit knowledge is described as high quality personal knowledge, which is usually revealed in action. Mezirow's description is just the opposite. Tacit knowledge is recipe knowledge, which is culturally assimilated so that the knowing subject has learned it without ever having been conscious of doing so. In the Mezirowian theoretization, knowing happens in the light of knowledge structures i.e. meaning perspectives, which constitute kinds of interpretative frameworks for living, knowing and learning. A meaning perspective is a personal paradigm for understanding ourselves and our relationships (Mezirow 1978). But because meaning perspectives are structures of largely pre-rational, unarticulated cultural construction, they easily result in distorted views of reality. "Some of our knowledge structures are made up of beliefs, theories, and schemas that inaccurately represent the world. We may label objects and events inaccurately or process them through inappropriate knowledge structures", Mezirow argues (1991c, 120). Furthermore, "a wide range of epistemological distortions are related to the fact that each knowing subject is embedded in his/her particular life

situation and stage of intellectual development" (ibid., 130). As a consequence, "inappropriate knowledge structures" are to some extent at least a cultural construction; tacit cultural assumptions are brought into the knowing subject's mind unintentionally. If tacit recipe knowledge is regarded in this way as a function of the cultural context, it means that in the Mezirowian theorization the same elements that bring meaning to understandings of the world are also distorting those understandings (see Clark & Wilson 1991). As a consequence, Mezirow's basic definition of knowledge could also be described as exceedingly contextualist: one can know only in terms of one's own perspective. Knowles shares with Mezirow the idea of negative societal influence by claiming that human nature is essentially good, and individual potential needs are only released to overcome negative societal influences (1989, 111-112). To sum up, tacit knowledge can be defined in two different ways. On the other hand, tacit knowledge is high quality knowledge actively acquired by a knowing subject as a result of active work, and on the other hand, tacit knowledge can refer to distorted knowledge that is culturally assimilated, and thus passively given to a knowing subject (see Popper 1977b).

Both Kolb and Mezirow seem to believe in developmentally higher quality knowledge, a kind of 'superior' knowledge. Mezirow's 'superior' knowledge is emancipatory knowledge, which is defined as "knowledge gained through critical self-reflection, as distinct from the knowledge gained from our 'technical' interest in the objective world or our 'practical' interest in social relationships" (1991c, 87). Furthermore, this "knowledge gained through self-reflective learning may be distorted" (ibid.). Kolb names this 'superior' knowledge as integrative knowledge, the prime function of which is "to stand at the interface between social knowledge and the ever-novel predicaments and dilemmas we find ourselves in: its goal is to guide us through these straits in such a way that we not only survive, but perhaps can make some new contribution to the data bank of social knowledge for generations to come" (1984, 225). Kolb's arguments concerning intergative knowledge are highly speculative and he admits that "we know little of the nature of integrative consciousness (from the mystical or transcendental religious literature)" (1984, 158). However, his description of integrative knowledge refers in a way to the transcendental experience, which has such power and is so different from ordinary experiences as to give the sense of defying description. It includes also a heightened sense of clarity and understanding and intense positive affect (see Walsh & Vaughan 1980, 45).

Both of these descriptions include a more or less implicit comparison between imperfect and perfect knowledge (see also Hollinger 1980). The above comparison between imperfect and perfect knowledge raises the question of relationship between 'objective' knowledge and personal knowledge. It seems to be, however, an essential part of Kolb's, Revans' and Schön's teaching that both 'objective' and personal knowledge are legitimate qualities of knowledge, although they value them differently. Revans, for example, clearly underestimates programmed knowledge by claiming that these two types of knowledge are not related in a positive sense, but 'p' may actively inhibit 'q' (1982, 710-711). Elsewhere he, however, says that 'p' is also necessary (see e.g. 1982, 657, 711, 766). Schön values both qualities of knowledge in some respect, since he does not want to ignore applied science and research-based techniques altogether, but he argues that although they occupy a critically important territory, it is limited (1983, 12-13). Finally, Kolb puts social knowledge on an equal footing with personal knowledge. He suggests that these are dialectically related and fundamentally interconnected in a reciprocal manner. Neither of these can be discovered without reference to other - nor without reference to the experience which links them: the relationship between social and personal knowledge is a transaction or dialectic relationship. (Kolb 1984, 36, 40, 105). On the other hand, Kolb emphasizes the critical difference between personal and social knowledge: the presence of apprehension as a way of knowing in personal knowledge (ibid., 109).

The subjective conditions of knowing: the basic operations of 'understanding'

In this section I turn my attention to the knowing subject. How we come to know things? People are enabled to have knowledge of the world because of the knowing capacities that they possess. Kant divided these knowing capacities into three parts: sensation, imagination and understanding. The result of sensation, imagination and understanding working together is perception⁷. It is the basic process by which contact with the world is maintained. It is thus the first phase in knowing (see e.g. Hamlyn 1970, 184-187; Scruton 1996, 328-331; Young 1988).

Perception through the senses

Kolb and Mezirow describe thoroughly these subjective conditions for knowing. Kolb describes the first phase as "a simple registrative consciousness", associated with the elementary learning forms (see note 4). For Mezirow perception is the same as prereflective learning (see page 32).

Kolbian knowing by apprehension: M

- * a registative process transformed by appreciation
- * a personal subjective process that cannot be known by others
- * a here-and-now experience
- * timeless at once instantaneous and eternal
- direct apprehension, i.e. reliance on the tangible, felt qualities of immediate, concrete experience
- * a dynamic form of perceiving
- * to know without need for rational inquiry
- * we learn through apprehension that event B follows event A
- * a grasp of figurative representation
- * two elementary forms of knowledge: divergent and accommodative
- * an immediate experience
- * ultimate source of the validity of comprehensions in fact and value

Mezirowian perception:

- occurs prior to the use of language to form categories
- tacit process of reviewing and making interpretations based on prior experience to delimit the slice of new experience to which we will attend
- * involves an ability to differentiate space, time, direction, dimensions, sequence, entity, focus, states, moods, feelings and the punctuation (identifying the beginnings and ends) of events
- * presentational construal refers to construing immediate appearances (prelinguistic)
- can be attempted to understand through psychoanalysis, dream interpretation, meditation, increased sensitivity to changes in physiological states and spiritual or mystical exploration

Revans defines sensation in the Lockean way: sensation is the source of *most* of the ideas an individual has, and it depends "wholly upon our senses". Revans gives an example of sensation: "... seeing one unemployed steel worker, and so to have knowledge of his plight by sensation..." (1982, 782-783). On the other hand, he claims with Piaget that "actually, the point of departure for all knowledge is in no way to be

found in sensations or even in perceptions — simple signs whose symbolism is necessarily relative to meaning — but *in actions*" (ibid., 783; my italics). Schön's only reference to sensation is included in the following sentence: "Skillful using of a tool is to learn to appreciate, *directly* and without intermediate reasoning, the qualities of the materials that we *apprehend through the tacit sensations* of the tool in our hand" (1988, 35; my italics). Knowles ignores sensation as a condition for knowing completely.

On the whole, sensation is direct awareness of something. In sensation we have acquaintance with anything of which we are directly aware, without any intermediary processes (see Gram 1983, 60; Hamlyn 1970, 103-104; Russell 1991, 25-28). Sensation, as a matter of first-person acquaintance, seems to have five basic properties: passive, non-propositional, tacit, subjective and immediate. Firstly, sensation do not seem to have intentionality, but it is relatively passive and forced upon us, and it can tell us nothing about its cause (see Hamlyn 1963, 132-140; Saugstad 1992; Scruton 1996, 341; Young 1988). Secondly, sensation is tacit and it may be unexpressed even to knowing subject oneself. These two properties together lead us to the conclusion that immediacies can not be described nor defined in words, i.e. things in their immediacy are unknown and unknowable (see Dewey 1930, 74-75). Therefore sensation is also a very subjective process, as Kolb mentions. Furthermore, a passively received sensation is immediate in that sense that it is concerned with particulars. It has a spatio-temporal form: it is always connected with particular things and particular occasions (cf. Hamlyn 1978, 14-16; Russell 1991, 47). Intuitions of these spatio-temporal forms of appearances are a priori and 'subjective'. This 'subjectivity' does not mean that they are somehow produced by the individual knowing subject, but it means that they are not 'objective' in the sense of being displayed across pure generality. Time and space particularize generality and in that sense they are 'subjective'. In addition, sensation is intensive in magnitude, but not extensive. (Kant 1996, 182-183.)

As a consequence of these five qualities sensation is a private state of knowing subject (see Hamlyn 1970, 215). Although an immediate sensation as such is incommunicable, at least some of them seem absolutely certain (Hamlyn 1963, 176-177; Russell 1991, 7, 10). A sensating subject namely has authority for the truth of these first-person entities (Hamlyn 1970, 226). Thus, sensation is the same as knowing what it is like. For example, an individual subject may know all that

there is to be known about fear, and still not know what it is like. For knowing what it is like means *having* it. When an individual subject knows what fear is like, it is an absolutely certain, 'subjective' fact. (Scruton 1996, 325-327.) On the whole, perception is not mere physiological functioning of senses and knowledge is never derived exclusively from sensation, but in order to perceive something we need to do more than stand in a merely passive relationship to the world (Hamlyn 1978, 64-65). Accordingly, sensation is a necessary but not a sufficient condition in order to get knowledge of objects (Hamlyn 1978, 69). A knowing subject attempts to control the having of these immediate sensations, and in doing so (whether intentional or not) *develops objects* (Duff 1990; my italics).

Perception through the mind

How this manifold of immediate sensations is arranged and synthesized into a reasonable, integrated perception? Kant's view is that perception involves not just being in a certain sensible state but also construing that state as the awareness of something. Such construal is ultimately the characteristic act of active imagination (Young 1988). Kant means to distinguish imagination from understanding; imagination mediates between sensibility and understanding. While the function of imagination is the synthesis of sensations, that of understanding is to bring this synthesis to concepts, thereby giving it unity and creating coherence out of a confused diversity. For this reason subsumption under the concept is a necessary ingredient in any perception. (Hamlyn 1978, 28-31.) Kant characterizes sensibility as passive, imagination and understanding as active. The degree of activity exhibited in imagination is lower than in understanding. (see Young 1988.)

Kolb, Mezirow and Revans draw the distinction between the two capacities nonetheless. They suppose that perception of objects does involve both sensation and comprehension. Kolb, for example, claims that "the simple perception of experience is not sufficient for learning; something must be done with it" (1984, 42). Revans defines comprehension briefly as being able to accept responsibility for application in practice (1982, 657), but Kolb and Mezirow handle comprehension as thoroughly as sensation.

Kolbian comprehension of symbols:

- the judgment of causality is based on inferences from our comprehension of A and B
- * an interpretive process transformed intentionally and extensionally by criticism
- * indirect comprehension, i.e. reliance on conceptual interpretation and symbolic representation
- * an *objective*, social, reflective, analytic process
- * a tool of culture
- * based on objectivity, *skepticism* and doubt, dispassionate analysis
- * distances
- * guides the choices of experience
- * *directs attention* to relevant aspects of apprehended experience
- * comprehensions can be communicated (transcend time and space)
- * selects and reshapes apprehensions in more powerful and profound ways
- * predicts and recreates apprehensions
- * a record of the past
- * an immediate experience
- * assimilative and convergent knowledge, refined knowledge

Mezirowian comprehension:

- * learning through language
- * a process of making an experience coherent by using categories acquired through language
- propositional construal may give coherence to either a new experience or an old one as it becomes validated through reflective assessment
- * occurs through immediate, conscious psychological processes (scanning): exploring, differentiating, recognizing, feeling, intuiting and imagining, associating, inferring
- * involves a conflict, scanning and construal, during the latter of which a constructive act of *imagination* occurs, resulting in an *interpretation*
- * cognitive interpretation can result in appreciation, inspiration, amusement or some other emotional reaction, in the confirmation or negation of a belief, attitude or emotional reaction ('a meaning scheme) or in a belief or meaning scheme being rendered problematic i.e. defined as a problem
- * propositional construal refers to experiencing things in terms of concepts and categories
- * meaning construction
- * intentional

Imagination thus deepens and extends the apprehended sensation, but comprehension could be characterized shortly as an intentional interpretation process, wherein a knowing subject has an active role of interpreter. Once we grasp Kant's distinction between imagination and

understanding, other points begin to become clear. Comprehension (or interpretation) must be made in terms of certain principles. Without sensation being subsumed under principles of understanding, there would be no possibility of perception. Accordingly, sensations, in order to be recognized as coherent, have to be subsumed under certain pure a priori concepts, which Kant calls 'categories'8. Categories can be defined as expressions of relations between things, which are independent of a knowing subject. Essential to the categories of comprehension is not their number or even the specific content of a particular category, but insight concerning the whole project; human understanding is based on principles which exceed sensation (Hamlyn 1978, 47, 61-65; Jaspers 1962, 26-27; Saarinen 1989, 239-240). This Kantian idea of a preexistent structure located in the mind is crucial in this context (see Hamlyn 1978, 25; Hoy 1991). These structures namely order our perception (Bowen 1981, 218; my italics). Thus, comprehension takes place within the mind - in terms of categories. Perception presupposes the applicability of at least one of the categories.

Mezirow is very much Kantian by arguing that "to move from a perceptual interpretation to a cognitive interpretation requires propositional construal (monitored by presentational awareness) and an imaginative insight" (1991c, 33). Actually his theoretization includes all three elements of perception. But the most interesting aspect concerning comprehension is that whether these writers have even slightly noticed the necessity for some kind of pre-existent structures of understanding for knowing. Some hints of a kind of pre-existent structure do exist. For example:

Kolb: "The developmental structures observed in human thought are just as likely to be characteristics of the social knowledge system" (1984, 138; my italics).

"Thus, each developmental stage of maturation is characterized by acquisition of *a higher-level structure of consciousness* than the stage preceding it, although earlier levels of consciousness remain" (1984, 146; my italics).

"Since all social knowledge is learned, it is reasonable to suspect that there is some isomorphism between the structure of social knowledge and the structure of the learning process" (1984, 109; my italics).

"The relationship between apprehension and comprehension is dialectic in the Hegelian sense, these opposite processes merge toward a higher truth that encompasses and transcends them. The process, whereby this synthesis is achieved, is somewhat mysterious; that is, it cannot be explained by logical comprehension alone. Thus the development of knowledge ... our sense of progress in the refinement of ideas about ourselves and the world around us, proceeds by a dynamic that in prospect is filled with surprising, unanticipated experiences and insights, and in retrospect makes our earlier earnest convictions about the nature of reality seem simplistic and dogmatic." (1984, 107-108; my italics.)

Mezirow: "Kitchener's findings suggest that 'cognitive style' may be considered as a developmental progression from a more limited and distorted viewpoint to a way of understanding that is more inclusive, discriminating and integrative of experience" (1991c, 129; my italics).

"Transformative learning involves reflective assessment of premises, a process predicated upon still another logic, one of movement *through cognitive structures* by identifying and judging presuppositions" (1991c, 5; my italics).

"We learn in order to add to, extend or change the structure of our expectations, that is, our meaning perspectives and schemes; learning to change these structures of meaning is fundamentally transformative" (1991c, 62; my italics).

Schön: "When a student has learned to carry out smaller units of design activity but has not yet learned how to integrate them into a larger design process, the nature of the larger whole is likely to seem confusing" (1988, 159; my italics).

Kolb even refers to Kant's famous dictum by saying that the essence of the interrelationship between apprehension and comprehension is expressed in Kant's analysis of their interdependence: apprehensions are the source of validation for comprehensions ("thoughts without content are empty"), and comprehensions are the source of guidance in selection of apprenhensions ("intuitions without concepts are blind") (1984, 106). On the whole, the above citations refer in many ways to

the structures in mind. Nevertheless, there exists ambiguity in these writings. For example, the important conceptual issue about changes from 'lower level structures' to 'higher level structures' is not specified at all.

Kant's argument in favour of his categories shows the importance of distinguishing between what is due to the knowing subject and what is not due to the knowing subject as a condition of both objectivity and subjectivity. Kant maintained that the shape of knowledge is determined by the subject: the structure of mind must be invariant for all individuals at all times, while its contents are always different (Hoy 1991; see also Latomaa 1992, 79). In Kantian terms, matter is what is given in sensation. but we have to think of form as being 'in the mind' ('thoughts without content are empty, intuitions without concepts are blind'). This order within the mind is fundamentally relevant both in reality and in the mind (Bohm & Peat 1989, 120, 158). Kant's categories are a necessary prerequisite and a general basis for public understanding of the world, for 'objective' knowledge and for knowledge of other people's states of mind and finally, a condition of communication. For Kant it is primarily the categories - mind's inborn forms - that make possible the objective reference of experience and agreement with others (Bowen 1981, 210). This structure, it should be noted, is also involved in the knowing subject's consciousness of its own existence (Baldacchino 1980). According to Kant an individual subject is in his internal perception to himself a mere phenomenon, an objective viewpoint. He is thus, to himself, on the one hand a phenomenon and on the other hand, in respect of certain faculties which cannot be ascribed to sensibility, a purely intelligible object (Baldacchino 1980; Hamlyn 1963, 186-197). Consequently, a human being can have knowledge of the states of mind of other people as well as his own.

The categories thus make the examination of sensation possible, but it must be noticed that this examination concerns only the world manifested to a knowing subject, not 'things-in-themselves', since there can be no knowledge of those entities as 'things-in-themselves'. Accordingly, the situation is quite complicated since comprehension cannot exist without the categories and the categories, in turn, are restricted to experience, which they cannot exceed (ibid., 241). In addition to the processes so far described there is one purely subjective element. Perception is not a linear and straightforward activity, but it is also a point of selection and exploration, too (Hamlyn 1970, 231-232; see also Reed 1992). At least partially, the incompleteness of perception is

due to this selective and explorative character: the preferences precede inferences. Kolb names this selective activity as "appreciation".

Kolbian appreciation:

- * intimately associated with apprehensions: only those aspects of reality are noticed that *interest* and thereby "capture attention"
- * the foundation from which critical comprehension can develop
- * based on belief, trust and conviction
- * a process of attention, valuing and affirmation
- * less recognized and understood
- the source of values

Appreciation guarantees for a knowing subject a felt continuity among past and present sensations (Elder 1980; see also Baldacchino 1980). "The value of perception is judged ultimately by its immediate affective utility. This apprehensional portion of personal knowledge prevents people from losing their identity as unique human beings and guarantees their freedom because they can hold their own inquiry into the social knowledge system and their personal experience of it. This process of choosing to believe helps us to feel that we are free to chart the course of our own destiny. In the unique individuality of apprehended experience lies the creative force for expanding, shaping and validating social knowledge." (Kolb 1984, 109.)

The epistemological status of experiential learning theories

What is knowledge? What are legitimate ways of knowing? How these questions are answered reveals one's initial assumptions about how the mind acquires knowledge of the world, and these assumptions, in turn, influence on the definitions of learning. The theories under study take at least four different positions on these questions. Firstly, Kolb, Mezirow and Revans share the view that perception is the basis for knowing or knowledge. They seem to agree that knowledge is obtained through sensation as a result of being affected by an object. Knowledge is thus a matter of internally representing the external world and rests upon sensation. The influence of traditional common sense Empiricism can clearly be seen here. This is exactly the same idea that the Empiricists

had: sense-experience is the sole source of ideas (see Driscoll 1994, 10-15; Hamlyn 1978, 93). Sensations, and especially visual sensations, are taken as the standard example of conscious experience (see Popper 1977a). And as this experience grows broader and deeper, knowledge is represented in the individual's mind as an ever-closer approximation of how the world really is. Furthermore, knowledge is thought to exist independently of the knowing subject.

Is it, however, possible to have knowledge of something in other ways than by perception? Or is it necessary that all knowledge is derived from sensation and nothing can be known to exist except through it. Revans and Schön answer the first question positively. They seem to believe in rationalist way of acquiring knowledge. For example:

"Learning is more likely to consist in a *reorganisation of what is al-ready known* rather than in the acquisition of fresh factual knowledge, although such fresh data may be needed to precipitate the reorganisation proper" (Revans 1982, 776; my italics).

"Action learning does not pretend to supply the subject with much fresh cognitive knowledge; it is sufficient to help him *use more effectively what he already has*, and to reinterpret the experiences of yesterday in the light of tomorrow" (Revans 1982, 633; my italics).

"... the learner 'spontaneously' recovers knowledge that is in him but forgotten" (Schön 1988, 85; my italics).

"... learning to design sometimes takes the form of making explicit what one already knows how to do" (Schön 1988, 87; my italics).

The definitions by Revans and Schön given above resemble the rationalist view of knowledge acquisition. These quotations refer clearly to the rationalist or interpretative perspective on knowledge: factual truths about what does and does not exist can be conclusively established by the use of reason alone without any acquaintance with sensory objects. One may, by recalling something, make explicit to oneself the knowledge that one already has in implicit form. One can be said, however, to have acquired new knowledge, even if the new knowledge is likely to be something inferred from what is previously known. One can therefore gain new knowledge by using memory in two ways: either by making explicit to oneself what one previously knew implicitly or by drawing

further conclusions from the knowledge that one already has. (Driscoll 1994, 10-15; Hamlyn 1970, 212.) Accordingly, we can have knowledge by description of things which we have never personally experienced. The chief importance of knowledge by description is that it enables us to pass beyond the limits of our private experience. According to this view, which was suggested by Plato and later developed by Kant in particular, the mind does not copy reality or does not apprehend it directly. Rather, reason is considered to be the prime source of knowledge. This implies that all sense data are unstructured and undifferentiated, to be interpreted by the knowing subject. In other words, reality is constructed by a knowing subject. The interpretative view of knowledge thus emphasizes the active and dynamic nature of the knowing subject. Related to this interpretative view is the idea that at least some knowledge is innate and present in the mind at birth. The knowing subject actively imposes an organizational and interpretative framework on sense data according to these innate tendencies, i.e. categories. A third way to think about the quality of knowledge and knowing can be seen in the following citations:

"Specific constructivist assumptions underlying transformation theory include a conviction that meaning exists within ourselves rather than in external forms such as books and that personal meanings that we attribute to our experience are acquired and validated through human interaction and communication. Our actions toward things are based on the meanings that the things have for us. These meanings are handled in and modified through an interpretative process that we use in dealing with the things we encounter. As far as any particular individual is concerned, the nature of a thing or event consists of the meaning that the individual gives to it. This does not negate the existence of a world external to us but only asserts that we make of that world is entirely a function of our past personal experiences. Conception determines perception, and we know reality only by acting on it. Inasmuch as this viewpoint presupposes that meaning is interpretation, and since information, ideas, and contexts change, our present interpretations of reality are always subject to revision or replacement." (Mezirow 1991c, xiv; my italics.)

"A practical implication of the theories just described is that *knowledge* for the learner does not exist in books or in the experience of the educator. It exists only in the learner's ability to construe and reconstrue

the meaning of an experience in his or her own terms." (Mezirow 1991c, 20; my italics.)

"Underlying this view of the practitioner's reflection-in-action is a constructionist view of the reality with which the practitioner deals — a view that leads us to see the practitioner as constructing situations of his practice, not only in the exercise of professional artistry but also in all other modes of professional competence. Technical rationality rests on an objectivist view of the relation of the knowing practitioner to the reality he knows. On this view, facts are what they are, and the truth of beliefs is strictly testable by reference to them. All meaningful disagreements are resolvable, at least in principle, by reference to the facts. And professional knowledge rests on a foundation of facts." (Schön 1988, 36; my italics.)

"In the constructionist view, our perceptions, appreciations, and beliefs are *rooted* in worlds of our own making that we come to accept as reality. Even in this simple example, imitiation presents itself as a process of selective construction. The features of the performance to be reproduced are not given with the demonstration." (Schön 1988, 108; my partial italics.)

Mezirow and Schön thus define themselves as advocates of constructivism. Theorists in the emerging constructivist tradition often contrast their ideas with the epistemological assumptions of the objectivist tradition, as Schön above does. In contrast to the objectivist view, constructivism rests on the assumption that knowledge is constructed by knowing subjects as they attempt to make sense of their experiences. Accordingly, a knowing subject is not empty vessel waiting to be filled, but rather active organism seeking meaning. Regardless of what is to be known, a knowing subject elaborates and tests "candidate mental structres" until a satisfactory one emerges (see Perkins 1991). Furthermore, new, conflicting experiences will cause perturbations in these structures, so that they must be constructed anew in order for sense to be made of the new confusing information. However, constructivists argue strongly that knowledge constructions do not necessarily bear any correspondence to external reality, i.e. knowledge constructions do not have to present the world as it really is in order to be useful and reasonable. This idea is consistent with the rationalist or interpretative epistemology discussed earlier. (Driscoll 1994, 360-361.)

Finally, a fourth epistemological perspective is present in Revans' theorization – in addition to the empiricism and rationalism already mentioned (see pages 46-48).

"For successful theory is merely that which enables him who is suitably armed to carry through successful practice. This is the argument of the pragmatists, William James, John Dewey and even Karl Marx: to understand an idea one must be able to apply it in practice, and to understand a situation one must be able to change it. Verbal description is not command enough. It is from consistently replicated and successful practice that is distilled and concentrated the knowledge we describe as successful theory. The process by which one is transformed into the other is the scientific method, and the essence of the scientific method is the experimental test: 'Are the results of using the theory in practice substantially the results that we predicted?'" (Revans 1982, 493-494; my italics.)

"It is one strength of action learning to protect us from the corrosion of sophisticated inapplicability, since at no time does it confuse one question *What need I know to do what I am trying to do?* with another What does this professor want to teach me?" (Revans 1982, 664; my italics).

The third source in which Revans' theorization is rooted is pragmatism. In a sense, pragmatism is a compromise between objectivism and interpretivism. Pragmatism acknowledges the existence of reality but argues that it cannot be known directly. Thus, pragmatists accept the copy theory but they claim that knowledge is provisional. Sometimes the knowing subject's mental copies or beliefs present reality accurately, but he must also be prepared for when they do not. What is true today may indeed be false tomorrow. As a result, although pragmatists hold absolute knowledge as a worthy goal, they emphasize that this goal of absolute knowledge may never be reached. (Driscoll 1994, 10-15.) But what then is Kolb's position? He defines himself as an upholder of an interactionist perspective on knowledge and knowing, and he claims that Kant was the first interactionist epistemologist (Kolb 1984, 100).

"Individual learning styles are shaped by the structure of social knowledge and through individual creative acts; *knowledge* is *formed by individuals*. To understand learning fully, we must understand the nature and forms of human knowledge and the processes whereby this knowledge is created and recreated." (Kolb 1984, 99; my italics.)

"The interactionism of experiential learning theory places knowing by apprehension on an equal footing with knowing by comprehension, resulting in a stronger interactionist position, really a transactionalism, in which knowledge emerges from the dialectic relationship between the two forms of knowing" (Kolb 1984, 101; my italics).

"I will propose here that the poles of these two dimensions are equipotent modes of knowing that through *dialectic transformations* result in learning. This learning proceeds along a third, developmental dimension that represents not the dominance of one learning mode over another but the integration of the four adaptive modes." (Kolb 1984, 40; my italics.)

Finally, Knowles' epistemological roots are primarily in Empiricism, despite the fact that he completely ignores sensation as a condition for knowledge and defines his philosophical orientations as follows:

"My own philosophical orientation has its roots in the humanistic, pragmatic, and existential frameworks of John Dewey, Eduard Lindeman, Abraham Maslow, Carl Rogers."... "So I accept the criticism that I am a philosophical eclectic or situationalist who applies his philosophical beliefs differentially to different situations. I see myself as being free from any single ideological dogma, and so I don't fit neatly into any categories philosophers often want to box people into." (Knowles 1989, 111-112; my italics.)

On the whole, he is, however, close to the advocates of the conventional view, who believe in non-political objective knowledge and define, for example, education as the transmission of knowledge (see e.g. Bright 1989b; Fisher & Podeschi 1989; Hartree 1984).

To summarize, the basic assumptions about the nature of knowledge and acquisition of knowledge lead us to conclude that these theorists are seeking a compromise between Empiricism and Rationalism. For example, pragmatism and constructivism are compromises of this kind. However, there are many inconsistencies and inadequacies in these theorizations. The first issue concerns the definition and role of perception. What is perception? Should the word 'experience' be used in this connection? Sense-experience? Immediate experience? Perceptual experience? For example, Kolb use the term 'immediate experience' in order to refer to both sensation and comprehension. At the moment I

prefer the term *perceptual experience*, since it refers clearly to a phenomenon that comes about through *the synthesis* of sensation, imagination and comprehension – that is, it arises when the 'raw' sense data is brought under concepts, and so is endowed with a 'representational' character (see Scruton 1996, 341-342). A perceptual experience is thus in one sense a source of knowledge, as the Empiricists claimed (see Hamlyn 1970, 284-287). Whether it is a basic sort of *knowledge* is another question. Could that which a knowing subject discovers by perception be termed intuitive, direct knowledge, i.e. knowledge which is attained without any intermediary procedures? Truths so known may be called *self-evident* truths (e.g. those which merely state what is given by the senses, certain abstract logical and arithmetical principles). (Russell 1991, 61-63.)

Another issue concerns *sources of knowledge* in general. Schön, especially, seems to believe that a knowing subject can also be acquainted with phenomena through other sources than the senses. Such other possible sources, for example, are reason, memory and "self-awareness" or acquaintance with Self (see Crisholm 1966, 56-69; Russell 1991, 25-28). From this point of view it is precisely that simple: knowledge is not *always* rooted in perceptual experience. But is perceptual experience a necessary condition for defining adult experiential learning? Or are alternative definitions of knowledge acquisition in itself needed for the purposes of defining adult experiential learning? These alternative definitions do not necessarily mean that a knowing subject loses his vital contact with the ordinary world of ordinary human beings.

The third issue concerns more or less explicit assumptions about the nature and role of so-called 'objective' knowledge included in the theories studied here. Kant used the word 'objective' to indicate that scientific knowledge should be justifiable, independently of anybody's whim: a justification is 'objective' if in principle it can be tested and understood by anybody. If something is valid for anybody in possession of his reason, then its grounds are objective and sufficient. Furthermore, Kant argued that objectivity is construed as a function of the human mind and not independently of it (Hamlyn 1978, 51-53; Kant 1996, 757). An individual subject strives to understand the objective relations between things in as pure and general a way as possible and attempts to free them from 'subjective extras' (Kant 1996, 71-75). Finally, it is important to notice that if knowledge is to be objective or true for all men and not just true for an individual subject, it must conform to Kant's categories (see Hamlyn 1978, 55). Thus, objective knowledge is only possible in

terms of categories. Another perspective on 'objective' knowledge is that of Popper's. He argues that the objectivity of (scientific) knowledge lies in the fact that it can be *inter-subjectively tested*. In general: "for inter-subjective *testing* is merely a very important aspect of the more general idea of inter-subjective *criticism*, or in other words, of the idea of mutual rational control by critical discussion". Accordingly, in order to define knowledge as objective, our subjective experiences or our feelings of conviction, which can never justify any statement, must be distinguished from the objective logical relations subsisting among the various systems of scientific knowledge. (Popper 1987, 43-45.) On the whole, the concepts of knowledge, truth and objectivity are social in the sense that they imply a framework of agreement on what counts as known, true and objective (Hamlyn 1978, 58-59). Knowledge is thus inter-subjective and interpersonal in nature (Hamlyn 1967; Hamlyn 1970, 38-39).

How then does knowledge and knowing develop? Revans, for example, admits that "we know next to nothing about the development of questioning insight" (p. 710-711; my italics). I would like to propose that deepening of knowing is growth of knowledge in terms of the Kantian categories, which, in turn, is a matter of degree since one can know of some aspects of a phenomenon without necessarily knowing others (see Hamlyn 1978, 74). A human being is thus capable of knowing within the limits of the categories in use. Understanding, and knowing in general, is thus restricted to its categories. All that an individual subject can do is done in the light of his understanding of the appropriate concepts (Hamlyn 1970, 230-231). Lacking the ability to use 'more developed' categories, he lacks the capacity for deeper knowledge. There can, however, be no complete definition of knowledge and its structure. A dynamic knowledge structure is always subject to the processes of organization and disorganization (Bohm & Peat 1989, 141-144). At any given stage of knowing, it is possible to abstract a certain structure as relevant and appropriate. But, later, when the context is broader, the limits to the validity of this abstraction are seen and new notions developed (ibid., 87-88). As a consequence, "there 'is' no completed world, waiting for us to 'know' it" (Roberts 1992, 46).

To summarize, the nature of the compromise sought between Empiricism and Rationalism is still in need of clarification. Whether that compromise is called constructivism or pragmatism remains debatable and unclear. Or is it possible that the epistemological roots of adult experiential learning lie mostly in Rationalism, and thus we do not need any compromise at all? Because these theorizations under

consideration define knowledge from both strongly Empiricist and strongly Rationalist viewpoints, it can be argued that they are trying to find a compromise. However, there are obvious problems with these views of knowledge, and further clarification is needed. The fact is that knowledge of reality does not lie in the individual subject, nor in the known object, but in the dynamic flow between these two (see e.g. Bohm & Peat 1989, 67). I propose that the essential point is to refine the characteristics of both the individual and 'objective' qualities of knowledge. In this way it might be possible to understand how 'objective' knowledge gets translated into individual knowledge or knowing and vice versa (see Freidson 1988, 2). Furthermore, how are individual knowledge and perceptual experience related to each other? Does experiential learning necessarily imply the existence of perceptual experience? I would like to propose further that the mediator between these two qualities of knowledge can be found in Kant's basic idea of categories. Kant's categories can enable a bridge to be built between these two different worlds of knowledge. From this point of view, these theories have thus failed to recognise something that may be essential to the definition of adult experiential learning, since they show hardly any interest, for example, in the structures of knowledge (see pages 43-45). They show even less interest in pre-existent structures or inborn qualities of the human mind. After this general epistemological discussion I shall focus on questions of more specific relevance to the individual dimensions of adult experiential learning.

4 INDIVIDUAL DIMENSIONS⁹ OF ADULT EXPERIENTIAL LEARNING

T shall now proceed to the second topic of this study – the individual $oldsymbol{1}$ part of the adult experiential learning process. First I will examine the question, what does 'experience'10 (in addition to perceptual experience) mean to these five scholars? How do they define the quality of experience? Secondly, I am interested in how they describe the act of learning (see e.g. Brookfield 1988a). These two issues together mean, in particular, clarifying the links between experience, learning and reflection (see e.g. Merriam & Clark 1993; Usher 1989c). Three of the theorists under study - Kolb, Mezirow and Schön - share common optimistic assumptions about the power of reflection in adult experiential learning. However, reflection seems to be as slippery and vague a term as experience (see Jarvis 1987; Smith 1987; Usher 1989c). It means different things to different writers and practitioners (see Merriam & Heuer 1996). I would like therefore to clarify whether it is a necessary element in experiential learning act or a mere educational slogan (see e.g. Bullough 1989; Liston & Zeichner 1987; Munby & Russell 1989; Smyth 1989; Tremmel 1993). Accordingly, I ask, how are reflection and learning related? Finally, I am concerned with the individual consequences of experiential learning, i.e. how do these experientialists define 'the end point' of learning? In addition, I would like to clarify the fuzzy link between learning and development (see e.g. Granott 1998; Hobson & Welbourne 1998; Merriam & Heuer 1996).

What experience?

These theoreticians seem to have at least three kinds of uses and meanings for the term 'experience'. The second kind of use is revealed in the following quotations. Firstly, Kolb emphasizes the central role that ex-

perience plays in the adult learning process as follows:

"Learning is a continuous process grounded in experience. Knowledge is continuously derived from and tested out in the experiences of the learner." (Kolb 1984, 27; my italics.)

"Everyone enters every learning situation with more or less articulate ideas about the topic at hand. ...It is just that some of our theories are more crude and incorrect than others.... The important point is that the people we teach have held these beliefs whatever their quality and that until now they have used them whenever the situation called for them to be atomic physicists, historians, or whatever." (Kolb 1984, 28; my italics.)

"The transactional relationship between the person and the environment is symbolized in *the dual meanings of the term experience – one subjective and personal*, referring to the person's internal state, as in 'the experience of joy and happiness', and *the other objective and environmental*, as in, 'He has 20 years of experience on this job.' These two forms of experience interpenetrate and interrelate in very complex ways. 'He doesn't have 20 years of experience, but one year repeated 20 times'." (Kolb 1984, 35; my italics.)

"... Because we can still *learn from our own experience*, because we can subject the abstract symbols of the social-knowledge system to the rigors of our own inquiry about these symbols and *our personal experience with them*, we are free" (Kolb 1984, 109; my italics).

For Schön, experience consists in making and doing. His conception of experience in the adult learning process is expressed implicitly in following quotations:

"Our spontaneous knowing-in-action usually gets us through the day" (Schön 1988, 25-26; my italics).

"I shall use knowing-in-action to refer to the sorts of knowhow we reveal in our intelligent action — publicly observable, physical performances like riding a bicycle and private operations like instant analysis of a balance sheet. In both cases, the knowing is in the action.... We are characteristically unable to make it verbally explicit.... The knowing-in-action is tacit, spontaneously delivered without conscious deliberation." (Schön 1988, 28; my italics.)

"There is, to begin with, a situation of action to which we bring spontaneous, routinized responses. These reveal knowing-in-action that may be described in terms of strategies, understandings of phenomena, and ways of framing a task or problem appropriate to the situation." (Schön 1988, 28; my italics.)

"How can an inquirer use what he already knows in a situation that he takes to be unique? ... When a practitioner makes sense of a situation he perceives to be unique, he sees it as something already present in his repertoire. To see this site as that one is not to subsume the first under a familiar category or rule. It is to see the unfamiliar situation as both similar to and different from the familiar one, without at first being able to say similar or different with respect to what. The familiar situation functions as a precedent, or a metaphor, an exemplar for the unfamiliar one.... It is our capacity to see unfamiliar situations as familiar ones, and to do in the former as we have done in the latter, that enables us to bring our past experience to bear on the unique case. It is our capacity to see-as and do-as that allows us to have a feel for problems that do not fit existing rules." (Schön 1988, 65-68; my italics.)

"Judith comes to the studio already armed with a strongly held view of architecture. ... But this is her initial stance" (Schön 1988, 126; my partial italics).

"... 'stance' as itself a kind of competence, since it involves not only attitudes and feelings but ways of perceiving and understanding" (Schön 1988, 119; my italics).

"They already understand and know how to do" (Schön 1991, 5; my italics).

Action Learning emphasizes "real life", on-the-job learning. Revans concisely describes the role of experience in the adult learning process:

"Each can 'reorganise his own experience'." (Revans 1985, 220-221; my italics.)

"The most precious asset of any organization is the one most readily overlooked: its capacity to build upon its lived experience, to learn from its challenges and to turn in a better performance by inviting all and sundry to work out for themselves what that performance ought to be." (Revans 1985, 286; my italics.)

"... humanity with the obligation to learn, painfully and from its own experience." (Revans 1982, 653; my italics.)

"Action Learning does not pretend to supply the subject with much fresh cognitive knowledge; it is sufficient to help him use more effectively what he already has, and to reinterpret the experiences of yesterday in the light of tomorrow." (Revans 1982, 633; my italics.)

For Knowles 'the role of the adult's experience' is one of his four basic assumptions concerning characteristics of adult learner. He writes:

"The learning process is related to and makes use of the experience of the learners" (Knowles 1980, 58; my italics).

"Experience is the richest resource for adult's learning: therefore the core methodology of adult education is *the analysis of experience*." (Knowles 1990, 31; my italics.)

"... Adults come into an educational activity with both a greater volume and a different quality of experience from youths. By virtue of simply having lived longer, they have accumulated more experience than they had as youths.... The fact of greater experience also has some potentially negative effects. As we accumulate experience, we tend to develop mental habits, biases, and presuppositions that tend to cause us to close our minds to new ideas, fresh perceptions and alternative ways of thinking.... There is another, more subtle reason for emphasizing the utilization of the experience of the learners; it has to do with the learner's self-identity.... To adults, their experience is who they are. They define who they are in terms of the accumulation of their unique sets of experience (e.g. occupations, work, travelling). Adults are what they have done. Because of this they have a deep investment in its value. The implication of this fact is that in any situation in which adult's experience is ignored or devalued, they perceive this as not rejecting just their experience, but rejecting them as persons." (Knowles 1990, 58-60; my italics.)

Mezirow's conception of the role of experience in adult learning process is found in the following citations:

"The idea that uncritically assimilated habits of expectation or meaning perspectives serve as schemes and as perceptual and interpretive codes in the construal of meaning constitutes is the central dynamic and fundamental postulate of a constructivist transformation theory of adult learning....

Experience strengthens our personal meaning system by refocusing or extending our expectations about how things are supposed to be." (Mezirow 1991c, 4-5; my italics.)

"I have chosen the term meaning perspective to refer to the structure of assumptions within which one's past experience assimilates and transforms new experience. A meaning perspective is a habitual set of expectations that constitutes an orienting frame of reference that we use in projecting our symbolic models and that serves as a (usually tacit) belief system for interpreting and evaluating the meaning of experience... Meaning perspectives determine the essential conditions for construing meaning for an experience. By defining our expectations, a meaning perspective selectively orders what we learn and the way we learn it. Each meaning perspective contains a number of meaning schemes. A meaning scheme is the particular knowledge, beliefs, value judgments, and feelings that become articulated in an interpretation.... Meaning schemes are much more likely to be examined critically and transformed by reflection than meaning perspectives." (Mezirow 1991c, 42-44; my italics.)

"Often our understanding comes from finding the right metaphor to fit the experience analogically into our meaning schemes, theories, belief systems, or self-concept" (Mezirow 1991c, 80; my italics).

"We can never be totally free from our past" (Mezirow 1991c, 2; my italics).

"Uncritically assimilated presuppositions may *distort* our ways of knowing" (Mezirow 1991c, 5; my italics).

"... how we select those elements of it (an encounter) that past experience tells us may be relevant to understanding. We have to sort through our past experience, that is, the alternative interpretations currently available to us. Thus the way our prior experience is organized and the way we interpret its relevance become central to making a new interpretation." (Mezirow 1991c, 11-12; my italics.)

Experiences of this sort seem to have at least five fundamental properties. Firstly, these citations refer to past, "lived" experiences or life experience. They are experiences that have already passed or been lived through. Every adult has a "private mixture" of experiences, and these "private mixtures" of experiences belong to adults as individual subjects and constitute the adult's 'everyday meaningful world of signifi-

cance' (see Bohm & Peat 1987, 248; Mair 1980; van Manen 1990, 36; Usher 1989a). Secondly, this sort of experience has a *tacit* or *implicit* character. An adult lives with these experiences, and carries them with him in every situation. Because an adult dwells in these experiences, it is difficult to describe them in language form: an adult is unable to say all that he has experienced (see Polanyi 1964a, x, xi). These "lived" experiences could be similarly characterized as tacit knowing: we have experienced more than we can tell and we can tell nothing without relying on our awareness of things we may not be able to tell (Polanyi 1964a, x; see also Mair 1980). These experiences are a natural and fundamental part of adult life; they are brought into daily routines. Although tacit they are not, however, wholly inexpressible, because they become more or less transparent in action. As Schön puts it, "we reveal (our knowing-in-action) in our intelligent action" (Schön 1988, 28).

On the basis of these two properties the "private mixture" of experiences resembles the Husserlian life-world, the world of the natural attitude of everyday life11. It involves living in contact with the ordinary world of ordinary human beings, for example, the family and other social ties including employment. It is the world one finds oneself in without thinking about it, just as the world of things surrounds us without our making a conscious deliberate effort (Dilthey 1985, 223; Roberts 1992, 268). The life-world, in short, is the world humanity finds itself in before deliberate manipulation takes place. Knowledge within the life-world is defined as implicit (in that it cannot be completely stated), holistic (in that each element is related to the whole), and unavailable (in that we cannot give a critical account of it) (Roberts 1992, 269). The third property of such experiences follows quite naturally from these two characteristics. These experiences are always true, authentic and worthwhile for the adult himself (see Dilthey 1985; see also Polanyi 1964a, 202). In short, they are objects of certainty. When we, in the natural course of day-to-day life, experience things, we 'believe' in them, and attribute real existence to them. Therefore it is quite natural that they are taken-forgranted. Because of their subjective character these experiences are not, however, capable of strict definition, i.e. not absolute.

Fourthly, experiences of this sort are described as *incomplete* and *inadequate* – even *distorted* (e.g. unarranged and untested conceptions; more or less articulated ideas; crude and incorrect theories; inadequate, false, distorted and limited meaning perspectives or meaning schemes). In spite of inadequacy or incompleteness these "private mixtures" con-

stitute, however, a holistic unity for the adult himself, since an adult seeks a unity among experiences (see e.g. Roth 1962, 35-36). Knowles (see e.g. 1990, 60) emphasizes that it is the learner's self-identity that is at issue. If these experiences are subjectively true or adequate but can on the other hand be defined inadequate, one question arises in relation to what are they inadequate? They can be inadequate or incomplete at least in two senses. Firstly, they can be defined as individual misinformation (see Bohm & Peat 1989, 248), which can arise due to defects in one's understanding. In addition to defects of understanding, there can be genuine mistakes of facts about oneself (Hamlyn 1978, 228-230). Simple misunderstanding should, however, be differentiated from pathological or ideological distortion (Ricoeur 1991, 302). Secondly, inadequacies could be defined as partial understanding or imperfect knowledge (see Hollinger 1980; Popper 1977b). Accordingly, they are not falsehoods, since a human being can not be focally aware of innumerable items of experience (see Polanyi 1964a, 103). A third way to explain these inadequacies is to refer to the differences between subjective and personal. The subjective refers merely to enduring feelings and action guided by individual passions. The personal, in turn, is more than subjective. It actively enters into a human being's commitments and the universal. In so far as the personal submits to requirements acknowledged by itself as independent of itself, it is not subjective. (Polanyi 1964a, 300.) Accordingly, the inadequacies could refer to lack of universal and with too much subjective. What then are 'objective' and 'environmental' experiences? Do they refer to this universal? What does Kolb mean by them? Are these wordless and habitual experiences described in the above citations inadequate in some objective and environmental sense? Kolb does not clarify the distinction he makes, but states only that 'these two forms of experience interpenetrate and interrelate in very complex ways' (see page 56).

To sum up, the adult's present way of being and seeing the world, others and himself is defined in terms of experiences of this kind (cf. Hanson 1972, 30). I would term them first-order experiences. The total of these first-order experiences – i.e. the adult's unique, autobiographical history – constitute the 'boundary structures' for learning, since they – as a whole – influence the way an adult understands and acts in the world. However, they are a necessary, but not a sufficient precondition for experiential learning to occur (see e.g. Boud, Cohen & Walker 1993; Jarvis 1987; Smith 1987). Actually these five properties of first-order experiences are of a kind that do not produce learning alone and

automatically, and may even prevent it. The more experience an adult has the more easily he tends "to develop mental habits, biases, and presuppositions that tend to cause (him) to close (his) mind to new ideas, fresh perceptions and alternative ways of thinking" (Knowles 1990, 59). Also the theories presently under study include the more or less explicit argument that for experiential learning the connection between what one has experienced already and what one comes to learn is crucial. More precisely, these experientialists seem to assume that learning begins with the interplay between these first-order experiences and experiences of a different quality. They describe experiences of another kind of quality, which I have termed second-order experiences, as follows:

A Mezirowian disorienting dilemma:

- * a growing sense of inadequacy of old ways of seeing and understanding meaning
- * ineffective old patterns of response
- * any major challenge to an established perspective: through an accretion of transformed meaning schemes resulting from a series of dilemmas; an externally imposed epochal dilemma (e.g. a life crisis, a death, an illness, a divorce, failing an important examination, retirement); an eyeopening discussion, book, poem, painting or efforts to understand a different culture; an emotionally charged situation
- * painful: often calls into question deeply held personal values and threatens very sense of self
- problem posing: making a takenfor-granted situation problematic, raising questions regarding its validity
- experiences fail to fit our expectations and consequently lack meaning for us

A Schönian element of surprise:

- * something fails to meet expectations
- * an inadequate hypothesis
- an unexpected pleasant or unpleasant outcome does not fit the categories of our knowing-inaction
- * confusion and puzzlement

A Revansian recognition of a common ignorance:

- a real, threatening problem (no existing solution), on which honest and reasonable man may disagree
- * no-one knows the answer, what to do next
- * ignorance, risk and confusion
- * obligation to find the answer
- * some element of threat
- * a problem will vary from one to another (differences between past experiences, current values and future hopes)

- an anomaly that cannot be given coherence either by learning within existing schemes or by learning new schemes
- * a redefinition of the problem: critically reassessing the assumptions that support the current meaning schemes in question

A Knowlesian real or simulated experience:

- learners discover for themselves the gaps between where they are now and where they want to be
- * even more potent tools for raising the level of awareness of the need to know

A Kolbian *surprising*, unanticipated experience:

- * makes our earlier earnest convictions about the nature of reality seems simplistic and dogmatic
- * it is in this interplay between expectation and experience that learning occurs
- * this experience can develop gradually or dramatically as a result of a life crisis (e.g. divorce or losing one's job)

A second-order experience seems to have at least three essential properties. Firstly, such an experience unlocks some part of the subject's first-order experiences, which have suggested appropriate ways in which to see the world, to doubt (cf. Hamlyn 1978, 120-124). The second-order experience breaks down the tendency to cling to what is familiar and therefore more or less seriously disturbs the subject's overall equilibrium. The subject has over the years acquired a certain body of understandings and living, but suddenly he notices that there is something wrong with this old, familiar way of seeing and living (see Hanson 1972, 70). A skeptical intent arises, and he suspends his own experiences in this particular situation, and his holistic, implicit awareness turns into somewhat explicit or transparent form. Secondly, this disturbing or violating second-order experience usually generates negative feelings or at least confusion in adults. At worst, it may even threaten the unity of Self. I would like to propose that these negative feelings are more than mere cognitive discomfort, but a holistic discomfort, which also includes emotional discomfort. A second-order experience threatens the adult's unity and his own, familiar conceptions are not true anymore. In other words, he notices some incompleteness or inadequacy in his present ways of seeing. In this inconvenient or confusing situation the adult is faced with a choice. More precisely, in this situation the subject has two basic possibilities: to defend the familiar way of seeing or to modify it, i.e. to learn. How does a second-order experience give rise to modifying the familiar way of seeing and to learning?

The answer is the third property of a second-order experience, continuity. Accordingly, every second-order experience is seen as interrelated with the totality of first-order experiences, or as even inside this unity (cf. Elder 1980). First-order experiences thus constitute the boundary structures for seeing. 'Seeing' a second-order experience is a 'theory-laden' activity, since 'seeing' is shaped by first-order experiences (see Hanson 1972, 19). An adult cannot properly be said to see something, unless as one thing or other, even if it is not seen as it is (see Hamlyn 1978, 64). An adult asks "is this the same as ...?" The past thus provides clues for the seeing of a second-order experience (see Barbour 1980). The Deweyan idea of the experiential continuum is thus important here: every secondorder experience refers to some features of the first-order experience pre-existent in time - and modifies in some way the quality of those experiences which come after (see Dewey 1951, 17, 27). But the experiential continuum can also be explained through Kantian categories and structural resemblance: an individual sees the second-order experience in the light of his understanding, in the light of the categories in use. A second-order experience gives a hint that there is something beyond the individual boundaries of understanding, but one cannot know yet what lies beyond those boundaries. A second-order experience provides the clue that one's own boundaries can be moved on

I would argue with Dewey that the criterion of continuity is that which discriminates between educative and mis-educative second-order experiences (see Dewey 1951, 29; see also Usher 1989c), but my grounds for this are Kantian. An educative second-order experience should prepare a learner for later experiences of a deeper and more extensive quality i.e. to activate more developed categories. Furthermore, a second-order experience is mis-educative, if it arrests or distorts development of this kind (see Dewey 1951, 13). From Kantian point of view, a second-order experience arrests or distorts if there is not enough 'fit' between a secondorder experience and first-order experiences in terms of categories. In particular, one of Knowles' arguments refers to this difference between educative and mis-educative experiences: "a little anxiety stimulates learning; but each of us has an anxiety ceiling that if exceeded operates as a block to learning" (1989, 89). Mezirow expresses the same idea as follows: "We trade off awareness for avoidance of anxiety when new experiences are inconsistent with our habits of expectation, which can result in areas of meaninglessness" (1991c, 63). The line between educative and mis-educative is, however, difficult to define. How can a second-order experience be mobilised to generate the optimal amount of discontinuity and optimal amount of continuity to orient an adult to approach a familiar, but at the same time disturbing phenomenon with fresh interest, but without arresting learning? The second-order experience has to provide a learner with something genuinely new, but not too new or too familiar, in relation to first-order experiences, because both over-familiarity and under-familiarity will produce a mis-educative experience, at worst even an alienating or an anomic experience (see Jarvis 1987; Merriam& Clark 1993; Usher 1989c).

It this situation of choice it should, however, be noticed that first-order experiences are more fundamental and powerful than second-order experiences. Therefore, by virtue of having been positive agencies for a long time in the adult's life first-order experiences can easily become negative boundaries to learning (see also Dewey 1930, 175; van Manen 1990, 46-47). The situation is fuzzy and disturbing and, because of the need to maintain the unity of Self, the adult does not necessarily want to see too much (see Claxton 1987; Daloz 1987, 93; Smith 1987). The unity of Self can be disturbed, if 'the perceived rewards' are very great. Otherwise, the subject will not willingly explore the inadequacies of first-order experiences, but will prefer to continue in more familiar ways (cf. Bohm & Peat 1989, 22-23). How then does an adult ultimately orient to learning? One explanation is that we are "preprogrammed" for learning. At least three of the theoreticians under study seem to believe that human beings - and especially adults - have some kind of inner compulsion or need to learn and develop themselves¹². Knowles, for example, appeals to 'internal pressures' (e.g. desire for increased self-esteem, quality of life, responsibility and job satisfaction) and 'the need to know', but the most important seems to be the "almost infinite potential, latent ability to self-actualize and ability to learn, be able to cope more satisfyingly/effectively with real-life tasks or problems or situations" (1989, 84). Revans mentions simply 'the need to learn' and 'humanity with the obligation to learn' (1982, 653, 779). Mezirow (1991c, 10), in turn, believes in 'the need to understand our experiences' and in 'a need to make and transform meaning'. This need, Mezirow claims, is orthogenetic in nature, i.e. it imitates inevitable patterns of biological development (1991c, 193). On the other hand, Knowles (1990, 63; 1989, 84) also mentions more 'earthly' needs, concerning 'current needs, interests and problems adult learners have in their minds', external pressures (better jobs, promotions) in the current life situation and the developmental tasks of adult social roles (performances as workers, spouses, parents and citizens). However, Knowles and Mezirow share a common faith that the adult's *real* interests are hidden¹³.

I would like to argue, contrary to these theorists, that the need for learning arises afterwards; after first-order experiences and a second-order experience have met. The only 'preprogrammed' aspect is the human being's biological need to be in equilibrium. Consequently, it is not 'an inner compulsion' which matters, but the relationship between a second-order experience and first-order experiences which creates a need to learn. It is as a result of this situation that an adult commits to learning. Commitment thus determines the nature of the ensuing action; without commitment nothing happens (see e.g. Bolton 1991; King 1980; Merriam & Heuer 1996; Popper 1977a; Reinharz 1989). My propose is that it is the personal significance (see Brookfield 1988b) or subjective value (see Merriam & Clark 1993) of this combination of first-order and secondorder experience which matters. In fact, one can, for example, learn from a meaningless experience in this 'relevance' sense (Usher 1989c). The personal significance or relevance of a certain second-order experience, in turn, depends essentially on what an adult already knows and has experienced and therefore on receptivity (i.e. an ability to experience), which is defined as a major dimension of being (see Hanson 1972, 26; Smith 1987). Receptivity affects our relationships with other people, as well as our capacity for learning (Smith 1987). Among adults, receptivity in relation to a second-order experience is crucial. And due to the different life-histories shaped by individual's social relationships and culture, adults' abilities to orient to and see second-order experiences are different. Not everyone is interested in the novel and problematic. As Mezirow points out, all adults find no need to engage in reflective thinking (1991c, 125). Accordingly, a second-order experience that may be educative in one adult learner's case may be even alienating to another. Or a single second-order experience can lead to several learning topics or a variety of them lead to a single topic (see Merriam & Clark 1993; Smith & McCormick 1992). In consequence, I claim that one can not state in advance whether an adult will choose to learn something or not. Due to the properties of these two qualities of experiences the final choice is unknown. And most importantly, personal significance is a private affair.

Furthermore, one of the basic characteristics of second-order experiences seems to be that *most often they are not planned beforehand*, but an adult can 'meet' an optimal second-order experience any time and

any where in a real life situation. They just happen in the real life context as is the case, for example, with life experiences such as change in job status or divorce (see also Merriam & Clark 1993). This raises the question of fictional or arranged second-order experiences. Can these be personally significant for the adult learner? Knowles, for example, believes in arranged second-order experiences, "learning experiences in adult education are increasingly organized around life tasks or problems" (1989, 84; my italics), not "according to subject-matter units and the logic of subject-matter content" (ibid., 82). But he claims also that "the learners accept a share of the responsibility for planning and operating a learning experience and therefore have a feeling of commitment toward it" (1990, 86; my italics). Lawrence (1989) has asked the guestion, does success of Action Learning rely wholly on the choice of 'problem'? This question could also be put into a more general form: does the success of experiential learning rely wholly on the choice of second-order experience? And furthermore, who chooses a second-order experience? Or is choosing even possible?

To sum up, how are these three kinds of experiences – perceptual experiences, first-order experiences and second-order experiences related to each other? Perceptual experiences and second-order experiences, in fact, resemble each other in one crucial respect. Both of them are 'immediate', here-and-now experiences loaded with considerable intensity. First-order experiences are, in turn, memory experiences. Although continuity between these two types of experiences is seen as necessary, there are many ways in which they can be joined. In the first place, the possibilities inherent in ordinary first-order experiences are wide. But this is also the case with second-order experiences. Thus, every second-order experience is a possibility for experiential learning, a potential moving force, but the final potential for the commitment to learn seems to be within adult learners themselves: it is the ability to experience which matters. Knowles argument that "all learning experiences should be reinforcing as well as stretching" (1989, 104) seems impossible from this point of view. But, generally speaking, much depends upon the quality of a second-order experience. As seen in the descriptions on pages 62-63 they can be of whatever quality. Especially interesting is the nature of the clues that second-order experiences give. The quality of the second-order experience should 'fit' especially with learner's receptivity, since experiential learning emerges from discontinuity and confrontation with the unfamiliar. As Dewey (1930) puts it: a delicate combination of habit and impulse is a requisite (p. 177). A

second-order experience challenges adult's current way of seeing and understanding. Accordingly, the necessary and sufficient conditions for experiential learning to occur cluster around two interrelated phenomena, the (immediate) second-order experience and the totality of first-order experiences. But the relationship between these phenomena is not direct and unproblematic. More precisely, if *three* elements – first-order experiences, a second-order experience and receptivity – are in optimal balance, learning is possible. Finally, I would like to characterize encountering a second-order experience as a reflective moment, a moment of discovering the boundaries of the adult's first-order experiences. It is a moment, when the adult subject discovers that behind those boundaries lies something of personally significance to know.

The individual experience -modifying process

The following explanations of on what happens when act of learning takes place are wide-ranging, complex and multidimensional. They include terms that are so loose and ambiguous as to create more problems than they solve in describing the act of experiential learning (see also Usher 1989c). This especially concerns the terms of 'transformation' and 'reflection'. Kolb defines learning as the creation of knowledge, meaning and reality through the transformation of experience (1984, 38, 52; my italics). He connects an increasingly specialized interpretative consciousness with learning (1984, 145-146)¹⁴.

Kolbian learning:

- * transformation means active experimentation and reflective observation
- intention i.e. internal reflection (understanding) about the attributes of these experiences and ideas/their presymbolic impact on our feelings
- * extension i.e. active external manipulation of the external world and grounding of ideas and experiences in the external world/acting

Interpretative consciousness:

- * contains no contradictions that would challenge the validity of the interpretation
- * an evaluative process that selectively interprets the focal experience
- * this interpretation of the focal experience alters it selectively, redefining it and carrying it forward in terms of the hierarchically integrated learning mode

- on our apprehended experience and thus extending it
- * the structural basis of the learning process lie in the transactions among four adaptive modes and the way in which the adaptive dialectics get resolved (intuitive and affective responses to the situation are present) (logical thinking and rational evaluation to create ideas that integrate their observations into logically sound theories) (a tentative, impartial perspective toward a learning situation - a willingness to patiently consider many alternatives) (action, participation, and risk taking in learning, pragmatically testing previously generated concepts)
- learning requires the resolution of conflicts between dialectically opposed modes of adaptation to the world
- * knowledge results from a combination of prehension and transformation
- * the result is four different elementary forms of knowledge (see note 4)
- * learning is an emergent, continuous, *cyclical*, *holistic* and *adaptive* process

- gives direction and structure to the unfocused elaboration of registrative consciousness
- random accentuation process
- an experience is chosen that Apulls for" a particular orientation
- * primarily *analytic*: experiences can be treated singly and in isolation
- * a self-sealing, self-fulfilling character that deceives us with the illusion of a holistic view of an experience when it is fact fragmented and specialized
- serves to stifle contradictions and paradoxes
- * at higher levels of interpretative consciousness, one develops the ability to observe experience from multiple perspectives

For Mezirow, "learning is a dialectical process of interpretation in which we interact with objects and events, guided by an old set of expectations" (1991c, 11; my italics). Mezirow argues that "making meaning is central to what learning is all about" (ibid.; my italics) and "learning may be understood as the process of using a prior interpretation to construe

a new or a revised interpretation of the meaning of one's experience in order to guide future action" (1991c, 12; my italics). At the core of Mezirow's theorizing is the division into reflective learning and transformative learning, and the distinction between transformation of meaning schemes and transformation of meaning perspectives (see also Tennatt 1993).

Mezirowian interpretation:

- * involves making a decision that may result in confirmation, rejection, extension or formulation of a belief or meaning scheme or in finding that belief or scheme in question presents a problem that requires further examination
- * interpretations are fallible
- * often predicated upon unreliable assumptions
- * interpretations are articulations of meaning schemes and involve assumptions that adults in modern society find necessary to validate
- * can lead to either nonreflective (automatic, habitual) action or to reflective action; this involves the testing of fundamental assumptions rather than the mere extension of knowledge

Reflective learning:

- * the previously acquired takenfor-granted meaning schemes are further differentiated and elaborated within the structure of acquired frames of reference
- the confirmation, addition or transformation of ways of interpreting experience
- * this form of learning includes habitual and stereotypic responses to information received through pre-existing, known categories of meaning ("recipe learning", rote learning)
- a specific response changes or adding knowledge

Mezirowian reflection:

- * a personal, private process
- a retroactive critique of the content (description of a problem, a problematic meaning scheme), process (both reflection and critique of perceiving, thinking, judging, feeling and acting, method of our problem solving) or premises of problem solving
- * central in transformation of meaning schemes (reflection on dysfunctional assumptions) and meaning perspectives, in intentional learning and validity testing (of prior learning, or attending to the grounds or justification for our beliefs)

- learning new meaning schemes, sufficiently consistent and compatible with existing meaning perspectives to complement them by extending their scope
- * identification with others often plays a large role in this form of learning

Transformative learning:

- * happens through transformation of meaning schemes
- * accretion of transformed meaning schemes *can* lead to a transformation in meaning perspective
- * perspective transformation: becoming aware, through reflection and critique, of specific presuppositions upon which a distorted or incomplete meaning perspective is based and then transforming that perspective through a reorganization of meaning
- * the learner is presented with an alternative way of interpreting feelings and patterns of action; the old meaning scheme or perspective is negated and is either replaced or reorganized to incorporate new insights
- * transformation in meaning perspective can happen only through taking perspectives of others, who have more critical awareness of the psychocultural assumptions which shape our histories and experience.
- involves an enhanced level of awareness of the context of one's beliefs and feelings

* reflect on the results of our efforts to project our symbolic models, as selected and organized by our meaning perspectives, metaphorically to interpret a situation (imaginative projection of symbolic models)

Mezirowian premise reflection:

- * unquestioned premises are special cases of assumptions
- awareness and critique of the reasons why we have done in a certain way
- the dynamics by which belief systems, i.e. meaning perspectives, become transformed
- * involves the process of "theoretical reflectivity" that may cause us to become critical of epistemic, social or psychological presuppositions
- * leads to more fully developed meaning perspectives (more inclusive, discriminating, differentiated, permeable, open and integrative of experience)
- * less frequently opens the possibility for perspective transformation
- * an inferential logic, "dialectic presuppositional", a movement through cognitive structures guided by the identifying and judging of presuppositions (elaborate, create, negate, confirm, problematize, transform)
- we can understand how they have come to shape the way we feel and act and their consequences
- * occurs mainly in psychotherapy

- * a critique of their assumptions and particularly premises, an assessment of alternative perspectives, a decision to negate an old perspective in favor of a new one or to make a synthesis of old and new, an ability to take action based upon a new perspective and a desire to fit the new perspective into the broader context of one's life
- * perspective transformation involves a sequence of learning activities
- * as sequential moments of "meaning becoming clarified"
- * this usually appears to occur after the age of thirty

* a natural form of transformative learning: often occurs in adult life, especially during major life transitions, without the intervention of either a therapist or an educator

Schön identifies learning through three kind of reflection processes¹⁵. Reflection is thus a basic process in learning. Schön defines reflection *on* action as "thinking back on what we have done in order to discover how our knowing-in-action may have contributed to an unexpected outcome" (1988, 26). It has no direct connection to present action (ibid.). The distinction between reflection-in-action and knowing-in-action may be subtle (Schön 1988, 29). Both knowing-in-action (see description on pages 31-32) and reflection-in-action are processes which we can perform without being able to say what we are doing (e.g. skilful improvisers) (ibid., 31).

Learning a new competence:

 Kaſkaesque situation: a learner seeks to learn things whose meaning and importance he cannot grasp

* a learner cannot at first understand what he needs to learn, can learn it only by educating himself, and can educate himself only by beginning to do what he does not yet understand

Schönian reflection-in-action:

- * a pattern of inquiry: a sequence of "moments"
- * the moments are rarely distinct
- * its immediate significance for action
- * rethinking of some part of our knowing-in-action leads to on-the spot experiment and further thinking that affects what we do in the situation at hand and perhaps

- * knowledge, which she considers useful may be asked to unlearn
- * essential "covert things" can never be explained
- * either a learner gets them in the doing or does not get them at all
- * learners' initial learning process bears a double burden: they must learn both *to execute* design performances and *to recognize* their competent execution
- * these two learning tasks support each other: as the student begins to perform, he also begins to recognize competent performance and to regulate his search by reference to the qualities he recognizes
- * a learner must build an image of it, an appreciation of where he stands in relation to it, and a map of the path by which he can get from where he is to where he wants to be, i.e. he must learn the "practice of the practicum"
- * learning is to do cognitive work
- reflection as reconstructing experience leads to new understandings of action situations
- * partial meaning can stimulate a reconstruction of meanings, ideas or *feelings* in the other person involved, based on his own experience a different experience from that of the originator of the communication

- also in others we shall see as similar to it
- * reflection in the midst of action without interrupting it
- at least in some measure conscious, although it need not occur in the medium of words
- a critical function of questioning the assumptional structure of knowing-in-action
- to restructure strategies of action, understandings of phenomena, or ways of framing problems
- * leads to another cycle of reformulation until the best "fit" is achieved between one's definition of the situation and the perception of other experts of the problem
- * "thinking on your feet"; "keeping your wits about you"
- * a series of new experiences
- a kind of experimenting: to experiment is to act in order to see what follows
- * our thinking serves to reshape what we are doing while we are doing it

Revans defines Action Learning "as a means of development, intellectual, emotional or physical, that requires its subject, through responsible involvement in some real, complex and stressful problem, to achieve intended change sufficient to improve his observable behaviour henceforth in the problem field" (1982, 626-627; my italics). Revans' definition of

learning utilises phases familiar in scientific inquiry: survey, hypothesis, experiment, verification and review. He emphasizes the social nature of the learning process¹⁶.

Revansian learning:

- * responsible action is, in itself, an effective learning process
- * learning consists mainly in *new perceptions* of what individuals are doing and in their *changed interpretations* of their past experiences
- * in the treatment of problems, the subjectivities of those who carry out that treatment are cardinal
- * in the treatment of a problem, none can be declared right or wrong
- * true learning involves intelligence, emotion, logical exposition and successful application
- * the logical foundation of Action Learning is the *structural identity* of four independent activities, which are scientific method, a rational decision, wise counsel and learning
- * the underlying structure of these four activities formally as System Beta, which consists of five stages: (1) survey (field activity), (2) hypothesis (set workshop), (3) experiment (field operation), (4) audit (set exchange), (5) review (field activity and operation); the nature and sequence of these five stages are invariant
- * (1) survey: *becoming aware*, data collection; awareness may come spontaneously and rapidly, with a mix of speed and deliberation, or with slow and cautious circumspection
- * (2) hypothesis: *speculation*; the subject finds intelligibility in the material of which he has become aware; his insight is not yet verified and may be illusory
- * (3) experiment: *test*; the pattern, theory, hypothesis, supposed relationship or order is subjected to independent or impartial test
- * (4) verification: *audit*; the results achieved are compared with the results to be expected
- * (5) review: *control*; the subject decides whether the relationship has been disproved or not

Knowles classifies learning (or teaching) into three categories: straight indoctrination (in cases where protection of human life is involved), direct didactic instruction (e.g. how to operate a machine) and self-directed learning (whether more complex human performances are involved) (Knowles 1989, 92-93). Self-directed learning, which appears

in complex human performances and in problem solving, is the most developed of them.

Knowlesian self-directed learning¹⁷:

- * a self-directed process: learners define their educational needs and interests, formulate the learning objectives, plan the learning experiences and different methods of learning, organize the learning process through the use of learning contracts and evaluate the results
- * an elusive phenomenon
- * a life-long, internal and linear process
- * a process of active inquiry, the initiative residing in the learner
- * learners participate actively in the learning process
- * a process of need-meeting and goal-striving by the learners
- * performance-centered, life-centered, problem-centered learning

Regardless of the complexity and multidimensionality of above descriptions they have much in common, although those common features are not easily discerned. Nevertheless, the basic assumption underlying these all descriptions seems to be that adult experiential learning is relearning (see also Claxton 1987). Learning involves modification of earlier constructions: re-organization, re-construction, re-defining, re-thinking, re-shaping, re-interpretation and re-formulation. On the whole, experiential learning seems to aim at establishing a renewed contact with something original (see van Manen 1990, 31; my italics). Broadly speaking, the original objects of renewed contact or modification seem to be knowledge and self-knowledge, experience, meaning and action. As Mezirow puts it, learning is "about the world, other persons, and ourselves" (Mezirow 1991c, 89). How does this renewing process proceed? On the basis of above descriptions I would propose that the basic qualities that characterize this process are the following: retrospective, critical, analytic, rational, personal and internal (see also Armaline & Hoover 1989: McPeck 1992).

Experiential learning is retrospective...

Experiential learning concerns situations the learner is no longer in. Accordingly, experiential learning is *retrospective*, because the experience under modification has already been passed or lived through. The

experience itself continues to be given to a learner itself and in person, while effecting a different style that is, in the mode of "no longer" (Lyotard 1991, 79). It is thus 'retained' at the heart of learner's living present. This 'retained mode' is necessary, since a learner must first master a body of experiences before he can work on the experience to be modified (see Ennis 1992; Roth 1989; Vanderberg 1995; Young 1990). The learner has, however, receded eternally from what he has experienced earlier in his life. It is important to notice that these experiences are not forgotten, but they are retained in a tacit form. In a certain way the learner still 'has' the unmodified experience but modified in personal way, in order to be able to 'compare' it to the past experience of which his memory presently informs him (Lyotard 1991, 79). This past experience is thus obtained by recollection, not by perception, but with help of perception i.e. a second-order experience. With help of this second-order experience a learner can recover first-order experiences. date them, place them, find motivations and excuses for them.

This is quite a natural way to revisit first-order experiences, since lived experiences can never be grasped in their immediate manifestation but only as past presence (see e.g. Dilthey 1985, 223; van Manen 1990, 36). Whether these first-order experiences are in conceptualized form or not, the adult has accepted them existentially by dwelling in them (see Polanyi 1964a, x, xi). From this point of view, it could be argued that a second-order experience helps a learner to switch focal attention to particulars of which he had previously been aware, but only in a subsidiary role (see Polanyi 1964a, 56). While focal awareness is necessarily conscious, subsidiary awareness may vary over all degrees of consciousness (Polanyi 1964a, 92), including tacit experiences. Accordingly, retrospective consideration could take place between a tacit totality of earlier experiences and some come-to-consciousness part of it. Mezirow's theorization of memory illuminates in part the possible problems in this situation. He defines memory as an active process of recognizing again and reinterpreting a previously learned experience in a new context. He argues that "remembering depends upon how well the original experience was integrated into past learning and how frequently the memory has been called upon. When an experience appears incompatible with the way meaning is structured or provokes anxiety, integration is less likely and recall probably will be distorted. Remembering appears to involve recognizing an object or event that previously had meaning and either strengthened or transformed an existing meaning perspective or a specific meaning scheme or schemes." (Mezirow 1991c, 6). Furthermore he states that "we forget, ..., when the event is no longer recognizable, its context is changed or our habits of expectation have been transformed" (ibid., 7).

The basic assumption is that an adult learner turns backwards, and thus that first-order experiences will come under scrutiny. As a consequence, the temporal dimension is essential here - experiential learning occurs first and foremost temporally. Through temporal distance a learner acquires psychic distance to his first-order experience. This psychic distance between the first-order experiences and a second-order experience is necessary, since putting experience at a distance enables to be made sense of them (Ricoeur 1991, 156-162). Unless taking a distance happens a learner 'reproduces basic problems' included in firstorder experiences (cf. Ricouer 1991, 198). Learning in itself takes time (see e.g. Jarvis 1987: Merriam & Heuer 1996: Nolan 1989: Wilson & Burket 1989; see also Heiskanen 1990), but the first demand concerning time is that mentioned above. The time needed after the reflective moment is yet another question, which will be treated later. A renewed contact with tacit and familiar first-order experiences thus presupposes exceeding 'biases' or 'basic problems' (see e.g. Juntunen & Mehtonen 1982, 117; Krohn 1981, 122). How does the process of exceeding proceed? A standard answer to this question seems to be: through reflection. It is worth noticing that reflection is also a 'gone over' perspective, a later perspective (Palmquist 1987; see also Franzosa 1992; Punamäki 1993; see also Mezirow 1998a). But, the other important condition for reflection to occur is being critical over 'biases' or 'basic problems' i.e. first-order experiences.

Experiential learning is critical ...

Another quality of experiential learning is thus that it is *critical*. Being critical can be understood as a kind of negative consideration, which puts forward nothing positive, but, in its own negativity, destroys the presumptions of the positive (Roberts 1992, 240). Critical consideration is nonetheless imperative in all areas of human life, including learning (Zecha 1995). Human beings are always being asked to search for contradictions, errors and mistakes in order to correct their conceptions and improve their knowledge. According to Popper, this kind of critical attitude is not only a rule of wisdom, but it is a moral duty in continuing self-criticism and improving judgments and theories (Zecha

1995). In short, critical consideration recognises mistakes, contradictions and hidden presuppositions. Schön's and Mezirow's claims are compatible with this definition of criticalness. Schön (1988, 28) mentions "a critical function of questioning the assumptional structure of knowing-in-action" and Mezirow (1991c) argues in favour of critique of "their (adults') assumptions and particularly premises" (p. 105) and critique of "the reasons why we have done in a certain way" (p. 106). Furthermore, "through reflection he (the adult) can surface and criticize tacit understanding and can move" (Schön 1983, 61-62).

As noticed earlier (see pages 60-61), one quality of first-order experiences is inadequacy or incompleteness. If familiar first-order experiences, a necessary basis for experiential learning, are treated in this way as deficiencies, they can be remedied through critical consideration. The problem with these "lived" experiences is that an adult has experienced and therefore also knows 'too much': this pre-understanding predisposes the subject to see the nature of the phenomenon under critical consideration as rigidly as before (cf. van Manen 1990, 46-47). On the other hand, identifying inadequacies that are shaped by one's own history and experience is not an easy task¹⁹. 'Meeting' a second-order experience can easily be explained as insignificant (without importance), and therefore personally irrelevant. On the other hand, to be critical a learner must to some extent possess the phenomenon under consideration. The learner simply shifts the focus from dwelling in it to critical consideration of it. Having a phenomenon under consideration is thus a necessary criterion of being able to be critical. Critical consideration, however, reveals something of the limits and defects of learner's understanding.

It is important to notice that criticalness and retrospectivity together constitute reflection²⁰, which, according to Kantian definition, is the act of 'going back over different representations' or 'that state of mind in which we set ourselves to discover the subjective conditions under which we obtain conceptions' (Kant 1996, 168). Kantian reflection (i.e. transcendental reflection) thus distinguishes from the introspective reflection (a Lockean variety) to which Revans refers by arguing that reflection is a source of ideas which "every man has wholly in himself", and it might be called "internal sense" (1982, 783). In Kant's view, reflective judgment is merely an interpretative technique which a human being employs in order to bring organic entities and systematic unities within his powers of comprehension. Although reflection has its origin in the understanding, it is directed towards something 'subjective'. Kant

explains that our inadequate grasp of 'objectivity' results from the restricted capacity of our brains (i.e. our restricted use of categories; my addition) (see also Hamlyn 1978, 51-53). And that contingency, unformedness, is what Kant meant by 'subjective'. This dichotomy between our conceptually constructed, already elaborated world ('objectivity') and the contingency from which concepts extract it ('subjectivity') underlies Kant's definition of reflection. In this sense, to reflect is to describe what is not (and to that degree it is metaphysical), and reflection carries only a *subjective* validity. (Palmquist 1987; Roberts 1992, 5-9.)

Being critical is a useful way of underlining the inadequacies of first-order experiences. This retrospective critique only reveals the limits of the learner's understanding, but nothing beyond those limits. Does critical consideration then enable the learner to acquire a more developed conception of the inadequacies under scrutiny? The purpose of critical consideration is to point out those inadequacies, but not to change anything. Yet criticism will be fruitful only if we state our problem as clearly as we can and put our solution in a sufficiently definite form — a form in which it can be again critically discussed (Popper 1987, 16; my italics). In order to put a solution of inadequacies 'in a sufficiently definite form', the learner needs to be critical in relation to something. The subjectivity of reflection is not enough, but makes it possible to 'move' as Schön expresses it (see page 78). How are inadequacies best criticized rather than defended against doubt?

Experiential learning is analytic...

One possibility 'to impose order' on inadequacies is analytic consideration, as mentioned by Kolb. Under these circumstances analytic consideration seems necessary, since critical consideration alone is in itself unable to describe *how* earlier modifications i.e. mistakes and inadequacies should be changed. It only tells us that there is a reason for change and modification. Being analytic could, for example, take the form of explication, which builds on bracketing. In fact, explication of a phenomenon, seeing the essence and bracketing out reduction are one and the same thing (see Juntunen 1986, 72). At first the learner suspends his conceptions and inadequacies and tries to see things as openly and freshly as possible – to see them as they really are (Dilthey 1985, 325). As Kolb defines an analytical attitude, "experiences can be

treated as single and in isolation" (Kolb 1984, 150). By being analytic the subject attempts to change the implicit or non-conceptual into a more conceptual or explicit form (see e.g. Vandenberg 1995). The criterion of what are essential and non-essential or secondary qualities "dictates" what must be taken account and what will be put in brackets (Juntunen 1986, 77; Juntunen & Mehtonen 1982, 111). As a result, a good description shows the nature of the phenomenon under consideration such that the structure of lived experience is shown to a learner in a way that helps him to see the nature and significance of it *in a way not seen before* (Higgs 1995; my italics). It may also involve the connecting and linking of pieces of knowledge that earlier seemed distinct, and occasionally the reverse (Hamlyn 1970, 10-11).

If original, inadequate experiences are 'destroyed' through retrospective critique (i.e. reflection), this analytical phase constructs a pure experience, which is free from all presuppositions. Although identifying essences and disclosing non-essential qualities is a demanding process, we should not, however, make the mistake of mystifying the concept essence (Higgs 1995). 'Essence' could be understood as a linguistic description, which tries to capture the phenomenon creatively (ibid.). Yet the role of imagination remains underrated in the theorizations presently under study (see also Nelson 1994). Mezirow, for example, argues that "discernment is a complement to critical reflection. It involves enhancing presentational awareness and clarifying the influences of the prelinguistic on the way one feels, understands and acts" (1991c, 193; my italics). In this definition imagination has a more minor role than in analytic explication. Thus, the key of the method of 'eidetic description' is imagination. As learners we 'imaginatively vary' the experience from which we start, via our own, so that the descriptions of the variations will no longer be descriptions of our own experience. The descriptions of these 'imaginatively varied' experiences will pick out not only features which all actual experience in fact has, but they will also pick out features which all imaginable experience has. But features of all imaginable experiences are precisely the essential features of experience. (Hamlyn 1963, 173-174; Hammond, Howarth & Keat 1991, 75-76.) Studying essences makes it possible to characterize a phenomenon, to ask what the very nature of a phenomenon is, i.e. what is it that makes a something what it is - and without it could not be what it is (see e.g. Husserl 1982; Juntunen & Mehtonen 1982, 110-111). All this is not merely correction of interpretations (see Mezirow 1991c, 167), but a re-conceptualization of first-order experiences (cf. Iran-Nejad 1990).

Furthermore, to explicate is to attempt the impossible: to construct a full interpretative description of some aspect of the life-world, and yet be aware that lived life is always more complex than any explication can reveal. Phenomenological reduction teaches us that reduction can not be complete and that full or final descriptions are unattainable. (Hamlyn 1963, 182-184; van Manen 1990, 18.) During this analytic phase an adult begins to realise not only that he is looking at the world in an inadequate way, but what kind of inadequacies they are. In this connection it is important to notice that the central idea underlying phenomenology is that the world is in the eye of the beholder (see Higgs 1995). A learner is not being asked to deny his previous inadequacies, but to suspend them temporarily. As a whole, the analytic phase is explication as rational reconstruction without emotions and the natural attitude's assumptions about existence, but, in the spirit of phenomenology, human beings are free to constitute their own world of meaning.

Experiential learning is rational...

Furthermore, learning is described as a rational and therefore relatively unproblematic process. Again, it should be asked, what is being rational? Being rational could be defined as 'an attitude of readiness to listen to critical arguments and to learn from experience' (Popper 1962, 225). Accordingly, the adult learner should be rational in order to benefit from those critical and analytic considerations. However, the decision to be rational is based on value-judgments. Accordingly, being rational is 'faith in reason' (ibid., 231). It may be asked, however, why trust should be placed on fallible reason alone (Zecha 1995; see also Siegel 1992). In fact, all these five theoreticians seem to share an overreliance on adult rationality and they make little room for other aspects of learning, e.g. imagination and emotions. This is contradictory, since experiential learning in particular attempts to be sensitive to the inner world of the learner (see e.g. Barnett 1996; Boud, Cohen & Walker 1993; Nelson 1994). For this reason alone the force of their arguments concerning rationality and criticality are somewhat diminished, because they underrate the non-rational elements of experiential learning.

However, this rational movement takes place in a living, feeling adult, who does not rely exclusively on this kind of systematic, rational thinking (see Crain 1992, 328-329). At least some of non-rationalities that are

present or arise in the situation itself can be explained through the characteristics of first-order experiences (see pages 59-61). Adults do not learn simply through their intellect, but through their whole being, including feelings and volitions. An adult learner may have faith in his emotions and passions (Zecha 1995). For example, due to the tacit character of first-order experiences 'underdetermination' is possible: what an adult 'knows' is underdetermined by his capacity to understand it conceptually. This makes the analytic phase of learning, in particular, difficult. On the other hand, the learner may rigidly adhere to certain specific experiences that emphasize only one aspect of the phenomenon while ignoring others. Yet it can also be difficult for adult learners to see their lives in terms of what they have *learnt* earlier (see Smith & McCormick 1992). Accordingly, we "tend to accept and integrate experiences that comfortably fit our frame of reference and to discount those that do not" (Mezirow 1991c, 32).

As a consequence, it could be claimed that rationality is a necessary but not sufficient condition for human life in general, including experiential learning. Relying on rationality is a rather one-sided view. Learning is not a rational and progressive forward movement, a convenient step-by-step process (see e.g. Daloz 1987, 93; Hamlyn 1978, 129; Popper 1977a), but it also includes non-rational elements. How then does an adult learner overcome those non-rationalities temporally and become committed to modifying first-order experiences? I propose that the answer is to be found on the learner's ability to give up a satisfying routine and to accept new aspects of experience that have earlier been denied or shied away from. This ability refers back to a basic human characteristic, namely receptivity (see page 66). Also the theories under study refer to many kinds of abilities, which are 'useful' in learning. Kolb (1984, 30) has specified the abilities which are needed in learning as follows: concrete experience abilities (to involve himself fully, openly and without bias in new experiences), reflective observation abilities (to reflect on and observe his experiences from many perspectives), abstract conceptualization abilities (to create concepts that integrate his observations into logically sound theories) and active experimentation abilities (to use these theories to make decisions and solve problems). Mezirow (1991c, 11) mentions the extension of our ability to make explicit, schematize (to make an association within a frame of reference), appropriate (to accept an interpretation as our own), remember (to call upon an earlier interpretation), validate (to establish the truth, justification, appropriateness or authenticity of what is asserted) and

act upon (to decide, change an attitude toward, modify a perspective on or perform) some aspect of our engagement with the environment, other persons or ourselves. A Schönian learner, in turn, needs, for example, some cognitive capacities and willingness to imitate. Furthermore, Awe learn new ways of using kinds of competences we already possess" (Schön 1988, 32). Knowles argues that as "individuals mature, their need and capacity to be self-directing, to utilize their experience in learning, to identify their own readiness to learn, and to organize their learning around life problems, increases steadily from infancy to pre-adolescence and then increases rapidly during adolescence" (1990, 55). All these descriptions concern expansion of personal abilities, which are useful for learners, "if they are to be effective" (Kolb 1984, 30). Although, for example, Kolb's specification follows very mechanically from the learning cycle, it may be helpful in explaining overcoming non-rationality. All these abilities "prepare minds" especially for the critical and analytic consideration in learning process (cf. Tremmel 1993; see also Merriam & Clark 1993). In short, they are abilities to experience.

To sum up, in addition to the temporal dimension (including retrospectivity) critical, analytic and rational qualities could be seen together as constituting the *epistemological dimension* of experiential learning. On the whole, these three qualities are concerned with separating essential qualities from secondary, accidental ones. It is not observation of the intellect by the intellect, but observation of the life-world by the intellect. The essence of the epistemological dimension can be considered as focusing on the explicit and universal instead of the implicit and particular (see also van Manen 1990, 19). But after this 'unnatural' phase it is again time to turn to the 'natural' or real.

Experiential learning is personal...

Finally, experiential learning is also a *personal* process. What gives experiential learning this personal coloration? My answer is, in short, meaning-taking. I would like to propose that this personal part of the experiential learning process follows the 'abstract' or 'unnatural' phases of critical, analytic and rational consideration. What is then meant by 'meaning'? In this connection meaning-taking could be defined as catching the right *sense* of the experience²¹ and answering the questions 'What is it?' and 'What is its meaning?'. This kind of hermeneutical spirit of understanding which focuses on understanding of sense (Sinn-

Verstehen) will exclude psychological understanding. Accordingly, understanding of the meaning is the idea of understanding. (Danner 1995.) One aspect of the hermeneutical spirit of understanding is that it is understanding on the basis of something. How is the search made for the grounds of new meaning? How is a meaning corrected through learning? In my view, answering these two questions necessarily involves referring to the 'abstract' phases of the process. The learner clarifies his own present meanings with help of critical and analytic considerations. Otherwise the adult may avoid confronting deeper ideas by assuming that each particular inadequacy or contradiction can be dealt with through same suitable modification without seriously disturbing the underlying infrastructure of first-order experience (see Bohm & Peat 1989, 22-23). A Mezirowian learner is of especial interest here. He is first and foremost a meaning-maker (see also Merriam & Heuer 1996), but the role of analytic consideration in meaning-making has not been fully acknowledged. Mezirow states only that in transformative learning a learner investigates beliefs that are important to him and modifies these beliefs appropriately in the light of new information (see e.g. Mezirow 1991c, 5), but does not explain more closely the role of this new information

One source of this lack of clarity is the blurring of the distinction between truth and meaning, and it has had serious consequences for an explanation of what experiential learning is about. However, by drawing on Kant's distinction between reason and intellect²² we may be able to clarify this conceptual opacity. Reason and intellect are, in fact, distinct, although not separate, since the operations of reason and intellect have different objects, purposes and overall modes (Arendt 1978a, 62). The function of the intellect is knowing and it is directed toward the discovery of truth, which, in turn, is concerned with the apprehension of sensory appearances. The outcome of the search for truth is a progressively refined knowledge of the world. The function of reason is thinking and it is directed toward the discovery of meaning, which is, in turn, concerned with the comprehension of the world with respect to ultimate and penultimate questions. The outcome of thinking is an interpretation which may or may not be worthy of belief. Furthermore, interpretations can never be proven absolutely, because questions of meaning are never answered with compelling certainty. Certainty is found only in the realm of intellect, but not in the realm of reason. Reasoning is conducive to interpretations that are credible in varying degrees. (Arendt 1978a, 53-65; see also McKenzie 1987.)

As a consequence, meaning questions cannot be "solved" through critical and analytic consideration (see also van Manen 1991, 23). Critical and analytic consideration seeks truth, which is the object of judgment, and personal consideration defines the meaning or value of the truth found. It is necessarily a fact that one cannot have the one without the other. As Arendt (1978a) points out, "the quest for meaning stimulates the thirst for knowledge" (p. 62). Truthful knowledge of observable world is used instrumentally when reason is used to assess the alternative interpretations developed. Finally, the belief that an interpretation is true as well as meaningful is a highly personal matter. The meanings individuals attribute to the same event or phenomenon may be dramatically different (Merriam & Heuer 1996), since meaning is multi-dimensional and multi-layered, and meaning-taking happens in direct connection to lived experience, i.e. first-order experiences. On this basis, rational consideration could, in fact, be defined in a new way: adult experiential learning is rational in terms of personal relevance. Personal relevance, in turn, is determined on the basis of the totality of first-order experiences.

Experiential learning 'by doing' ...

The experiential learning process is not only an *internal* act, but includes *doing* something. All five theorists emphasize action as a necessary part of the learning process (see pages 111-113). As Mezirow points out, action 'closes' the learning process (see e.g. Mezirow 1991c, 209). This topic will be addressed in detail later, in chapter 5, since themes under this topic have more of a social than individual character. Schön, for example, locates reflection-in-action within the social dimension, and this gives a distinct coloration to his use of the term.

A temporary definition of 'adult experiential learning'

At the moment I would define adult experiential learning, broadly speaking, as a process of re-construction performed by an individual learner. First-order experiences are modified with help of a second-order experience. A second-order experience 'meets' the adult's totality of first-order experiences and this encounter starts up a process of retrospective critique, and analytic and personally rational consideration. All these ele-

ments are necessary for a full definition of adult experiential learning. Otherwise re-construction is not possible. I would especially like to emphasize the role of analytic consideration through which the distinctions between primary and secondary qualities of first-order experiences are made under re-construction. This truthful part of the process is a necessary basis for personally rational consideration. As noted earlier, a conception or an experience involves both a truthful component and a meaningful component. As a result of re-construction, the content of the adult's first-order experience is necessarily either *extended* or *deepened*, and therefore inadequacies are remedied.

More precisely, experiential learning is experiential at least in three senses. At first, experiential refers to being in touch with first-order experiences through memory and with help of a second-order experience. The lived experience origins of learning are thus acknowledged, and it could be said that experiential learning is grounded in first-order experiences. Accordingly, first-order experiences could also be termed memory experiences (cf. Hamlyn 1970, 196). Secondly, experiential refers to being in touch with the second-order experience. The role of a second-order experience is crucial in the learning process. Namely, 'meeting' a second-order experience generates a need for better understanding: this sudden experience tells to the adult that his elementary understanding is no longer sufficient, and that therefore he wants to understand better (see also Danner 1995). This 'meeting' is often so powerful that it may even generate powerful feelings in adults. At this significant, reflective moment an adult 'experiences his earlier experience' again (see also Smith 1987). What is then the right kind of second-order experience for each individual subject? Perhaps one of the greatest of all fallacies concerning adult experiential learning is the notion that a perceptual experience is a necessary condition for experiential learning. In fact, a second-order experience can have varied qualities, one of which can be, for example, a perceptual experience. A second-order experience can happen 'inside' a learner without any external perception. And finally, experiential also refers to doing something (see chapter 5).

In what way is the experiential learning process a transformation process? Transformation is a basic concept in Kolb's and Mezirow's definitions. Kolb (1984), for example, argues that a transformation happens between experience and knowledge (see page 68). Mezirow, in turn, argues that there are two kinds of transformation: the transformation of meaning schemes and the transformation of meaning perspectives. The latter involves, in fact, ten different phases (Mezirow 1975). However,

Mezirow's arguments about the transformation itself are not very clear. A common way to define transformation in the present context is to say that it is a qualitative change in the way an adult sees the world (see e.g. Hobson & Welbourne 1998). But what then is that qualitative change? How is it to be known that a transformation has taken place? I propose that transformation could be explained in terms of Kantian categories. At first, however, I would like to make a basic distinction between extending and deepening: extending happens within categories, whereas deepening happens between categories. But altogether, it is always a matter of changes in the structures of first-order experience. My proposal is that transformation could be defined as climbing up the 'ladders' of the Kantian categories. Transformation is thus dependent on categories: deepening demands using categories which have never before been in use. Therefore, it is understandable that starting to use new categories seems to require violating logic in relation to first-order experiences. In short, transformation is a boundary move between categories.

What is then the role of reflection in this re-construction process? Is reflection 'the right exercise of reason' (see Michelson 1996)? Although a common argument among theorists is that reflection is a proper procedure for transformation, I am at the moment somewhat doubtful whether reflection is sufficient to cause transformation. Has, for example, Schönian or Mezirowian reflection enough power to change a learner's inadequacies? In my opinion both of them do not necessarily involve enough analytic consideration. However, to discover what is really essential and to act upon that discovery is an exceedingly difficult task (see also Dewey 1951, 20). As a consequence of these remarks, the relativistic perspectives often adopted in connection with the individual or personal nature of experiential learning need to be reconsidered. This definition presupposes a certain kind of epistemological absolutism with respect to the justification of 'new essences', a radically nonepistemic conception of truth, and embrace of fallibilism (see Siegel 1992). It also holds that the goodness of reasons and the justifiability of particular beliefs is absolute in that it does not change across persons, times and cultures (ibid.). Accordingly, experiential learning is less of a private monologue, as defined earlier (see e.g. Roberts 1992, 286-289; Saugstad 1992).

At the moment one fundamental issue before us is the conceptual question of the root distinction between 'knowledge' and 'experience'. What are the basic distinctions between these two notions? Is experience counterposed to knowledge? On the basis of Kolb's definition of

transformation one might conclude that knowledge is more refined than experience, since it is through transformation of experience that knowledge arises, which is worth of learning process. Knowledge is thus rooted in experience (see also Michelson 1996). But could it be vice versa? Could it be possible that knowledge is transformed into experience? The relationship between life experience and knowledge is especially intriguing and complex, since personal knowledge (see page 34) has at least three of the characteristics concerning first-order experiences (see pages 59-61). At the moment I would like combine those two 'qualities', and use the term 'experiential knowing'. This term would include both the subjective and the universal aspects of being-in-the-world. Furthermore, it could even clarify the problem of the *object* of re-construction. Is it knowledge, meaning, experience or action? 'Experiential knowing' would include at least knowledge and meaning.

In addition to explicating the above distinction further, another fundamental issue before us is whether first-order experiences are defined as precomprehension or misunderstanding or misinformation (see also Krohn 1981, 130-132). As a matter of fact, an adult's first-order experience arises in the socio-cultural context of everyday ordinary life (see Bohm & Peat 1989, 269). Whether this necessary 'data base' for experiential learning is defined as misunderstanding or precomprehension, determines the whole nature of adult experiential learning. If the totality of first-order experiences is seen as precomprehension, the nature of experiential learning is hermeneutical (see also McKenzie 1987). If, in turn, the nature of experiential learning is defined as phenomenological, those first-order experiences would be defined in the same way. But if first-order experiences are defined as misinformation, then the nature of experiential learning is a critique of false consciousness (see Ricoeur 1991, 298-301). The Mezirowian premise reflection mostly resembles this type of critique²³.

Finally, adult experiential learning seems to be an endless spiral, since no single re-construction of first-order experiences will ever exhaust the possibility of yet another complementary, or a more extensive or deeper description (see e.g. Juntunen & Mehtonen 1982, 116; see also Roth 1989). The learning spiral occurs between the personal (or concrete, or particular) and universal (or abstract, or general): thus, first, the very personal first-person perspective, then many 'unnatural' perspectives, which could be described, for example, as third-person perspectives and, finally, back to the first-person perspective – but this latter first-person perspective is qualitatively different from the first one

The consequences of the individual experience -modifying process

One of the optimistic basic teachings of these experiential theorists is that learning contributes positively to the individual learner's overall development ²⁴. What is the direction of this development (Tennatt 1993; see also Pekarsky 1990)? The descriptions of 'the end product' are the following.

For Kolb the highest goal is a fully intergrated personality with an integrative consciousness in its structure.

Integrity:

- a sophisticated, integrated process of learning, of knowing
- * intellectual, moral and ethical standards are created
- we strive towards it consciously, even unconsciously, perhaps automatically
- * requires the thoughtful articulation of *value* judgments as well as the *scientific* judgment of fact
- * adaptive commitment to learning and creativity produces a strong need for integration of the four adaptive modes
- requires that we learn to speak unselfconsciously about values in matters of fact
- from embeddedness, defensiveness, dependence and reaction to self-actualization, independence, proaction and self-direction
- integration of dialectic conflicts among the adaptive modes

An integrative consciousness:

- * based on third-order feedback
- * the highest level of hierarchic integration of experience
- * creates integrity by centering and carrying forward the flow of experience; this centering of experience (not easily achieved) is created by a continuous learning process fuelled by successive resolutions of the dialectic between apprehension and comprehension and intention and extension
- primarily synthetic, placing isolated experiences in a context that serves to redefine them by the resulting figureground contrasts
- introduces purpose and focus to this random process
- * difficult to achieve
- one must first free oneself from the domination of specialized interpretative consciousness

- * the key to this sense of self-asprocess lies in the reestablishment of a symbiosis or reciprocity between the dialectic modes of adaptation such that one both restricts and establishes the other
- * integration in affective *complexity* begins with the relativistic appreciation (in the fullest sense of the term) of value systems and concludes with *an active value commitment* in the context of that relativism
- * integration in perceptual complexity begins with a similar relativistic appreciation of observational schemes and perspectives and concludes with intuition – the capacity for choosing meaningful perspectives and frameworks for interpreting experience
- * integration in symbolic complexity begins with the ability to match creatively symbol systems and concrete objects and concludes with the capacity for finding and solving meaningful problems
- * integration in behavioral complexity begins with the development of an experimental, hypothesis-testing approach to action that introduces new tentativeness and flexibility to goal-oriented behavior a tentativeness that is tempered in the final stage by the active commitment to responsible action in a world that can never be fully known because it is continually being created
- * a holistic developmental adaptive process

- continues with, first, the exploration of the previously nonexpressed adaptive orientations and later, the full acceptance of the dialectic relationship between the dominant and nondominant orientation
- more strategic than tactical broadly in time and space
- * cannot be described by any single interpretation
- * the transcendent quality
- * through accepting these paradoxes and experiencing their dialectical nature fully we achieve integrative consciousness in its full creative force
- * the correct or appropriate response depends on the conscious perspective used to judge it (performance – relatively current and immediate circumstances, learning – successful adaptation in the future, development – all life situations)
- the higher-order structures give a priori preference to some interpretations over others
- * with increased affective complexity comes a self-aware system of sentiments and values to guide one's life, a growing awareness of the values and sentiments of others (higher-order sentiments)
- increasing perceptual complexity is reflected in the development of perspectives on experience that have personal meaning and coherence (higher-order observations)
- * symbolic complexity results in higher-order concepts
- * at higher levels of behavioral complexity, these action schemes are

combined and trade off in a process that recognizes the necessity of risk taking (higher-order actions)

The aim of Mezirowian learning and development is an emancipated person.

An emancipated person:

- emancipation: freedom from libidinal, linguistic, epistemic, institutional and environmental forces that limit our options and our control over our lives
- * toward greater autonomy
- * ability to act separately from the demands of one's environment
- * overcoming limited, distorted and arbitrarily selective modes of perception and cognition
- * movement from dogmatism through skepticism toward rationality
- * to acquire more developmentally advanced meaning perspectives (more inclusive, discriminating, permeable, open and integrative of experience, more reliable and more differentiated) and use them more effectively to differentiate and integrate experience, to understand it more clearly
- * improved ability to anticipate reality
- * natural move toward such an orientation
- * a series of transformations in our own ways of making meaning; each transformation makes more efficient use of energy and generates its own reinforcement because the resulting behavioral pattern is better integrated and more open to new ideas, which provides for greater adaptional efficiency
- * from a simple awareness of their experiencing to an awareness of the *conditions* of their experiencing (*how* they are perceiving, thinking, judging, feeling, acting a reflection on process) and beyond this to an awareness of the *reasons why* they experience as they do and to action based upon these insights
- * adult's development: "as an adult's progressively enhanced capacity to validate prior learning through reflective discourse and to act upon the resulting insights"

Revans' view of individual development is included in his "Principle of Insufficient Mandate": those who would change something unknown to them are themselves changed in the process; those who think they have no need to learn anything about the world are unable to change it

(Revans 1982, 776-777). Furthermore, without authority over one's beliefs one has no authority over one's environment (ibid., 638).

A developed Self:

- * a more intelligible perception of his external world
- * improves in self-understanding
- * to improve observable behaviour
- * 'micro-political' skills
- * growth of moral and social understanding (the moral law of Kant, the perfect law of liberty of St James, the inner value systems)
- * development of the Self as its own
- * growth is symbiotic (with and from each other) and existing talents and internal resources are employed better

A Knowlesian learner progresses towards greater self-actualization and self-direction²⁵. The aim of maturation and development is *a competent person*. (Knowles 1989, 132.)

A competent person:

- * the ability continuously to anticipate new conditions and to change in ways that would enable him to avoid becoming obsolete (to what extent the participants leave a given experience with heightened curiosity and with increased ability to carry on their own learning)
- * the foundational competence to engage in lifelong self-directed learning
- * a cooperative person who see himself as a global citizen
- * highly creative
- * from dependency toward increasing self-directedness (at different rates for different people and in different dimensions of life)
- * live more efficiently
- * to improve ability to cope with life-problems
- * gain knowledge and skills
- * competences required for performance in life situations
- * the fulfilment of our human nature: to become more fully who we are
- * complete self-identity through the development of their full potentialities of life
- * growth, maturing from dependence toward *autonomy*, from passivity toward activity, from subjectivity toward *objectivity*, from ignorance toward enlightenment, from small abilities toward large abilities, from few responsibilities toward many responsibilities, from narrow interests toward

broad interests, from selfishness toward *altruism*, from self-rejection toward self-acceptance, from amorphous self-identity toward *integrated self-identity*, from focus on particulars toward *focus on principles*, from superficial concerns toward deep concerns, from imitation toward originality, from the need for certainty toward tolerance for ambiguity, from impulsiveness toward *rationality*; all human beings move on a scale from zero to infinity in each dimension throughout life, and tend to incorporate learning from a given experience in proportion to its relevance to their stages of development on the scale at that moment

Schön integrates personal and job-related development (see also Fisher & Podeschi 1989). For him the end point of development is a skilful designer.

A skilful designer:

- * recognizes and appreciates the qualities of good and competent design
- * an increasing capacity to produce competent design and those qualities
- * greater design competence
- * greater capacity for the reflection-in-action of the dialogue are two other purposes
- * the meanings of technical operations and to carry them out
- * convergence of meaning
- * observes in a finer-grained, more differentiated way

The above 'end products' are very positive descriptions of human capacities. At first they seem very different, but some common features can also be seen. Put together, development means individual changes towards autonomy or independence, rationality, relativistic thinking, self-direction, self-actualization, integrated self-identity and self-understanding, competence and responsible action. Experiential learning seems thus to be first and foremost an opportunity for holistic personality growth, involving the whole individual. Enlargement of the adult's intellectual horizons or deepening of theoretical understanding is of less importance, although from a developmental perspective the emphasis has generally been on the cognitive dimension (see Merriam & Heuer 1996). If development is defined as movement in the direction of perfection or as one in which there is direction but no point of termination so that there is improvement but never a finished state, a problem is presented by the term 'improvement' (or 'more-ness') (see Daloz 1987, 136). In

order to develop, later acquisitions have in some sense to be better, more advanced or more valuable than earlier ones. Yet these abstract qualities are not easy to define nor it is easy to define what constitutes development (or improvement) in terms of these qualities. For example, Mezirow's argument that "age involves changes reflecting qualitatively different dimensions of context awareness, focus, goal awareness, critical reflectivity and greater integration of the cognitive dimensions of learning" (1991c, 7) is problematic from this point of view. In fact, 'qualitatively different' does not even necessarily mean qualitatively better, although such qualitative changes should be changes for the better.

If these theories are concerned with *adult* learning, could these qualities be those which distinguish adults from non-adults and adult-like behaviour from nonadult-like behaviour? In short, do these qualities describe the adult way of being? At least they have many similarities with age-appropriate or life-stage-appropriate developmental tasks (see e.g. Merriam & Caffarella 1999; Sugarman 1996). How do these theorists define an 'adult'?

"..., a person is adult to the extent that the individual is *performing social roles* typically assigned by our culture to those it considers to be adults. ... A person is adult to the extent that the individual perceives herself or himself to be *essentially responsible for her or his own life*." (Knowles 1980, 24; my italics).

"Finally, the *psychological* definition: we become adult psychologically when we arrive at a self-concept of being responsible for our own lives, of being self-directing. ... So we become adult *by degree* ..." (Knowles 1990, 57; my partial italics.)

"Although children must rely upon adult authority to provide guidance in the validation process, self-directedness is inherent in the way our culture defines adulthood, and communicative competence is the essence of self-direction" (Mezirow 1991c, 69; my italics).

"... those whom society deems fully responsible for their acts to become more reflective in posing and solving problems, to become more critically self-reflective, to participate more fully and freely in rational discourse and action, and to move developmentally toward more reliable perspectives" (Mezirow 1991c, 214; my italics).

"...transformation can lead developmentally toward a more inclusive, differentiated, permeable, and integrated perspective and that, insofar as it is possible, we all *naturally* move toward such an orientation. *This is what development means in adulthood.*" (Mezirow 1991c, 155; my partial italics.)

"Examining critically the justification for our interpretations and the meaning schemes and perspectives that they express is the major imperative of modern adulthood" (Mezirow 1991c, 35; my italics).

"... adult learners who demand that the relevance and application of ideas be demonstrated and tested against their own accumulated experience and wisdom" (Kolb 1984, 6).

Broadly speaking, these definitions include two marks of the 'true' adult, self-responsibility and self-consciousness. These qualities can be seen as interpenetrated. Yet this is not a vicious circle, but a virtuous one. Sometimes, by going round in a circle, it can be shown that two concepts really are deeply connected, not in the sense that the one has to be applied both before and after the other (as in a vicious circle), but that they are both applied together (Scruton 1996, 305). Knowles (1980, 33) argues similarly that "the dimensions of maturation tend to be interdependent, so that changes in one dimension have an effect on other dimensions" (see pages 92-93).

The necessary partner of the term 'responsibility' usually is freedom. It seems to me that inherent in the above descriptions of end products is more or less explicitly how these writers think about the term 'freedom' and how it is connected with their theories. Different conceptions of the existence of freedom in human life constitute perhaps one of the most important and influential differences between them. Firstly, a Knowlesian adult is free in the humanistic sense, that is, a self-actualizing adult is relatively independent of his physical and social environment. He is dependent for his continued growth on his own potentialities and latent talents, capacities and resources (Maslow 1962, 207-208; Sugarman 1996, 32). A self-actualizer is deeply responsive to his inner nature and urges toward growth. He is less molded and flattened by cultural pressures and has preserved the capacity to look at the world in a spontaneous, fresh, childlike manner (Maslow 1962, 207-208). If the Knowlesian subject is, in contrast, more non-adult, he is conformist and follows conventional ways of ordering experience (see Crain

1992, 320-321). At the same time, however, the Knowlesian adult tries to cope with the social roles 'assigned by our culture'. Yet in middle life social success loses its importance, and the subject increasingly turns inward and considers the discovery of his own personality more important than social conformity (Crain 1992, 323).

A different point of view of freedom is that of Mezirow, which is based on critical theory, and which thus aims to make transparent what is hidden. Also the Mezirowian adult is only free when he has attained a certain independence from his culture and society – but on a different basis from that of his Knowlesian partner. "In order to be free we must be able to 'name' our reality, to know it divorced from what has been taken for granted, to speak with our own voice" (Mezirow 1991c, 3). According to Mezirow our emancipatory interest impels us "to identify and challenge distorted meaning perspectives" (1991c, 87). Distorted meaning perspectives and therefore, distorted self-understanding is the same thing as not being free, and it should to be overcome. With emancipatory interest an adult becomes truly free. On the whole, this unmasking activity could be called 'ideological critique' (see Nel 1995). The negative side of adulthood is revealed when "these (psychological) distortions take the form of 'lost' adult functions (mature ways of feeling and acting) blocked by inhibitions, psychological defense mechanisms and neurotic needs. The distorted assumptions suggest that to feel or act in ways forbidden by the prohibition will result in disaster, even though such an expectation usually is unrealistic in adulthood" (Mezirow 1991c, 144). As noted earlier, Knowles and Mezirow share a common faith that the adult's real interests are hidden. They argue about these interests quite similarly (see pages 65-66), but again on a different basis

The third way to think of freedom is the Kantian position to which Revans refers (1982, 632; see page 92). Kant claimed that we know that we are free, because we are bound by the moral law. A human being is self-commanded by reason to do what he ought and to avoid what he ought not. Such commands, however, would not make sense, if we could not freely decide to obey them. For that which we do by nature cannot also be a duty. (Kant 1996, 735-746; see also Green 1992, 46, 152; Scruton 1996, 234-236.) In short, "I should never act in such a way that I could not also will that my maxim should be a universal law" (Kant 1959, 18). Furthermore, for Kant a man who acts out of emotion – even if it is one of benevolence – is not 'autonomous' (Kant 1996, 735-746; see also Scruton 1996, 291). For Kant freedom is first

and foremost a *moral* thing: moral beings are free, rational and capable of self-legislation. Furthermore, moral beings are 'persons' in order to distinguish them from the rest of nature, as the bearers of rights and duties (see Scruton 1996, 286). If a free adult is first and foremost a moral being, the social dimension of being arises as significant, since morality is primarily a social matter. That Revans has chosen this Kantian position is consistent with his theorization, which emphasizes the social nature of learning and development.

To put it simply, development as personality growth can be defined as becoming more and more adult. Development of an adult may also be presented as enlargement of Self (or strong subjectivity). On the basis of this new self-consciousness the individual subject then behaves differently. On the other hand, development in adulthood seems to be primarily a gradual, maturational process of moving on without any clear boundaries. If so, it seems possible for development to occur at the heart of the familiar without laborious intellectual exertions and discoveries that extend one's intellectual horizons, although every act of tacit living shifts one's existence, re-directs and contrasts one's participation in the world (cf. Polanyi 1964a, xi). From this point of view, development is only a tacit (or latent) and convenient way of living, a way of existence (ibid., 102). Although the adult moves towards more refined, more completed adulthood in piecemeal fashion, it is not necessarily a steady, gradual progression (cf. Hamlyn 1978, 129). Life in itself is an experiential continuum, and an adult usually feels 'at home' in this taken-for-granted reality. Unity of experience is a necessary feature of any course of experience, any mental life, and it has to be maintained (Elder 1980; see also Roth 1962, 36, 40). On the whole, the 'harmonious general view' seems to be significant, since it is in relation to this general view human beings apply their understanding; distinct experiences acquire their final content in relation to it. These general principles rather than categories of understanding will shape distinct islands organized by understanding into a holistic view. (Saarinen 1989, 243-245.) But wherever there is life there are potential significant moments at which to begin to learn (see also Jarvis 1987).

However, Mezirow and Kolb describe development with a more radical intent, as a profound worldview change (see Tennatt 1993; McKenzie 1987). Mezirow equates the process of perspective transformation with adult development (1991, 192-193; see pages 46-47). Kolb too regards 'perspective transformation' as one of the primary aims of development. The congruence between the ideas of Kolb and Mezirow is apparent

here. Kolb claims (1984, 145) that "with this new awareness, the person experiences a shift in the frame of reference used to experience life, evaluate activities and make choices. The nature of this shift depends upon the specifics of the person's dominant and nonexpressed adaptive modes. The challenge becomes to shape one's own experience rather than observing and accepting experiences as they happen." He argues further that "the net effect of these shifts in perspective is an increasing experience of self as process" (ibid.). And when a person achieves a higher-order meaning transformation, he does not usually return to prior meaning perspectives (ibid.). Both of these descriptions are very similar to Kuhnian scientific revolution, in which an older paradigm is replaced in whole or in part by an incompatible new one (Kuhn 1970, 92; see also Sankey 1993). Perspective transformation is a reality transformation process, the creation of a new reality for the individual learner. This developmental shift, through which a new world view arises, is a relatively sudden and unstructured event like the gestalt switch (see Kuhn 1970, 122, 150; Tennatt 1994). In this situation development means transition from the 'world' of one paradigm to the 'world' of another (Sankey 1993). These two 'worlds' can be even incommensurable, and they present an adult with different 'visual gestalts' of the same world (Kuhn 1970, 111-112). Thus, Kuhn's 'worldchange' image may be interpreted as a change in the basic 'ontological categories' which different theories impose upon the world. The holistic nature of category change is directly reflected in translation failure: the interconnection of categories is paralleled by the interdefinition of concepts. (Sankey 1993.) I would like propose at the moment that perspective transformation is, however, a more rare way for a human being to develop. More usual is development by degree, as Knowles, for example, argues (see page 94).

Cunningham (1992) asks a very relevant question in this connection: "To what degree does perspective transformation depend on cognitive structure development?" This question could also be put into a more general form: does adult development depend on cognitive structure development? I would like to answer that adult experiential learning and adult development are interdependent phenomena so that either extending or deepening knowledge is necessary for development to occur. As noted earlier, experiential learning is a re-construction process, consisting of transformations, and it necessarily presupposes changes in the structures of knowing, with more abstract developmental changes coming afterwards – and more slowly. The locus is thus the individual re-construction process, and cognitive structure development is a nec-

essary basis for adult development and paves way for either gradual development or a developmental shift. Hence in development it is mostly a question of *degrees*, but in experiential learning it is a question both of *kinds* and of *degrees* of changes (see also Roth 1962, 36, 40). While the link between learning and development appears to be primarily a cognitive process, the resulting change is of a more holistic nature (see Merriam & Heuer 1996). Accordingly, experiential learning shapes people both epistemologically and existentially: they are different afterwards (see also Clark 1993, 47). Experiential learning is not in itself self-analysis, but a basis for it through re-construction and enlarged intellectual horizons. At best it leads to qualitatively better *action*.

If the nature of adulthood is defined as subjectivity in the stronger sense, a fundamental issue concerns the definitions of self-consciousness and therefore, self-knowledge. In addition, what is adult knowledge (see Griffin 1983, 47)? The term 'self-consciousness' is challenging. Becoming and being a Self is partly the result of inborn dispositions (for example, Kantian categories) and partly the result of experience, especially social experience (Popper 1977b; see also Usher 1989c). Consciousness of the I is thus not possible without the experience of another consciousness (Hoy 1991). As a consequence, it seems that self-knowledge has in part social origins. Self-knowledge and knowledge of other persons are related to each other so that knowledge of oneself is impossible without an awareness of one's relationship to other people. Furthermore, a full understanding of self-knowledge and knowledge of other people exists against an understanding of human relationships. No proper understanding of the concept of an individual can be achieved independently of an understanding of the concept of a human relationship. (Hamlyn 1970, 245-248.) Mezirow (1991c, 88) refers to these social origins by arguing that "self-knowledge is clearly a function of communicative learning – of how others interpret us – but it is also gained in important ways through instrumental learning by getting feedback on our competence to perform". And Revans: "...the subject is obliged to accept some degree of risk; those who do not know what risks they are ready to face do not know their own value systems and it is by becoming aware of these that subjects start to gain true self-knowledge - as distinct from the flattery of interested acquaintances." (Revans 1982, 775.)

Hitherto, adult experiential learning has been seen as involving asocial individuals modifying private, unique re-constructions (see also Long 1990; Usher 1989c). There have, however, been many clues about

experiential learning not occurring in private. Although the adult is free, he is, nevertheless, always bound to a cultural and societal context and is thus partially determined by social forces and never wholly free from them. Therefore, all kinds of experiences are always what they are because of the transaction taking place between the individual and what - at that moment - constitutes his environment, whether the latter consists of persons with whom he is conversing about some topic or event or whether the subject being talked about is also part of the situation (see Dewey 1951, 32-33). All kinds of human experiences thus ultimately have social origins; it is only the contact with the social that varies. Accordingly, individual knowing presupposes participation in public and objective understanding at some point. For how is the learner to know which are the relevant first-order experiences to rely upon and which are worth rejecting (see Hammond, Howarth & Keat 1991, 143)? The individual process itself is fallible. From this point of view, an isolated learner's private processes can lead to "wrong results" or incorrect construal (see LaBoskey 1989; Young 1988). Therefore, any interest in 'right answers' or 'truthfulness' presupposes interaction between a plurality of knowledge-bearers. In a sense interaction with other knowledge-bearers precedes 'truth' (Roberts 1992, 286-289), since self-criticism of one's own basic beliefs is possible only if there are criteria which are not totally 'paradigm-dependent' (see Barbour 1980). As a whole, the individual dimensions of adult experiential learning are connected with social elements in a highly complex manner. For these reasons it is impossible to think of experiential learning at all except at the same time from a social point of view. The issues concerning the social dimensions of adult experiential learning will be discussed in greater detail in the next chapter.

5 SOCIAL DIMENSIONS²⁶ OF ADULT EXPERIENTIAL LEARNING

The fundamental orientation in this chapter is social. As I pointed out earlier, learning is not a private, internal matter, but involves being situated within the social world and interacting with others (see e.g. Aaltola 1992, 52-53; Bowen 1981, 216; Chené 1983; Hamlyn 1967; Hollo 1959, 62; O'Keefe & Johnston 1989; Ricouer 1991, 180; Smith 1987; Usher 1989c). Experiential learning theorists have been criticized for emphasizing the individual side of learning and overlooking or even ignoring social aspects (see e.g. Brookfield 1984a; Clark & Wilson 1991; McKenzie 1987; Rubenson 1982; Tennatt 1993; Usher 1989c). I would say rather that social dimensions have been latent or of less importance in their writings, and that the recent focus on self-directed learning has happened at the expense of the social side. This focus of interest has also led to a willingness among both practitioners and researchers to dislodge the educator from the position of superiority he has occupied in more conventional education (see Brookfield 1985). Thus 'the autonomy of adult learners' has been respected, and the role of the adult educator is just to 'help' others to learn. Under this topic I will ask the following questions. What kind of andragogical implications in general seem to follow from the individual dimensions of experiential learning? How does an adult educator come into the individual learner's learning? What kind of "being-with" does an individual learner require? What is it that an educator does (see also Munby & Russell 1989)?

The epistemological dimension of adult experiential learning

Three of these theoreticians – Mezirow, Revans and Schön – propose discussion or dialogue²⁷ as the most important instrument to 'help' adult learners.

Schönian dialogue of reciprocal reflection-in-action/reflective conversation/ the communicative work of the dialogue

- * a kind of reciprocal construction
- * telling and describing/operative, active listening and demonstrating/reflective imitating are combined
- * questioning, answering, advising, listening, demonstrating, observing, imitating, criticizing are chained together so that one intervention or response can trigger or build on another
- * a coach treats a learner's further designing as an utterance
- * a learner reveals by doing what she understands or misunderstands
- * a coach responds with advice, criticism, explanations, descriptions and with further performance of his own
- * a learner reflects on what she hears the coach say or sees him do and reflects also on the knowing-in-action in her own performance
- * a learner tries to construct and test the meanings of what she sees and hears
- * a coach asks himself what this learner reveals in the way of knowledge, ignorance, or difficulty and what sorts of responses might help her
- * to try to enter into each other's way of seeing design and into each other's ways of framing the interaction in which they are engaged
- * the learner's efforts at performance and self-descriptions
- * experimentation generates new problems, puzzles and confusions
- * a coach's *particularized* demonstrations and self-descriptions: demonstrations must be keyed to tasks this learner is trying at the moment to carry out
- * a coach must be able to travel freely on the ladder of reflection:1) designing, 2) description of designing, 3) reflection on description of designing,
 4) reflection on reflection on description of designing 'reflection on the dialogue itself)
- * diagonal moves along the ladder of reflection occur when one party's action triggers the other's reflection or when one party's reflection triggers the other's action
- * improvisatory, on-the-spot experiments to discover and test what the coach may be trying to communicate to the learner
- * the values of control, distance and objectivity (central to technical rationality) take on new meanings
- * feelings and understandings are involved, each critically bound up with the other
- * what a learner learns in this process depends on the content and quality of her reflection-in-action
- * is very sensitive
- * results in convergence of meaning

A Mezirowian reflective/rational dialogue

- * justification of assumptions
- * necessary *to validate* commonly held meanings, problematic assertions, new perspectives, the assertions made by others
- * social interaction and dialogue is the only way through which perspective transformation is ever effected, by coming to see alternative ways of seeing through the perspectives of others
- * a provisional consensus will be achieved
- * effective participation
- * gives meaning to experience
- * ideal conditions for learning
- * consensual validation through dialogue among those who know us best to establish the meaning of assertions
- * requires freedom, democracy, equality, reciprocity, justice, social cooperation
- * participants have accurate and complete information
- * free from coercion and self-deception; have the ability to weigh evidence and evaluate arguments; have the ability to be critically reflective; are open to alternative perspectives; will accept an informed, *objective and rational consensus* as a legitimate test of validity

A Revansian set discussion

- * small groups will learn more readily from their own real experiences
- * contains less error
- * messages may be more readily verified
- * learners learn with and from each other how to deal with their urgent and responsible troubles
- * criticism and conjecture
- * regular meetings
- * similarly placed to work on other problems to discuss among themselves what they thought they were trying to achieve, returning thereafter to their places of work to try out anything new that had come to them in the set discussions, with a view to reporting back to set at a later date
- * work to test and question each other until each is much clearer about what she wants to do and why

Kolb mentions dialogue very briefly: "Perhaps the richest resources for integrative development lie in *the dialogue across age levels* that the university for lifelong learning can provide" (1984, 207)²⁸. He claims further-

more, "the educational issue is how and when to intervene in a way that facilitates this development. The 'hows' are not easy." (ibid., 204.) Knowles, in turn, mentions "helpful negotiation between a learner and a resource person" (1989, 113-114). Negotiation concerns 'a learning contract', which is a systematic procedure for helping individuals make use of all resources in a systematic program of continuous selfdevelopment. It includes eight detailed stages: diagnose your learning needs, specify your learning objectives, specify learning resources and strategies, specify evidence of accomplishment, specify how the evidence will be validated, review your contract with consultants, carry out the contract, evaluate of your learning. (ibid., 212-217.) Also the designing and conducting of learning experiences happens through interaction; an adult educator and an adult learner together define the substance of the basic unit of learning, a 'learning experience' (see e.g. Knowles 1980, 57; Knowles 1990, 86). On the whole, these descriptions of dialogue again share certain similarities, although also differences. On the basis of them I have tried to formulate a basic dialogue structure, since learning dialogue needs some degree of structure – or disciplined inquiry – to improve its efficacy. I propose a four-part basic structure for dialogue: sharing, testing, justifying and believing.

Sharing: opening up the individual world for others

Individual learners' private conceptions constitute the raw material on which to work in dialogue (see van Manen 1990, 55). Therefore these private conceptions should be articulated and shared in dialogue first (see Reinharz 1989). The adult learner's inner monologue changes as outer dialogue (Bohm & Peat 1989, 98) and a complex process of interaction starts with others. Sharing is not an easy task due to uniqueness and variation of conceptions. Furthermore, conceptions (or tacit ways of knowing) are not easily rendered verbal (see e.g. Heshusius 1994). On the other hand, language in itself is vague and plastic. Strictly speaking, nothing that we know can be said precisely (Polanyi 1964a, 87-88). Revans (1982, 626) reminds us of this by claiming that "verbal exchanges are themselves extremely poor at communication". Sharing proceeds simply through telling and listening, and it creates the ties between the participants in a dialogue²⁹. Ties are necessary, since rational (in the Kantian meaning) actors must presuppose the 'perspective of the other' and the interaction of distinct minds (Roberts 1992, 31, 274275). Although the participants in a dialogue share conceptions, they are all bound to live in somewhat different worlds and have therefore different perspectives on them and on the situation altogether.

However, private conceptions are shareable, because every participant is like every other participant, but like no other participant (see Denzin 1989, 19). The fact that conceptions, experiences and states of mind may be private in the senses discussed earlier in pages 55-61 does not entail that others cannot know of them in principle, however difficult it may be on occasion to tell what state of mind someone is actually in (Hamlyn 1978, 219). It is obvious that we can know about other's conceptions, experiences and states of mind, but the other's contact with the subject's reality is always indirect. Even if it were possible for us to have an experience exactly similar to that had by another, and in identical circumstances, it does not follow that it would be right to say that we were having that experience or even experiencing it (Hamlyn 1978, 219; see also Reed 1992). To put the matter in the strongest way, I could not have another person's experiences, in the sense in question, unless I could become that other person. Nevertheless, this does not mean that it cannot be imagined what it is like to have another person's experience or even imagine having that other person's experience. We know thus about other person's states of mind and conceptions in principle by analogy with our own. (Hamlyn 1970, 219, 224-225, 232-233.) We know ourselves through understanding others, and we know others through understanding ourselves.

Sharing presupposes seeing things through the other's eyes, and therefore, the nature of sharing is first and foremost sensitivity and reciprocity (or mutuality). In sharing two or more descriptions of conceptions are related to each other. Each participant brings to the situation a 'unique constellation of previous conceptions and experiences' (cf. Usher 1989b). Multiple perspectives present in dialogue are thus extremely rich and varied. These descriptions of conceptions are controllable from the outside because they are indirect and transmitted (see Reed 1992). More precisely, what is shared are not conceptions in themselves, but first-person descriptions of them. As Schön puts it, "whatever language we may employ, however, our descriptions of knowing-in-action are always constructions" (1988, 25). The nature of sharing raises the question of how tacit forms of knowledge and experience, which are hardly inexpressible in a common language, can be handled together (see Sankey 1993). Yet sharing can not be done in its entirety, since the significance of the feeling or the thought to one participant is likely to be different from its

significance to that of the other participant (Hamlyn 1970, 220). Furthermore, to put oneself in another's position is to imagine *oneself* in that position, and this is something that cannot be done entirely (ibid.).

Testing: private conceptions against others' conceptions

After sharing the participants will have in their hands many different conceptions of or perspectives on the same phenomenon. Everyone's private conceptions are now challenged through testing. Testing proceeds through questioning, answering and criticizing. If it is difficult to share conceptions, it is equally difficult to move outside the limits of own private conceptions (see Tremmel 1993). In a way, the subject is a prisoner of his own conceptions. In this situation everyone's position is sovereign: private 'facts', which are to some extent actually acknowledged and articulated and to some extent latent, guide dialogue unconsciously (see Wilson 1986). In short, conflicting "goods" are present (Lyons 1990). Testing as a social situation provides a broader epistemological context to explore one's own conceptions. First-person descriptions by the other participants allow them to become more experienced, since new knowledge and new orders of knowledge may alter and shape the phenomenon discussed (see Bohm & Peat 1989, 245; Reed 1992). As Bohm & Peat (1989, 136) put it, "orders of experience may be 'hidden' in an earlier context, but they can be revealed in this new context". Testing - and dialogue as a new context - thus makes it possible to reveal hidden truths.

The features of free, creative discussion described by Bohm & Peat (1989) and Polanyi (1964a) could be appropriate – or even necessary – in the testing situation. Firstly, each participant is presupposed to be ready to acknowledge any fact and any conception or point of view as it actually is, whether he likes it or not (Bohm & Peat 1989, 241). Another basic feature of dialogue is that participants should to be able to hold several points of view, in a sort of active suspension, while treating the ideas of others with something of the care and attention that are given to his or her own (ibid., 246-247). Participants are not called on to accept or reject particular points of view; rather they should attempt to come an understanding of what they mean. In this way it may be possible to hold a number of different approaches together in the mind with almost equal energy and interest (Polanyi 1964a, 86). In this connection Schön (1988, 138-139) speaks of "testing what one has under-

stood of the other's knowing-in-action and framing of the interaction" and "testing what the other has made of one's own attempts at communication". Thirdly, participants can propose a new idea that can be put forward for exploration. As the implications of this idea are unfolded, they are composed or put together with other familiar ideas. Eventually the participant supposes that these ideas are correct, i.e. he makes an assumption or hypothesis and then acts according to the notion that this is the way they actually are. (Bohm & Peat 1989, 48.) This kind of behavior is necessary for the emergence of new knowledge, which goes beyond the individual already knows. It demands, however, tolerance, the capacity to listen to an unfair and hostile statement by an opponent in order to discover his sound points as well as the reason for his errors. Tolerance is also needed to able to respond to new perceptions going beyond the particular points of view that have been temporarily suspended. In short, each participant should be ready to listen to others with sufficient sympathy and interest to understand the meaning of their position properly and also be ready to change his own point of view, if there is a good reason to do so. (Bohm & Peat 1989, 241; Polanyi 1964a, 68.)

It may be easy to assess what one's opponent claims to be true, while the limitations of one's own conceptions and own natural bias is less frankly acknowledged. Testing as described above may break the individual participant's chain of thinking and helps him to see own conceptions in new and surprising ways (see Young 1988). Bohm & Peat (1989, 145-147) suggest further that 'the proper function of reason' requires social interaction that is free of every kind of excessive fixing of thought, in whatever form this may appear. Rational dialogue, they argue, is, however, ruled by formal logic, which is in fact only a limiting aspect of a much broader, overall movement of reason (ibid., 145). To loosen the rigidity of 'private facts' heuristic force of fiction could be utilized: fiction has the capacity to open and unfold new dimensions of reality by means of our suspension of belief in an earlier description (see also Bowen 1981, 216; Reed 1992; Ricoeur 1991, 170-171, 175; see also Atkinson & Murrell 1988; Laing 1971, 124-125). Fiction (or imagination) is the free play of possibilities in a state of noninvolvement with respect to the world of perception or of action (Ricoeur 1991, 174; see also Lyons 1990). The rigid, tacit infrastructure is loosened and the mind begins to move in a new order. Two possible routes to fiction or imagination are metaphors and the use of analogies (see Bohm & Peat 1989, 72-75). Metaphor, for example, is a form of creative perception,

which involves an extremely perceptive state of intense passion and high energy that dissolves the excessively rigidly held assumptions in the tacit infrastructure of commonly accepted knowledge (Bohm & Peat 1989, 38, 72). Knowles (1989, 84) also proposes to adults that they "examine their habits and biases and open their minds to new approaches", e.g. through sensitivity training, value clarification, mediation, and dogmatism scales. The quality of these methods is, however, very different than those of analogies or metaphors.

Thus, the basic nature of testing is *criticalness*. On the whole, from the individual participant's point of view testing may seem quite fuzzy, even chaotic, and therefore another basic capacity in addition to imagination is tolerance. The result of the 'fusion of horizons' (see Usher 1989a) is a collective construction. Many private conceptions are considered in entirely new ways; new sets of similarities and differences have arisen. A collective construction can be of a kind which never existed before or it can be a fusion of a few earlier conceptions. From this point of view, Mezirow's argument that "we can learn best as strangers and from strangers, if we can feel sufficiently secure to do so" (Mezirow 1991, 135), seems very reasonable. The presence of 'strangers' may guarantee that engagement in 'prejustices' and rigid assumptions is revealed and then dissolved so that every individual participant's horizons continually develop.

Justifying: fair truth-seeking

Knowing requires judgment, not mere construction or interpretation (see Young 1988). Therefore an attempt at *objectivity* follows, since dialogue seeks to *justify* a collective construction just produced. Dialogue seeks knowledge and therefore, *truth* (see Usher 1989a). After testing their private conceptions, the participants in a dialogue together define, whether the collective construction can be justified as truth. Accordingly, what is true and what are the objective (public) criteria of truth for the topic under discussion will be considered, since the collective construction is of necessity temporarily uncertain until it has been proven to be true (see Hamlyn 1970, 70, 284-287; Roberts 1992, 48; Wilson 1986). In order for a collective construction to be counted as true, it must conform to standards of objectivity beyond itself and beyond the person who makes the statement (Hamlyn 1970, 132). The participants in a dialogue thus operate with truths and untruths – or, more slightly –

with grounded and ungrounded propositions (see Lapintie 1985, 39-40). Hawkesworth's (1989) definition of rationality describes this justification process rather well: "Knowledge is a convention rooted in the practical judgments of a community of fallible inquirers who struggle to resolve theory-dependent problems." The objective justification for propositions and participants' ability to ground their beliefs should be separated (Lapintie 1985, 41). Justification is not a question of a contract or voting, but requires *legitimate* differences in 'knowledge' between one 'mind' and another (not merely such as my having read the newspaper and you not). Such differences must not be 'incommensurable': it must still be possible to come to some recognizably 'rational' agreement on the basis of two knowledges. Finally, the best argued and grounded alternative wins. (Roberts 1992, 31-32.)

Thus, interpersonal agreement provides the criterion for the truth of the collective construction. If agreement does not arise, it is the fact that requires explanation. It is now time to define the term 'truth' in relation to dialogue and learning³⁰. I would like to define truth in this connection as expressing something about the relationship between 'the situation' and 'the world'. Truth expresses some relation across this boundary, and the boundary is, in a certain sense at least, thrown up by reason, but it exists in time. Accordingly, 'truth' is not 'correspondence' or other, but is (for example) my view now of what I thought then. (Roberts 1992, 44-45.) What then can be stated about 'the world' depends on an agreed, intersubjective system of concepts. Intersubjectivity, in turn, implies the existence of a common (epistemological) framework, a common world. As Roberts (1992) has said: "All truths emerge in a historical practice of dialogue and debate" (p. viii). Although 'truth' is that which can be dialogically validated by those 'who share the same world at a given time in history', it depends upon something which lies outside the belief itself (see e.g. Russell 1991, 70-71).

In this connection it is necessary to return to the distinction between truth and meaning (see page 82; see also Latomaa 1985, 19). As noticed earlier, knowledge, in itself, has no meaning (Bohm & Peat 1989, 56). Accordingly, knowledge cannot be identical with belief (Hamlyn 1970, 79). Knowing is directed toward a progressively refined knowledge of the world and the discovery of truth. And thinking, in turn, is directed toward the discovery of meaning and produces an interpretation, which may or may not be worthy of belief. Because of their subjective quality, interpretations can never be proven absolutely. This also has consequences for participants in a discussion: some may attempt to arrive at truth on

the basis of reasoning alone; others may attempt to grasp meaning by reliance on 'empirical' data alone. However, neither of these strategies will be fruitful in terms of justification. Rather such attempts have a tendency to shift dialogue, magnify argumentativeness, and create confusion. Justification presupposes that each individual participant in a dialogue can differentiate knowledge from opinion as conditions of truth. *Fairness*, the effort to put your case objectively and prefer truth even at the expense of losing in force of argument, is needed (Polanyi 1964a, 68). Accordingly, intersubjectivity seems to be a precondition of forming a state of knowledge at all and a precondition for moving beyond it.

In sum, to make a justification is to assess of the truthfulness of the collective construction. How it is possible that a participant in a dialogue, with individual potentialities and capacities, can develop an understanding and knowledge which is objective and shared with others (Hamlyn 1963, 10-11)? Testing firstly considers critically his limited conceptions and provides new ones. Fair negotiation seeks agreement, although the amount of agreement is largely unforeseen. There is no systematic procedure which, properly applied, will lead each participant in the group to the same decision (see Kuhn 1970, 200). Agreement between participants is possible, but is agreement necessary? As Revans has argues (with Francis Bacon), "truth is the daughter not of authority, but of time" (1982, 657). Truth is not necessarily defined in a moment, but during a process, as revision, correction, and self-surpassing (see Lyotard 1991, 62). However, to free oneself from longheld conceptions and assumptions requires an objective and external perspective (Garrison 1992). Yet an "emotional charge" is inevitable. Only a dialogue that can, at the same time, meet the challenge both of uncovering the intellectual content of a rigidly held basic assumption and of "defusing" the emotional charge that goes with it will make possible the proper exploration of the new order of mental operations (Bohm & Peat 1989, 246). Collective justification is, however, quite irrelevant from the individual participant's viewpoint (see Lapintie 1985, 42). He is not a mere truth-seeking machine (see Polanyi 1964b, 15). Knowledge of the world cannot of itself provide meaning, but it can be used instrumentally when an individual subject evaluates his own conceptions with the alternative constructions developed in dialogue. Private meanings are decided individually within - or would it better to say after dialogue. On this basis, it should be clear that meaning is ultimately the responsibility of each individual but knowledge is created in collaboration with others (see Garrison 1992).

Believing: to engage in the "new truth"

The result of justification is a temporary truth (or a provisional consensus in Mezirow's words). Although testing and justification takes place within a social context, engaging or non-engaging in a temporary truth is a private matter. An 'objective', temporary truth will acquire an individual form. An adult 'decides' alone, whether or not to engage in this new truth. In this particular situation he may take one of three attitudes towards the new, temporary truth: accept and believe it, reject and disbelieve it or 'withhold' it. 'Withholding' means that he ignores the new interpretation and does not change anything. Some of these attitudes will be more reasonable than others (Crisholm 1966, 21). A participant in a dialogue weighs up the new truth both pragmatically in terms of its concrete advantages and disadvantages and in terms of its reasonableness (Soltis 1968, 21; Usher 1989b). But this new truth should be psychologically satisfying, too (Soltis 1968, 56). A psychologically satisfying truth must not only be adequate and reasonable, but must also be consistent - or at least compatible - with the rest of the truths which the subject holds (see Soltis 1968, 60-62). Consequently, the greatest enemy of any one of an adult's truths may be the rest of his truths (James 1991, 37). The adult's decision to engage is based, if not implicitly, on the belief that one way of knowing is preferable to another way of being. Otherwise the wish 'to play false' will always be able to find a way (Bohm & Peat 1989, 60). Playing false can take many subtle forms that are difficult to detect.

If a subject decides to believe and engage, what forms does engagement take? Moral? Emotional? Intellectual? (see Ilsley 1991.) There are at least two possibilities: engagement can take the form of either a personal, internal feeling of security or one's external action as if the believed thing were true. To know and believe that something is true is not only to have a true opinion with respect to it, but also to act with respect to it. From this point of view, action can be seen as an 'explication' of engagement. One's internal security manifests itself in one's action (see Lapintie 1985, 45-46). These five experientialists emphasize immediate action: the learner 'describes' the results of learning through doing. For example:

Mezirow: "All transformative learning involves taking action to implement insights derived from critical reflection" (1991c, 225; my italics).

"Perspective transformation is never complete until *action* based upon the transformative insights has been taken" (1991c, 56; my italics).

"Transformative learning is learning through action and the beginning of the action learning process is *deciding* to appropriate a different meaning perspective" (1991c, 54-56; my italics).

Knowles: "They (adults) learn new knowledge, understandings, skills, values and attitudes most effectively when they are presented in *the context* of application to real-life situations" (1989, 82-85; my italics).

"Adults tend to have a time perspective of immediacy of practical application toward most of their learning in contrast to postponed application. They engage in learning largely in response to pressures they feel from their current life situation. To adults education is a process of improving their ability to cope with life problems they face now." (1989, 82-85; my italics.)

Kolb: "An orientation toward active experimentation focuses on actively influencing people and changing situations. It emphasizes practical applications as opposed to reflective understanding; a pragmatic concern with what works as opposed to what is absolute truth; an emphasis on doing as opposed to observing. People with an active-experimentation orientation enjoy and are good at getting things done." (1984, 69.)

"... they must be able to use these theories to make decisions and solve problems (AE). Yet this ideal is difficult to achieve. How can one act and reflect at the same time?" (Kolb 1984, 30; my italics.)

Revans: "True learning, that which produces *changes in observable behaviour*, is the product of concentrating the attention upon troubles about which something needs to be done; it involves not only intelligence but also emotion, logical exposition but also *successful application*." (Revans 1982, 657; my italics.)

"... success in action alone will demonstrate whether the so-called knowledge ... is likely to be true" (Revans 1982, 783; my italics).

"...it is necessary to carry one's knowledge into action with things as they are, not as they ought to be, so that one can demonstrate

one's knowledge. An inability to act is a failure to be a manager at all. (Revans 1982, 655; my italics).

Schön: "We think up and *try out new actions* intended to explore the newly observed phenomena, *test* our *tentative understandings* of them, or affirm the moves we have invented to change things for the better" (1988, 28; my italics).

"Reflection-in-action necessarily involves experiment" (Schön 1988, 68; my italics).

I would rather argue that Revans' and Schön's immediate action happens not because of engagement in the temporary truth, but in order to test our own conceptions. In their citations immediate action is first and foremost experimenting, hypothesis testing and problem solving. The learner "must observe, in the real world, the effect of trying to apply what he thinks he is learning; he must receive inputs about his own outputs" (Revans 1982, 775). It seems typical for Revans and Schön, especially, that learning, in general, ought properly to be construed in terms of social situations and as experiments (cf. Dewey 1930, 87). However, Schön's definition of immediate action is essentially different that of Revans'. Revans' learners learn with and from each other how to deal with their urgent and responsible troubles. They are equals before their troubles. A Schönian learner, in turn, submits to authority. His partly 'wordless' dialogue is action as imitation, which refers here to a creative and constructive process³¹, not blind mimicry (McKinnon 1989). A learner "may be helped ... without recourse to verbal description. A coach can show her examples, nonexamples and variations of the quality in question ..." (Schön 1988, 160). Either this action does not happen in order to engage with the temporary truth, but it is a master-apprentice relation³². In imitation a learner must trust the master's example (Polanyi 1964b, 15). A learner follows his master because he trusts his manner of doing things even when he cannot analyze and account in detail for its effectiveness. By watching the master and emulating his efforts in the presence of his example, the learner unconsciously picks up the rules of the art, including those which are not explicitly known to the master himself. These hidden rules can be assimilated only by a person who surrenders himself to that extent uncritically to the imitation of another. (Polanyi 1964a, 53.) A learner thus represents a recognition of the authority of that which he is going to learn and of those from whom

he is going to learn it. As a learner matures he will rely for his beliefs less and less on authority and more and more on his own judgment. (Polanyi 1964a, 45.) Also Mezirow mentions modeling as "extremely useful in bringing about major transformative changes" (1991c, 218).

In addition to immediate action, these theorists talk about action of another kind of quality, delayed action. A learner may have acquired an ability to act, while he does not always exercise it (Saugstad 1992). Schön sees this delayed action as a more diffuse process of 'background learning' and argues that 'background learning' absorbed in a practicum may become evident only when the learner enters a new context, where he sees what he has learned, as he detects how different he is from those around him. Furthermore, 'background learning' often proceeds without conscious awareness, although a learner may become aware of it later on, as he moves into a different setting (Schön 1988, 38; my italics). In fact, this definition of background learning greatly resembles the process of individual development (see page 93). Mezirow (1991c, 203) writes about the same thing: "The learner should not be denied a full understanding of his situation, feelings and resources, even if it is impractical to act upon that understanding. It is always acceptable to postpone acting until the timing is more favorable or to limit one's actions to what is feasible under the circumstances. The educator's objective should be only that the learner learn freely and decide, on the basis of the best information available, whether or not to act and, if so, how and when." And Knowles (1989, 18-19), "people are able to apply their knowledge in changing conditions". Experiments or other immediate action are thus guides to 'proper' action later on. However, I would like to propose on the basis of these descriptions that these two qualities of action have different moods. Immediate action happens in order to test new constructions, but delayed action indicates that a learner has engaged with what he knows. Engagement can thus be seen in delayed application. It is an act of freedom.

In course of time the engagement becomes under consideration. Knowles, for example, writes about "evaluation of learning, reaction, behavior, results and *re-diagnosis* of learning needs" (1989, 45-49). Furthermore, he argues that "the reporting of plans for back-home application is the most telling form of evaluation" (Knowles 1989, 107). Revans (1982, 237; my italics), in turn, says that "within a reasonable lapse of time, they (the subjects) can obtain first-hand *knowledge of the results* of such trials". At review stage the subject decides whether his judgment may not be worth following up. It may well be worth of

further thought, i.e. he will re-examine its sequence with a view to discovering a more useful hypothesis or the incomplete hypothesis requires extension. Mezirow (1991c, 202) claims that "because this mode serves a crucial adaptive function by helping the learner resolve a dilemma by differentiating and integrating experience more inclusively, there is no real question about whether the learner should value a new perspective over an old one". Engagement thus becomes under consideration, and a learner will be convinced that certain things as yet beyond his knowing are on the whole true and valuable, so that it is worth spending again his most intensive efforts on mastering them. I would term this moment of re-evaluation as a post-reflective moment. Arise of this moment depends on where one is standing: an adult comes to recognize that his own version of the truth is conditioned by where he happen to be standing at the time (see Daloz 1987, 142). Engaging in personal knowing is under the adult's control, and therefore thus voluntary (see Garrison 1992). The obvious way, again, is to think of engagement – and personal knowing – in terms of temporal dimension. In this perspective, there are things that are always true, things that are sometimes true, and things that are true now³³. A temporal dimension is thus crucial for the whole process of learning. As Schön puts it: "The work takes a long time: time to live through the initial shocks of confusion and mystery, unlearn initial expectations, time to live through the learning cycles involved in any designlike task, to shift repeatedly back and forth between reflection on and in action" (1988, 311; my italics).

In sum, believing, and therefore engagement, seems to take time. However, the amounts of time needed for engagement vary considerably (see e.g. Brookfield 1988a). A step away from a commonly justified truth is a long one, and the individual subject can not cannot be forced (cf. Mair 1980). The individual subject decides alone whether he believes or not on the basis of personal relevance. Dialogue is partly a truth-seeking process and partly an individual meaning-taking process, although the latter happens within dialogue or after dialogue. More probably it happens after dialogue because of the time needed to appreciate the personal relevance of the new truth. The meaning-taking process is delayed by its nature. Furthermore, it is an expression of will. If the subject does not see the new truth as worth personal engagement, he has the "right to be sure" and keep his own truth. As a consequence, it is crucial that the dialogue remains 'within proper limits' and leaves a reasonable margin for personal judgment. The adult learner himself is the ultimate judge of what he accepts as true and valuable (Polanyi 1964b, 38).

On the whole, the basic nature of dialogue seems to be epistemological. One should first recognize the partiality and contingency of one's conceptions and secondly the possibility that these conceptions can become more comprehensive through dialogue with the help of opposing viewpoints thus leading to 'better' conceptions (cf. Usher 1989c). Both testing and justifying focus on questions of defining and refining these conceptions. What seems to be essential here is that each participant suspends his conceptions and points of view, while also holding other conceptions and points of view in a suspense and giving full attention to them. Such a thoroughgoing suspension of tacit individual conceptions (and therefore, cultural infrastructures, too) in the context of full attention to their contents frees the mind to move in quite new ways (see Bohm & Peat 1989, 243). Since a real dialogue implies a very deep change in how the mind works, it seems necessarily also to presuppose imagination, the free play of thought (ibid., 241). If these personal conceptions have something to do with knowledge (see page 87-88), then it is right to claim that knowledge is in a real sense a social, intersubjective matter (see Hamlyn 1970, 284-287; 1978, 24, 27). However, a spirit of goodwill or friendship is necessary for a real dialogue to take place (Bohm & Peat 1989, 241).

The existential dimension of adult experiential learning

At first I asked the question: what kind of context best promotes adult experiential learning according to the five theoreticians under consideration? The answers are given below:

A Knowlesian educative environment

A Mezirowian educational setting

- * a spirit of mutuality between teachers and learners as joint inquirers
- * a friendly, informal and supportive atmosphere
- exemplifies democratic values: adults feel accepted, respected and supported, valued as unique individuals
- * a supportive social climate
- * usually a relatively safe place to try out new roles and ideas
- * the norms protect learners from personal attack or humiliation
- competition among learners is generally discouraged

- * freedom of expression without fear of punishment or ridicule
- * safe, caring, trusting, understanding
- * encouragement of group loyalties
- * a norm of interactive participation
- * the most crucial determinant of climate is the reward system
- * participation in decision making
- * availability of information
- * mutuality of responsibility in defining goals, planning and conducting activities and evaluating
- * openness of communications
- * a general attitude of helpfulness and cooperation
- * a willingness to accept responsibility
- * continuous self-renewal
- * comfortable physical conditions
- * known by name

A Schönian reflective practicum

- * a virtual world = a constructed representation of the real world of practice
- * high interpersonal intensity
- a world with its own culture: own language, norms and rituals
- * the idea of "researchlike"
- * a learner is *free of the pressures*, distractions and risks of the real world
- * a learner lives in events
- * demands intensity and duration
- * confusion, mystery and inconguirity in the early stages of any reflective practicum
- the price of making mistakes is very low
- * the work of a reflective practicum takes a long time

Kolb describes as many as four pure types of supportive learning environments.

An affectively complex learning environment

- experiencing of concrete events (e.g. what it is actually like to be a professional)
- learners simulate or mirror or reflect upon an experience to generate these insights and feelings about themselves
- current/immediate information: often comes from expressions of feelings, values, opinions by the learner in discussions with peers or the teacher
- expressions of feelings are encouraged and seen as productive

Perceptually complex learning environment

- the primary goal is to understand something
- * learners view the topic or subject matter from different perspectives (their own experience, expert opinion, literature) and in different ways (listen, observe, write, discuss, act out, think, smell)
- * the emphasis is more on the process than the solution
- * learners define criteria of success for themselves
- individual differences are used as a basis for further understanding

- inputs to the learning process
- * learner's activities often vary from any prior schedule as a result of the learner's needs
- * personalized feedback with regard to each individual's needs and goals, as opposed to comparative (from both peers and the teacher)
- * discussion and critique of how the course is proceeding
- * the specific events within a single class session are often more emergent than prescribed

- learners are free to explore other's ideas, opinions and reactions in order to determine their own perspective
- * time is spent on looking back at previous steps, events or decisions in order to guide the learner in future activities
- * stresses observation and appreciation

A symbolically complex learning environment

- * the learner tries to solve a problem for which there is usually a right answer or a best solution
- the problem is abstract: removed from the present and presented via reading, data, pictures, lecture inputs and so on
- * the learner is both guided and constrained by externally imposed rules of inference
- * success is measured against rigid criteria (e.g. the right or best solution, expert opinion) imposed by the teacher
- * emphasizes abstract conceptualization

A behaviorally complex learning environment

- actively applying knowledge or skills to a practical problem
- * the problem need not have a right or best answer, but it does have to be something the learner can relate to, value and feel some intrinsic satisfaction from having solved
- * a "real-life" problem, case or simulation
- * the focus is on doing
- * completing the task is essential
- * concerned with what effect his present behavior will have vis-àvis the overall task to be done
- the learner is always left to make decisions/choices about what to do next or how to proceed
- * success is measured against criteria associated with the task (e.g. how well something worked)
- * stresses action taking in situations with real consequences

Action Learning happens in two related settings:

a set:

* a small group of managers (5-6)

- * *support* minimizes the possibility of serious failure
- * tests plans for 'trials' so thorough that even minor failure is unlikely
- * all that goes on in the set must have its counterpart in the field of action

a project:

- * the field of action, wherein the real problem exists to be treated by other real persons in the same real time
- * a totality of real-life conditions surrounding the problem
- * field observations and trials
- * verifies the self-understanding and evaluates the use made of the

Although the above descriptions concern the learning 'environment', they basically include things that are more mental than environmental in character. Accordingly, a mental environment that suits the purposes of adult experiential learning seems to be safe, supportive and open. These terms are again of a kind that rather create problems than clarify the nature of a learning environment. However, one approach to clarifying these qualities further is through Roger's (1983) and Daloz's (1987) theoretization. A safe mental environment arises from acceptance, prizing and trust, which altogether mean that a learner is not condemned or judged by others. Furthermore, genuineness or realness - i.e. 'being themselves' - is an another characteristic of a safe environment. And finally, empathy guarantees that learners feel understood (Daloz 1987. 183; Rogers 1983, 121-129; see also Claxton 1987.) Furthermore, empathy helps the learner to understand others' feelings and see things from their perspectives, and respect differences in how people feel and think about things. Kolb (1984, 202) argues that "perhaps the most important implication of the interaction between learning styles and learning environments is that empathy and communication are central to the teaching process. To educate means literally 'to draw out". The other basic feature of mental environment is support, which could be defined simply by reference to three words: listening, challenging and providing structure (see Daloz 1987, 217). The third basic feature of a safe environment is openness of communication, which could be defined along with Knowles as "freedom of expression without fear of punishment or ridicule" (Knowles 1980, 47). What is implied by these

three features, I would suggest, is that they are rather non-educational, human responsibilities. These are features present in *all* human situations, whether they educational or not. At this level, participants are equals – or, in educational terms – equal self-educators, which is emphasized especially by Revans: "those best able to help in developing the self are those comrades in adversity who also struggle to understand themselves" (Revans 1982, 632). All learners have similar responsibilities and the procedures are quite commonplace and familiar: the same procedures with which sensitive friends treat us when we turn to them for help. As a consequence, self-education is present in all human situations, including occasions where the self-educator is facilitating the learning efforts of other self-educators (cf. Callender 1992).

But how does a safe, supportive and open environment arise? I would answer that it presupposes learners who carry those characteristics. How, then, does a learner become safe, supportive and open? Schön seems to believe at least partly that they are inborn social abilities, the learner's "generic competences for communication, experimentation and imitation" and Aa capacity for cognitive risk-taking" (Schön 1988, 118, 139). Some (or even most) educational theorists, in turn, believe that these abilities can be improved by education and training. I would rather agree with Schön that these general, human abilities are partly inborn. This does not necessarily mean that a human being can not improve these abilities, but perhaps this improvement happens unconsciously, as development does as a whole (see page 97). I would give one more reason for this argument. The reason is again Kantian. Broadly speaking, all these human abilities could be included in Kant's categorical imperative and Kant's ethics. At the heart of Kant's thinking is the understanding that the categorical imperative is universal, because it applies at every moment in an individual's life. To be a rational person, in Kant's view, is not to be subject to ever changing directions of choice and resolve, but to make the choice that brings all one's choices under a comprehensive policy of choice, or what Kant calls a "maxim" (see page 96). If a person is to be moral, this maxim must involve unconditional obedience to the dictates of the categorical imperative. "A morally good person, therefore, is one who agrees to live up to this standard, who never allows merely private willing to govern conduct, and who always submits each specific choice to the test of universal acceptability as law." (Green 1992, 152.) On this basis, it seems to me certain that there are a priori elements in our moral behavior. It also seems certain that it is behavior that necessarily takes into account other persons and their situations. But a human being still has the freedom to act or not.

Accordingly, the bedrock of the learner's social abilities is self-discipline; a virtuous life is based on self-control (see also Goleman 1996, 285). To be moral (or rational in the Kantian sense) means being able to put aside one's self-centered focus and impulses. This has, in turn, social benefits, since it opens the way to being a safe, supportive and open partner in a dialogue. In addition to the epistemological dimension of a dialogue, feelings and emotions are present, too. But they are present in two senses. Firstly, emotions and feelings are present in tacit form and exert an indirect influence, however, on dialogue. On the other hand, the learner may also focus on cognitions about feelings, on appreciating others' feelings and his own feelings (see Goleman 1996, 40). Emotions are, however, rarely put into words; far more often they are expressed through other cues (Goleman 1996, 96). Thus, improving one's social abilities means, in short, learning to manage emotions or read emotions. This includes, for example, being better able to take another person's perspective, improved empathy and sensitivity to others' feelings, being better at listening to others, having an increased ability to analyze and understand relationships (see Goleman 1996, 284-285.) All this refers to what Revans describes as 'developing the self'. So, we come back to the definition of development. Is it possible to consciously develop abilities of this kind? Or it is just that it 'happens' to the individual subject?

Another (although based on a different epistemology than Kant's) explanation for being safe, supportive and open could be based on the idea of participatory consciousness³⁴. It is a mode of consciousness which could be defined a way of knowing ("allocentric") that is concerned with both "the totality of the act of interest" and with the "participation of the total person" (of the knower) (Schachtel 1959, 225; Heshusius 1994). It requires an attitude of profound openness and receptivity. Participatory consciousness is not "about" something or someone; it refers to 'being with' something or someone. Thus mutuality and ethicality are at once embedded in a participatory mode of consciousness. Ethics and epistemology are acknowledged as indivisible. "Participation of the total person requires an attitude of profound openness and receptivity; one is turned toward another (human or nonhuman) 'without being in need of it' or wanting to appropriate it to achieve something." (Heshusius 1994.) The participatory consciousness is interesting in this connection because it includes an attitude of receptivity, which was already

discussed on page 66. Could receptivity and Kantian rationality together constitute the human being's basic abilities to meet others, to cope in the social world? Could these two basic abilities be those that define the whole nature of dialogue?

The answer could be positive. The participants in a dialogue namely 'bring' their abilities into the dialogue. In the dialogue the social abilities of learners have a compelling nature: they are real, constraining and enabling forces (cf. Silverman 1986, 77-78). Together they constitute a tacit infrastructure of existential dimension that pervades the whole work and thought of those involved. In fact, the participants in the dialogue will be in different "phases" in relation to these social abilities. The quality of social abilities can thus also inhibit the fulfillment of dialogue. But it can be claimed that if an individual participant is both rational in the Kantian manner and receptive at least to a certain degree, it is also possible for him to be sensitive, tolerant and fair - all qualities needed in the epistemological dimension of dialogue. Taken together, if these social abilities are in good fit, the participants in a dialogue are able to detect and have insights about others' conceptions and other concerns. In this way negotiation on disagreements and solutions in order to justify the collective construction as truth also succeeds. These considerations lead me to suggest at the moment that at the heart of existential dimension is the human being's moral consciousness, the famed "categorical imperative", whose main formulation is, "I should never act in such a way that I could not also will that my maxim should be a universal law." (Kant 1959, 18). In the existential dimension the major focus is on social relationships and self-awareness. This kind of mental 'environment' constitutes, in Knowles' (1990, 123) words, An Atmosphere of Adultness, but is could also be named An Atmosphere of Humanity. This leads us back to consider, what is development? Furthermore, what is precisely the difference between humanity and adulthood?

In total, the existential dimension is concerned with the learner's basic being-in-the-world, a world of 'natural attitude' including emotions and feelings. I would like to argue that the basic nature of dialogue is defined primarily through the existential dimension, which, in turn, depends upon the quality of the first-order experiences or life-experiences of the participants. Learners do not operate in an epistemological vacuum within a dialogue, but the epistemological dimension is organized around this existential dimension. Because of the nature of being-in-the-world and, therefore, the existential dimension, there is no possibility for any kind

of adequate procedure within this domain (see also Reinharz 1989). Being-in-the-world is always prejudiced and personal, and the basic character of a dialogue is determined by taking all the participating learners' personal life-worlds together. As a consequence, dialogical situations are always fresh and unique (see also Grow 1991; Swain 1991). From this point of view, the importance of the mental environment over any andragogical 'techniques' will be understood. A favorable mental environment can not be 'created', it just arises or not with the participants equipped as they are with varied 'natural attitudes' and social abilities. In addition, the existential dimension is running up against the limits of language (cf. Roberts 1992, 154), and things within it are mostly transmitted indirectly. To conclude, the roots of both individual learning and participating in dialogue build on this existential dimension. The same principles that can be usefully advanced to explain first-order experiences seem to work equally well in explaining basic behavior in the dialogic context.

Necessary responsibilities for an adult educator

What kind of implications do the individual dimensions and the social dimensions together (combined) have for the responsibilities of an adult educator? I would argue that they have at least three epistemological implications for the educator's work. This is not, however, a list of standards or minimum competencies (see e.g. Connelly & Light 1991; O'Gorman 1989), but, more precisely, a summary of necessary areas in which an adult educator is responsible in relation to adult learners.

Firstly, the educator should have ability to identify and define learners' different epistemological perspectives³⁵ (see Lyons 1990). These epistemological perspectives interpenetrate the existential dimension and therefore, the totality of first-order experiences. Learners are knowers, who have their own specific, personal contents of knowing (see Lyons 1990; McEwan 1989). They hold various epistemological perspectives due to their unique sets of first-order experiences. At first, an adult educator should get an idea of these specific, personal contents of knowing that each learner already possesses, i.e. traditionally speaking, the content of the learner's knowledge. On the whole, sensitivity of the adult educator is required to learners' realities and life-worlds in order to recognize the *quality* of this knowing, including 'the places of inadequacies' (cf. van Manen 1990, 2). Furthermore, an adult educator

should be skilled in separating simple misunderstanding from pathological distortions (see e.g. Ricouer 1991, 304). "Here it is necessary to make a careful distinction between adults who are having commonly encountered difficulties in dealing with familiar life transitions and those who have extreme neurotic, psychotic or sociopathic disorders and require psychotherapy", says Mezirow (1991c, 205; see also Wilson 1986). Such disorders call for more explicitly therapeutic rather than educational interventions (Hart 1990). Consequently, to recognize the boundaries of individual learner's knowing is one of the most important elements in an educator's work. In fact, the inadequacies of knowing are the basis of the educator's work.

Secondly, to generate and select educative second-order experiences with particular learners at a particular time is another of the adult educator's responsibilities³⁶. For this generation of second-order experiences an educator takes cues from the learners themselves, from their epistemological perspectives. What matters in this process of generation is continuity between first-order experiences and second-order experiences in terms of Kantian categories. Seeing continuity from another's viewpoint is not an easy task, since it is hard to derive everything that is significant from the background of the learner's descriptions, whether they are communicated by words or by action. It is even harder to find out just how to lead learners towards more extended or deeper knowledge. The educator should, however, be aware of the potentialities for leading learners into new fields which belong to experiences already had, and he should use this knowledge as his criterion for the selection and arrangement of the second-order experiences that will possibly get learners to start learning (see also Dewey 1951, 86). It is thus the responsibility of the educator to choose hunches that are likely to solve the situation positively from the learner's viewpoint. Because of variations in first-order experiences, what are 'good conditions' for one learner in one stage of development may not be 'good conditions' for another learner or even for the same learner at a different stage of development (see Grow 1991). Therefore, the educator has a responsibility to present a range of different perspectives on the topic at hand (see Daloz 1987, 123). As Schön puts it, the coach's "virtuosity lies in his ability to string out design webs of great complexity" (1988, 62). This guarantees at least more possibilities for learners to find continuity. In sum, the educator assesses the learners' epistemological 'level' as knowers and introduces specific procedures for knowing, ones he believes will promote or challenge his learners' epistemological progress. In short, he assesses

his learners' stances towards knowing. In addition, this responsibility involves both the *presentation* of knowledge – of the topic at hand – and a particular kind of knowledge *construction*.

The third responsibility of the educator is to guide the learning dialogue, especially in the context of testing and justification³⁷. It is the business of the educator to see in what direction the discussion is heading within the epistemological dimension (see also Dewey 1951, 32). This could primarily be done by asking questions. The art of questioning is that of being able to go on asking questions (van Manen 1990, 98-99). The right kind of questioning could be more and more discriminating questioning, which Lawrence (1989) suggests is the key feature of Action Learning. This kind of questioning could enhance learners' opportunities to see the topic from different perspectives and thus speed up the process of learning. In fact, these arrangements create within dialogue a structure inside which learners can explore their own perspectives and those of a few interested others. The educator has a responsibility to guide the sensitivity of learners to the ways in which the dialogue proceeds. Under the topic being discussed, the educator monitors how discrimination between similarities and differences develops, and does not oversimplify the situation by ignoring them or minimizing their potential importance. The more different things are, the greater may be the importance in seeing how they are similar, and likewise, the more similar things are, the greater may be the value in perceiving their difference (Bohm & Peat 1989, 49). In short, the educator has a responsibility 'to keep alive' the spirit of suspended judgment, along with a primary interest in the creation of a common construction (see Bohm & Peat 1989, 247). To be a teacher of this sort, therefore, one must be 'at home' in those areas that learners may find anxiety-provoking.

Taken together, these three responsibilities place special demands on the educator's own depth of understanding of the structures of the topic, as well as on the educator's attitudes toward and enthusiasm for it (see Hamlyn 1967; Shulman 1987). Learning actually arises out of the organization that lies in knowledge (Bohm & Peat 1989, 190). Accordingly, the educator has his main responsibility in relation to knowledge of the topic, since he serves as the primary source of the learner's understanding of it (Lyons 1990; Shulman 1987). The educator's stance towards knowledge of the topic will determine the interactions in the learning situation. The concept of teaching is, however, triadic in nature: a teacher, someone-to-be-taught and something-to-be-taught

(McEwan 1989). What the educator knows about the topic³⁸ is fundamental to the success of the learners' acquisition of knowledge of the topic. Educator's task is, however, wholly interpretative, since he is the one who adapts the contents of the topic in the light of his understanding of the background knowledge of the learners (see McEwan 1989). As a consequence, the adult educator needs a broad overview and deep conceptual involvement in the subject if he is to open up larger frameworks for the learners. From this point of view, it is necessary that educator's limitations are wider than those of the learners, and that he knows those limitations in himself (see Claxton 1987; Lehtinen 1990, 39). In sum, individual learning under social interaction is guided by the educator's knowledge of the content (Shulman 1987). However, the educator as a knower has exactly the same properties as the learners: the educator has his own inadequacies and limitations within the epistemological dimension. Therefore, the educator can also limit the learner's possibilities (see Wacks 1987). For example, educator's knowledge may be implicit only and unexpressed even to himself (see e.g. Schön 1988, 29-31, 82-84).

As a result, the acceptance of authority-orientation³⁹ is necessary from the epistemological point of view⁴⁰. An adult educator and an adult learner are not equals in terms of the topic at hand, but the educator knows something which the adult learner does not know yet (see Daloz 1987, 185; King 1980; Krohn 1981, 120-121; Shulman 1987). Therefore the adult learner may become temporarily dependent on the educator in the face of new topics or knowledge (Grow 1991). However, the educator's authority seems to be justified from the epistemological point of view, but it should not lead to its unqualified acceptance. Authority does not mean indoctrinating the learners with supposed 'right answers', or leaving them in a methodological vacuum in which one answer is as good as another (see Wilson 1986). It does not mean right answers in order to educate, but to believe that right answers are possible (Wilson 1986). The term 'coaching', which Schön uses, is an authority-oriented term (Grow 1991). Schön has described this authority-orientation as follows: a learner adopts a particular kind of stance, "taking responsibility for self-education and at the same time remaining dependent on the teacher, open to the coach's help" (1988, 120). A Schönian learner is thus neither independent or dependent, but interdependent with the educator. In order to understand the quality of authority in experiential learning, the nature of this interdependence must first be clarified and it must be accepted that the balance of interdependence will dynamically shift from one circumstance to another. The adult learner also has a possibility to critically question authority (see Yonge 1985). As Schön puts it, "negotiation of the ladder of reflection offers possible responses to a student's doubts about the value of her instructor's message. A successful dialogue of student and coach need not end in the student's compliance with the coach's intentions." (Schön 1988, 116). Knowles too describes some kind of release from the authority-orientation: "Pedagogical strategies are appropriate, but only up to the point at which the learner has acquired sufficient knowledge of the content to be able to start engaging in self-directed inquiry about it" (Knowles 1989, 112-113).

From the epistemological point of view, the adult learner is "condemned to listen", as Revans (1982, 319) puts it. Because we can come to know about conceptual truths on authority rather than by understanding (Hamlyn 1978, 284-287), "it would be a waste of resources to expect the students to discover them (some existing programme) unaided" (Revans 1982, 657). Furthermore, at times there is need of technical instruction or programmed knowledge, the role of which is to develop the skills for solving puzzles in the appropriate profession, trade or technology (1985, 18). "But where ideas cannot be represented by some existing programme, nobody can find an existing reference to precisely what should be done; those caught up in the event have to decide for themselves what to do. They must learn autonomously." (Revans 1982, 657.) These citations refer to the concept of 'objective' knowledge, which was discussed in chapter 3 as a separate entity. But, in fact, by interpreting content of the topic for audiences, i.e. learners, the adult educator is the link between that 'objective' knowledge and learner's personal knowing (see also McEwan 1987).

In addition to these epistemological ties, an adult educator is tied to adult learners existentially. What are then the responsibilities of the educator? Within the *existential* dimension the educator's responsibilities are those described on pages 119-120: the same as those which sensitive and supportive friends show us when we turn to them for help. The existential dimension thus *does* demand a relationship of equals (see e.g. Nolan 1989). What does "help a friend" mean in this context? It is the same as being safe, supportive and open. All five theorists refer to this kind of 'helping' to a greater or lesser extent. Mezirow highlights that "the relationship between educator and adult learner in this kind of learning (transformative) is like that of *a mentor* trying to help *a friend* decide how to deal with a significant life problem that the friend

may not yet have clearly identified as the source of his dilemma" (1991, 223; my italics). Kolb, in turn, says that the teacher "relates to learners on a personal basis" and "is more often a colleague than an authority" (Kolb 1984, 198). Knowles lists many things: "to accept learners as persons of worth and respect their feelings and ideas", "to build relationships of mutual trust and helpfulness among learners by encouraging cooperative activities and refraining from inducing competitiveness and judgmentalness" and "to expose his own feelings and contribute resources as a colearner in the spirit of mutual inquiry, shared responsibility". Furthermore, he claims that a teacher should "be open and skillful in establishing a supportative climate (hard-to-accept information)". (Knowles 1980, 49; my italics.) As argued on page 120, within the existential dimension human beings are self-educators, and things cannot be forced. I would like to argue that within this dimension all this adds up to one important thing for the responsibilities of the educator: manipulation is totally out of question. Consequently, all an educator can do is to be himself. What kind of mental environment arises, is, of course, dependent on the educator. But this depends on the educator's own level of development on the way to 'full adulthood'. He cannot be any safer, more supportive or more open than the sum of his social abilities. One piece of advice could be given with Daloz: "Throughout the whole process it is valuable to keep one eye on the relationship itself" (Daloz 1987, 127).

Hitherto, the discussion has mostly been about ideal situations. However, complete contact with other's view point is not easy to gain, and, for example, unrestricted and unconstrained dialogue seldom happens and is difficult to achieve (see Ricoeur 1991, 306-307). But in fact, dialogue - and social interaction itself - is a field of possible conflicts due to the conflictual nature of social practice (Bohm & Peat 1989, 70; Lave & Wenger 1994, 49; see also McPeck 1992). Many sources of breakdown are present and, for example, dialogue can be blocked or broken for many reasons. Also, Mezirow's discussion of the ideal situation has been criticized for failing to incorporate the possibility of multiple valid viewpoints (Clark & Wilson 1991). Thus social interaction does not always proceed conveniently and smoothly. Schön (1988, 137), especially, analyses miscommunication, which is highly probable according to him. "Communicative dead ends" are always possible, he says. Below is a list of some of the problems which the theorists under study mention concerning social interaction.

A list of the problems:

- * impediments of ambiguity, vagueness and inexpressibility (Schön)
- * systematic miscommunication (Schön)
- * instructions are always and inevitably incomplete; this instructional gap may be of several kinds: not specific enough, ambiguous, strange (Schön)
- * a designer's inability to say what he knows (Schön)
- * inherent inexpressibility of some aspect of design knowledge (Schön)
- * descriptions of designing are likely to be perceived initially as confusing, vague, ambiguous or incomplete (Schön)
- * a possibility for a 'learning bind': a learner's initially resistant and defensive stance and coach's complementary stance (it is impossible for either to break through their mutual misunderstanding) (Schön)
- * the learner becomes *a counterlearner* i.e. refuses to suspend disbelief or to enter into her educators' views of designing except to "give what they want" (Schön)
- * unilateral control: withholding of negative feelings and surface rationality, individuals make negative attributions to others which they test only in the privacy of their own minds never publicly with the other person (Schön)
- * defensiveness and unilateral self-protection (Schön)
- * closed-system vocabulary: repeats the words learned, connecting them to one another but to no experience or action, states the educator's principles while performing in a manner incongruent with them and remaining unware of that fact (Schön)
- * some learners may refuse to be led before even having mastered the elements of their subject (Schön)
- * when each party is caught up in an effort to achieve his own objectives and win at the other's expense, he is unlikely to reflect on his underlying value assumptions, invite the other's challenges, test what the other makes of his utterances or surface the dilemmas he experiences (Schön)
- * a learner must construct the meanings of teacher's actions even though his meanings are likely to conflict with her own (Mezirow)
- * a learner, seeking to interpret an instructor's criticism of her work, cannot grasp the view of designing that underlies the criticism (Schön)
- * understandings of student and instructor are always initially more or less incongruent (Schön)
- * 'overlearning': a learner may take the view advocated by a coach as the one right way and follows expert procedures mechanically in each situation (Schön)

- * a learner can express only *interests or needs* defined within his current meaning perspective, which the learner may, upon critical examination, find distorting or dysfunctional (Mezirow)
- * neither learner nor educator is able to anticipate or evoke upon demand (Mezirow)
- * the learner may have difficulty in accepting and acting upon this new degree of clarity because it conflicts with an established meaning perspective or because of self-deception, lack of knowledge of how to act upon the new perspective or situational factors that preclude action (Mezirow)
- * at the beginning, the point at which a commitment to reflective action logically should follow insight, but is so threatening or demanding that the learner is immobilized (Schön)
- * for the student, having a plinge into doing provokes feelings of loss (Schön)
- * it is easy to become defensive (Schön)
- * a learning bind: the teacher cannot tell the student what she needs to know, even if he has words for it, because the student would not understand him (Schön)
- * learners differ in readiness to make use of a teacher's descriptions (Schön)
- * difficult negotiation, compromise, stalling, backsliding, self-deception, failure (Mezirow)
- * tunnel vision, troublesome issues, difficulty in learning, lack motivation (Mezirow)

On the whole, these problems concern both the epistemological and existential dimensions. Quite a lot of them could be explained through the qualities of these dimension. But to present it in a pointed way, perhaps the basic problem concerns both the relatively fixed forms of the adult's epistemological perspective and the quality of first-order experiences. Bohm & Peat (1989, 50) put it briefly and clearly: "This ideal (an unconstrained dialogue) is not generally carried out because of the common tendency toward unconscious defense of ideas which are of fundamental significance and which are assumed to be necessary to the mind's habitual state of comfortable equilibrium. As a result, there is instead a strong disposition to impose familiar ideas, even when there is evidence that they may be false." Here it should be noted that this blockage is never total, for everyone has some areas that are still open to free and honest inquiry. The essential point, however, is that any kind of free movement of the mind creates the opportunity for revealing and loosening the rigid conceptions that block creativity. (Bohm & Peat 1989, 267.) The whole problem of ending the mind's defense of its tacitly held ideas and assumptions against evidence of their inadequacy cannot be solved in a vacuum of epistemological dimension. For within this epistemological dimension, every step that is taken will, from the very outset, be deeply conditioned by the automatic defense of the learner's whole being (cf. Bohm & Peat 1989, 25). In addition to the best circumstances of the student's maximum readiness to understand and coach's maximum clarity (Schön 1988, 162), also student's maximum clarity and coach's maximum readiness is necessary in order to get near the ideal.

One theme has not yet been discussed: the adult educator's ethics. Ethical questions and the principles behind educating adults have been ignored almost completely – with the exception of Mezirow – by these experientialists, although the adult educator's relationship to his adult learners necessarily raises complex ethical questions (see e.g. Callender 1992; Claxton 1987; LaBoskey 1989; Merriam 1987; Wilson 1994). For example, has the adult educator the right to "tamper" with the world view of the learner (see Merriam 1987)? Mezirow asks six questions concerning the ethics of educator's work. Is it unethical for the educator: "to intentionally precipitate transformative learning without making sure that the learner fully understands that such transformation may result? facilitate a perspective transformation when its consequences may include dangerous or hopeless actions? decide which among a learner's beliefs should become questioned or problematized? present his or her own perspective, which may be unduly influential with the learner? refuse to help a learner plan to take action because the educator's personal convictions are in conflict with those of the learner? make educational interventions when psychic distortions appear to impede a learner's progress if the educator is not trained as a psychotherapist?" Mezirow answers simply: "I believe that all these things, if done properly, are ethical" and explains his reasons for this belief (1991c, 201-202; my italics.) Initiating and facilitating transformation by an educator is ethical, even through neither the educator nor the learner can predict the outcomes of the process and even though actions resulting from the process may be dangerous or may be impossible to take at a given time. While explaining the reasons for this he says that "the learner learn freely and decide, on the basis of the best information available, whether or not to act, if, how and when" (1991c, 203). Furthermore he says that "education for transformative learning is ethical as long as the educator does not attempt to force or manipulate learners into accepting his/her own perspective but instead encourages learners to choose freely from among the widest range of relevant viewpoints" (1991c, 225). It is unacceptable to "sell" one's point of view or to manipulate learners into agreeing with it or acting upon it (Mezirow 1991c, 203-204.). This explanation refers clearly to the learner's freedom to take meaning and therefore, engagement. Mezirow also discusses conflict between educator and learners. Mezirow admits that "the educator is not ethically bound to confine the learner to the learner's initial limitations or constraints in perspective" and that "if the learners decide upon the course of action as a result of reflective discourse that the educator cannot ethically accept, the educator is quite correct to withdraw from further educational interventions" (1991c, 202, 204). An adult educator cannot be expected to hide their own ways of seeing and interpreting. From my point of view, this suggests that within the existential dimension adult educator is also respected.

On the basis of Mezirow's reasoning as given above it can be claimed that the problem of the adult educator's ethics is not solvable and must simply be managed rather than resolved (see Lyons 1990; see also Connelly & Light 1991). This is because of the nature of the existential dimension and learner's and educator's first-order experiences. They demand only respect. At the moment I would like to propose an enlarged definition of ethics in this context. I propose that it is seen as one of the four dimensions, but that it has a different position from the other three. It takes into account both the existential and epistemological dimensions, and thus the quality of the educator's ethical behavior is grounded in the quality of the individual's epistemological and existential 'level' taken together. All these three qualities or dimensions, in turn, change over time (temporal dimension). As a consequence, the educator's ethical behavior depends upon how 'developed' he is in both the existential and epistemological dimension. This combination is what matters, and in this way an adult educator 'creates the mood of learning'.

In sum, the relationship between the adult educator and adult learner as human beings and knowers means a process of interaction between existential and epistemological perspectives⁴¹. The epistemological relationship to others is fundamental to knowing (see Chené 1983), and therefore the educational relationship has a clear epistemological basis. The educator is first and foremost a reason-giver in non-manipulative way. However, it is the existential dimension that gives the interaction its basic character, and it is prior to the epistemological dimension.

Educating adults is a question of integrating this basic level of existence with the content of knowledge. Epistemological priorities are thus in a way more important than existential ones. Epistemologically, the interaction is necessarily asymmetrical, yet existentially, it is necessarily symmetrical. As a consequence, there is no one way to learn or educate someone in a certain topic. Although the emphasis is on epistemological priorities it does not mean a return to tradition. Furthermore, 'a good adult educator' is impossible to define exactly. It should be rather claimed with Knowles (1989) that "there is no such thing as 'an educator of adults' in pure form" (p. 137). Instead, "there are many kinds and degrees of adult educators" (ibid., 137; my italics). Nevertheless, for adult learners the relationship to the educator – whether he is called a teacher or a facilitator or a coach or whatever - remains essential in establishing the quality of their learning (see also Chené 1983). If the teacher has ever been in real danger of elimination (see Brookfield 1988a), he is no longer.

6 CONCLUSION

My overall assessment of the preceding analysis is that the comparison of these five theorists has been beneficial. I have been concerned with developing a formal theory through concept analysis with the help of ideas borrowed from Kant (see Strauss & Corbin 1991, 115). At the beginning I mainly utilized the categories "suggested" by this set of landmark theories. These five landmark theories, although viewing adult experiential learning from somewhat different perspectives and with somewhat different foci and languages of their own, have, however, many common themes and terms. These theories gave me my initial orientation in developing the relevant categories and their properties (Glaser & Strauss 1974, 79, 141). As I pointed out in chapter 1, I have not been seeking Yes or No answers, but the purpose of theory generation, as I understand it, is to suggest a new – and I hope more precise – perspective on adult experiential learning (see Hutchinson 1986).

Towards a formal theory of adult experiential learning?

It is my intention, in this concluding chapter, to give a general profile of adult experiential learning by re-constructing its main categories. The simple figure below (see following page) sets out the main categories with their fundamental properties and suggests how these categories combine to form an integrated explanation.

The most fundamental category is *personal experiential knowing*. Throughout this study the concepts 'experience' and 'knowledge' have been intertwined and have overlapped to a greater or lesser extent. As noted earlier, for the most part first-order experiences share the same characteristics as personal knowledge. These two categories, which were proposed at the beginning, overlap to a greater extent than merits their

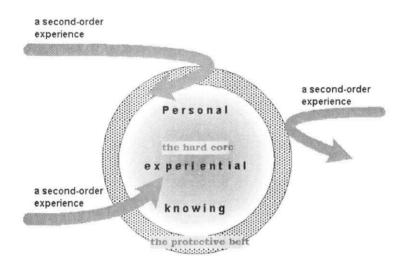


Figure 1. Personal experiential knowing 'meets' second-order experiences

being treated as two separate issues. It seems reasonable, therefore, to put them together in a single category having the basic qualities of *tacit*, *holistic*, '*true*' and *inadequate*. Personal experiential knowing is knowing from the first-person perspective. Furthermore, I suggest that personal, experiential knowing has a rigid part and a flexible part. In order to explain how these rigid and flexible parts work I use some of Lakatos's (1979) concepts. The rigid part is a 'hard core', which contains the learner's most fundamental conceptions. Around this 'hard core' is a *protective belt*, which contains more flexible conceptions, 'auxiliary hypotheses'.

Now, as defined earlier, adult experiential learning is a *re-construction* process, which remedies the inadequacies in personal experiential knowing. The 'negative heuristic' of personal experiential knowing inhibits a learner from directing his modus tollens at the 'hard core'. Instead, he tries to articulate or even invent 'auxiliary hypotheses', which are located within the 'protective belt'. From the learner's point of view, the re-construction of the 'protective belt' is safe territory, and can be built up in an eclectic fashion. The 'positive heuristic' of personal experiential knowing, in turn, saves the learner from becoming confused by the 'ocean of anomalies', i.e. second-order experiences. In adult experi-

ential learning, the 'positive heuristic' consists of a partially articulated set of suggestions or hints on how to change the inadequate parts of personal experiential knowing, and how to modify, raise the level of sophistication of the inadequate parts (see Lakatos 1979). In short, the 'negative heuristic' tells a learner what paths of learning to avoid; the 'positive heuristic' tells him, in turn, what paths to pursue (see also Blaug 1980).

I suggest furthermore that this tacit, holistic, 'true' and inadequate personal experiential knowing consists of four basic dimensions: epistemological, existential, ethical and temporal. In practice, it is difficult, but not impossible, to separate these dimensions of personal experiential knowing, since they blur together in the adult's stream of living. The epistemological dimension has the basic qualities of criticalness and analyticity. It is asymmetrical and authoritarian. 'Betterment' within the epistemological dimension happens either inside or across the Kantian categories in order to grow beyond the adult's own epistemological limitations. If betterment happens inside a category, learning is not yet transformative. It is a question of degree only, but experiential learning within a category somehow prepares the learner for a bigger change. If a step is taken to the next higher category, learning becomes a matter of kind, and this can be seen as a transformation. Experiential learning is thus both a matter of degree and a matter of kind.

The basis for adult experiential learning is thus in personal experiential knowing, which can be seen in our ordinary everyday living: a new way of knowing is drawn from the old ways of knowing. But how do adults learn? Another category of experience is second-order experience, which could be characterized by the terms doubt, negative feelings and continuity. It starts the re-construction process; experiential learning is learning through (or with help of) second-order experiences, since the familiar becomes problematic enough. At what point does a mass of discrepancies, i.e. second-order experiences, become stimulating enough to bring about a shift in the adult's personal knowing? What kind of second-order experience is educative from the learner's view point? Due to qualities of personal experiential knowing, second-order experiences may take different forms and have different meanings for learners. All second-order experiences are not equally educative. A miseducative second-order experience arrests or distorts the adult's capacity for learning and can not be easily integrated into one's current way of knowing. Continuity is not realized. In essence, there must always be a delicate

balance between personal experiential knowing and second-order experiences. As defined earlier, experiential learning is not only a question of adding something to one's knowing or changing meanings, but the re-construction process modifies the adult's personal knowing of the world holistically. However, inside this re-construction process more precise knowledge is created so that the *structure* of knowing, those already existing conceptions, changes. The learner's personal conceptions are transcended in this effort to see a situation from a new perspective.

The epistemological dimension is closely related to the existential dimension, which, in turn, is the non-authoritarian, symmetrical dimension of adult experiential learning. I do not equate development and learning (cf. Hobson & Welbourne 1998; Merriam & Clark 1993). but I equate changes within the existential dimension with development. I suggest that development is a more holistic phenomenon than learning. The connection between these two dimensions arises through meaning-taking, which is a personally rational aspect of the experiential learning process. Although learning basically has an epistemological character, the other side of the process is meaning-taking, which is, I suggest, a process included within the existential dimension. However, adults differ in respect of the ways they attain what is personally significant. I would like to suggest further that, in particular, one property identifies development within the existential dimension: the expansion of personal capabilities - especially receptivity. These personal capabilities support in a way the epistemological re-construction process. Those personal capabilities develop, however, over the life span, since development is a way of being in the social world, not a way of coming to know about it (see also Hanks 1994, 24). Furthermore, I suggest that receptivity as a personal ability regulates the thickness of the protective belt. On the whole, the idea of development within this existential dimension entails the existence of an endpoint, which could be humanity or adulthood in its perfection. As we have seen earlier, meaning-taking can occur post-hoc. Learning is a time-consuming process, since progress within the epistemological dimension, the transformation of knowing into a fuller and richer and also more organized form, is not an easy task and takes time. Therefore it is important to think of experiential learning in terms of the temporal dimension. Learning occurs during different time spans - minutes, hours, days, weeks, months, years - depending on the whole situation of the learner, e.g. the learner's receptivity. In sum, this approach to learning leads me to suggest that, even

though the learning process is connected to development, learning is qualitatively different from development, and these two processes have attributes that are inherently different from each other. However, experiential learning and development are inseparable: they are aspects of the same phenomenon.

An individual equipped with personal experiential knowing needs social interaction in order to 'better' the epistemological parts of his knowing. The private process of learning is easily fallible and vulnerable. Social interaction broadens the individual learner's way of looking at old 'facts', of seeing whether they are located in the 'protective belt' or in the 'hard core'. It makes possible a loosening of the rigid, tacit structure of knowing and the acquisition of fresh perceptions and enables him to cross the boundaries of his knowing. However, the social interaction - one adult meets another adult - includes the same four dimensions as the individual learning process. The four basic dimensions of personal experiential knowing are also present in social situations, because the participants already have them. The social situation provides both an epistemological and an existential environment for the individual adult learner. These dimensions modify the social process of dialogue. As a consequence, the other participant's experiences provide possibilities for varied forms of second-order experiences. This way of defining social interaction and dialogue leads me to suggest further that the structure and therefore, orders of social interaction are determined by the topic at hand, but on one condition: they must be based on the structures of the learner's personal experiential knowing, since in the 'betterment' of knowing, certain things must be done before others. In essence, the appreciation of structure and order is primarily a matter of epistemology, not a matter of psychology. Although it is the epistemological requirements of the social interaction between partners that are the most important, the participants interact within the existential dimension too. Therefore, the nature of dialogue is impossible to predict.

What qualities are required of an adult educator? The definition of adult experiential learning set out here requires a knowledgeable and active adult educator. The essential responsibilities of the adult educator lie mainly within the epistemological dimension; the educator is an epistemological authority. In short, the educator is responsible for clarifying the epistemological perspectives of learners, for organizing proper second-order experiences and for guiding dialogue – especially within the epistemological dimension. The educator is, however, a human epis-

temological authority, who has a duty to 'behave appropriately' within the existential dimension too. Actually it could be said that he is responsible for 'being himself' within the existential dimension. Within the existential dimension, the adult participants 'teach' each other unconsciously by 'being'. It is impossible for the educator to create the existential environment, but the existential environment surrounding an adult learner arises out of the educator's social abilities. In fact, it depends rather on educator's receptivity and tolerance.

Finally, I propose that the ethical dimension of experiential learning consists of these two dimensions - epistemological and existential together. Existentially, the participants are in a symmetrical relationship, but epistemologically their relationship is necessarily asymmetrical. From this point of view, it is possible to define some ethical principles concerning social interaction. Those ethical principles concern the responsibilities and freedoms of both learners and educators. The educator's responsibilities are described above. The learner, in turn, is responsible for betterment within the epistemological dimension. If both the learner and the educator have their own responsibilities, they have also freedoms. The learner has freedom to decide about his participation in a dialogue, whether it is to be peripheral or central. On the other hand the learner also has freedom to commit or not to commit the 'new' facts. As we have seen earlier, individual commitment is a essential part of adult experiential learning, since without it learning has not happened (see page 114). Commitment is linked with meaning-taking and, therefore, it is always an individual decision to believe or not. To sum up, the educator's work cannot be clear-cut in practice, but adult educators should, however, be conscious of both the existential, epistemological, temporal and ethical dimensions of working together. In particular, it is necessary to keep in mind the boundaries between the areas of freedom and the areas of responsibilities. From this point of view, learning requires both autonomy and interdependence (cf. Reinharz 1989; Daloz 1987, 152). The view that individual learning and development is as much a social as a individual phenomenon is thus further expanded. The union of these two domains is necessary: the epistemological content filters through the existential dimension and, therefore, socially accepted transforms, as personal.

On the whole, the spirit of adult experiential learning is a re-construction of personal experiential knowing. In this process the internal structure of knowing changes. The learning process is the more revolu-

tionary, the more it 'touches' the 'hard' core of personal knowing. Because in the learning process the four different dimensions are simultaneously present, both the process of educating and the process of learning will always be inadequate. One side of the process is systematic and asymmetrical and the other side is occasional and symmetrical. The adult learner and the educator are situated in the world both in the epistemological dimension of learning and in the broader existential dimension within which these epistemological dimensions are produced. Furthermore, I would like to remind the reader that I have described a one-to-one relationship, but the situation becomes even more complicated when there are more participants.

Finally, how is knowledge defined? What is the content of personal experiential knowing? What guarantee is there that changes from one state of personal experiential knowing to another state will be 'betterment' (see also King 1980)? My basic thesis is that a link must exist between the substance of personal experiential knowing and so-called 'objective' knowledge. It is the relationship between 'objective' knowledge and personal experiential knowing that is of prime interest. This 'objective' knowledge is in mediated form in dialogue, and the mediator is the educator. Yet on the other hand learners also have 'objective' knowledge in mediated form. The basic issue is that epistemological 'facts' are always filtered through one's – whether as learner or educator - existential dimension. My suggestion is that the Kantian categories thus provide a conceptual bridge between learner and educator. Learning necessarily involves that the experience be subsumed under concepts; change in meaning does not in itself suffice, because the structure of personal experiential knowing is organized hierarchically. Personal experiential knowing includes the Kantian categories. Yet the problem is not one of the connection between education and learning, but between teaching something and learning the same thing. Educating and learning are thus connected by conceptual bridges that exist within the topic at hand. Each lower level has directive power over the next higher level such that the development of the higher level can be seen as an articulation of the lower. Consequently, I propose that the sharp distinction between social, 'objective' knowledge and personal knowing should be rejected.

Methodological soundness of the research process

The grounded theory method

Whether this theoretical formulation is theoretically relevant, integrated or dense enough, cannot be assessed alone. In my view, however, this analysis has revealed the core category - personal experiential knowing (both learner's and educator's) – the central phenomenon around which all the other categories are integrated (see Wilson & Hutchinson 1996). A core category has three essential characteristics: it re-occurs frequently, it links together easily with other categories and it explains much (Glaser 1978, 95-96; Glaser & Strauss 1974, 70; Hutchinson 1986). From this point of view, integration has happened, since personal experiential knowing seems to be an essential cement in putting together the other elements of the formulation. The process of selecting the core category - and systematically relating it to the other categories - was, however, a challenge. The formulation that emerges from a researcher's collection and analysis of data is in one sense equivalent to what he knows systematically about his own data (Glaser & Strauss 1974, 225). In my own case, I have re-constructed my own knowing and tested my conceptualization through the task of teaching adults for a number of years (Glaser & Strauss 1974, 225). My theoretical proposal has thus evolved through repetitive questioning between my internal monologue and the practice of teaching adults.

Integration means also *simplicity* or *parsimony*, which is another criterion for assessing the quality of a formal theory (see e.g. Niiniluoto 1984, 154; Olszewski Walker & Coalson Avant 1988, 38). A formal theory is simple, parsimonious or dense when it possesses only a few key theoretical constructs and a substantial number of properties and categories (Hutchinson 1986). For analytical purposes I combined the Kantian approach with the grounded theory method. With help of Kant's ideas I have been able to give my own conceptualization a tighter form. Kantian concepts have formed the 'map' or special lens for my investigative and analytical purposes. From my point of view, this focus has been fruitful. However, the flexibility of Kantian theory means that it has not acted like a Procrustean bed, which imposes too rigid a form on the phenomenon under study. The flexibility of Kantian theory has even led in a convenient way to a certain systemic ambiguity that is even

more desirable than an artificial precision (Soltis 1968, 67). This kind of systemic ambiguity works as a heuristic force for further conceptualization.

A high level of integration or density ensures that the categories, which are systematically related and fit into a tight theoretical framework, can be applied in practice (Glaser & Strauss 1968, 243). This workability i.e. whether this theoretical conceptualization makes any contribution to a deeper understanding of adult experiential learning - will be assessed later in diverse contexts (Glaser & Strauss 1974, 237-249; Rachal 1986; Strauss & Corbin 1991, 23). This conceptualization is not tied to any culture or any specific historical conditions (see Griffin 1989), but strives towards universality. It is sufficiently general or universal, if it is applicable to a wide range - if not all - of the different adult learning situations and contexts (see Glaser & Strauss 1974, 237, 242-244; Niiniluoto 1984, 154; Rachal 1986; Strauss & Corbin 1991, 23, 174-175). If a theory is general or universal enough, it should also be modifiable or flexible (see Wilson & Hutchinson 1991). On the other hand, flexibility is required primarily for theoretical relevance (Hutchinson 1986).

Finally, whether this theoretical conceptualization of adult experiential learning is a formal theory (as opposite to a substantive theory) or not, depends largely upon its level of universality. I am primarily concerned with the universal elements or dimensions of *adult* learning. Is there anything distinct about or unique to adults? I propose that we are searching at the moment for a theory of human, rather than adult, learning (cf. Cunningham 1992). Such a theory could better speak about learning *in adult contexts*, rather than treating adult learning as a strictly distinctive domain (see Brookfield 1988a; 1989).

Hermeneutical text interpretation

This study is a particular form of textual analysis. As I have pointed out earlier, interpretation is an open process, which no single vision can conclude. The text is a whole, open to several readings and to several constructions. In this sense, the problems of interpretation are due to the text itself, which is more than a linear succession of sentences (see Ricouer 1991, 159). My interpretations are always open to change and criticism, especially the account of two basic characteristics. Firstly, my interpretations are 'wholly interpretative': it is possible to argue for or

against them, to oppose them, to arbitrate between interpretations or to seek alternatives (Palonen 1988, 15; Ricoeur 1971/1979, 91; see also Haapala 1991; Kearney 1987, 101). This procedure does not serve the purpose of the mere "verification" of "falsification" of a theory but as a heuristic means that helps us to gain a deeper understanding and to build a theory relating to the domain under study (cf. Kelle 1993). It is to be hoped, therefore, that the conceptualization presented here is 'wholly interpretative' in that sense. Secondly, my interpretation is 'inexhaustible': no interpretation gives an all-sufficient conception of a phenomenon (Palonen 1988, 15; Polkinghorne 1989). This is very true with this conceptualization. It should be emphasized that this study offers only one conceptual 'lens' - and a necessarily selective one due to the qualities of interpretation – for viewing adult experiential learning, carried out from a certain perspective with certain aims and certain analytical tools (see Salner 1989; see also Ogilvy 1977, 250). Adult experiential learning is a large phenomenon. I have thus been faced with many choices. Whether this conceptualization is successful will depend in turn on whether the result is universal, simple and integrative enough for the purposes of further examination and practice.

Thirdly, as a researcher, I can not stand outside of the interpretive process (Denzin 1989, 31). There exist no "pure" research objects, which are independent of the researcher and the research process. Therefore, my interpretation is necessarily prejudiced (Polkinghorne 1989). The crucial question is not, however, one of being objective or biased, but a question of the degree of universality in the interests one is representing. That truth which is linked to the most universal interests contains the highest degree of objective truth (Enerstvedt 1989). Thus, interpretations are constrained less by the individual scholar's assumptions and beliefs (Bruhn Jensen 1989; Denzin 1989, 23; Hanson 1972, 19; see also Haapala 1991), but by universality. I have brought my prior expectations and understanding to the texts studied and the resulting interpretation is a creative process in which my prejudgments have become expanded through interaction with those texts (see Gadamer 1988). For example, my interpretations are interpretations in the light of my philosophical interests, especially Kant (see Brookfield 1992; Popper 1977b). The role of these theoretical preconceptions and my previous knowledge as a researcher and a teacher in this kind of open research is that of a heuristic device for description, interpretation and explanation (see Kelle 1993). I have tried to maintain my theoretical sensitivity and attitude of scepticism throughout the research effort in my reading

of philosophical writings and literature. My insight and understanding – i.e. my theoretical sensitivity – with respect to adult experiential learning has been enhanced in constant dialogue with the written source material (see Strauss & Corbin 1991, 43). In addition, I have had another important source of theoretical sensitivity to the concepts under study, their meanings and relationships. I have been fortunate enough to engage in testing my understanding of how things work and what happens under certain conditions in the adult learning field (see Strauss & Corbin 1991, 42). Dilthey (1970, 278) has said that interpretation would be impossible if life phases were totally strange, and it would be unnecessary if there were nothing strange in them. On the whole, the criterion of reformulative consistency, the extent to which a theory has changed over time, holds true in the case of my interpretive leaps towards a more universal conceptualization.

The influence of interpretativeness has been such that my "coding" processes have been very multistage and complex, and this in turn has influenced the adequacy of the whole research process. Organizing and bracketing original texts in terms of particular structures and writing memos was actually the first "result" of the analysis. Complex descriptions were reduced with the consequence that I have highlighted some elements and ignored others. The phase of axial coding - i.e. data put back together in new ways after open coding by making connections between categories and subcategories - was at the same time difficult and interesting. It was movement forward and backward through the interplay of questions and answers (see Denzin 1989, 21). Every question led to other questions connected to other categories. In the selective coding phase I ordered and reassembled the phenomenon of adult experiential learning back into a coherent whole, but I did not use the original coding concepts as much as I did at the beginning (cf. Denzin 1989, 58). In sum, my reading and re-construction procedures have been purpose-oriented in relation to specific research problems, and therefore already constitute an interpretation of the meaning relations in the texts and thus are essentially the products of a hermeneutical process (cf. Palonen 1988, 32). In addition, the multiple meaning of words derives, however, not just from the world of the text itself but from a double historical reference both to the original conditions of utterance (the world of the author) and to the subsequent conditions of reception or interpretation (the world of the addressee) (Ricoeur 1991). Ricoeur (1971) has said that "what the text says now matters more than what the author meant to say, and every exegesis unfolds its procedures

within the circumference of a meaning that has broken its moorings to the psychology of its author."

Regardless of these inevitable limitations and inadequacies the research methodology selected seems to be appropriate to answering the particular questions I addressed at the beginning. I have undertaken a full intellectual and ethical commitment to these tools regardless of their limits. Although interpretation is always very subjective by virtue of being a conditional, incomplete and partial conception of a phenomenon, the hermeneutical interpretation process aims at revealing the objective deep structure of phenomena and in the discovery of common themes and shared meanings (Haapala 1991; Palonen 1988; Siljander 1992). Consequently, my subjective interpretation will be intersubjectively controlled, tested and worked out through dialogue and practice, through mutual questioning (see Bruhn Jensen 1989; Kvale 1989; Siljander 1992; Usher 1989a). I am asking the reader to think along with me, to examine and question these skeleton arguments with me (see Palonen 1988, 49). The researcher and her readers share a joint responsibility in relation to the phenomenon under study (Glaser & Strauss 1974, 232). After this analysis begins 'the reader's freedom' (Palonen 1988, 178). It is, however, highly unlikely that two researchers or readers would come up with the same conclusions (Hutchinson 1986), since they will interpret the text through different living worlds. Again, that guarantees reformulative consistency; since the one has the opportunity to check the other's interpretation (Polkinghorne 1988). For these reasons I have presented this conceptualization in as discursive a form as possible (see Glaser & Strauss 1974, 32).

Directions for future research and practice

This study proposes a new, if not objective, way of understanding adult experiential learning (see Hutchinson 1986; Olszewski Walker & Coalson Avant 1988, 70; Polkinghore 1989). This theoretical conceptualization of adult experiential learning is, however, an ideal case – and there is much to be refined more closely in the details of my "skeleton" arguments. Is this theoretical conceptualization theoretically relevant, useful, significant and 'true', and to what extent? What kind of implications might this revised conceptualization of adult experiential learning have for researchers and adult educators? The present theoretical formulation is a suggestion, not the theory of adult experiential learning

(see Glaser & Strauss 1974, 32, 40; Soltis 1968, 67). As I have mentioned earlier I am not saying or proposing anything 'finished' about adult experiential learning, but this proposition serves as one element in an open-ended project (see Glaser & Strauss 1974, 9, 32; Hamlyn 1970, 290-291). Seeking pure and simple universalities never ends (see Dewey 1951, vi). In this framework, this temporary conceptualization will leave us with more questions than answers (Enerstvedt 1989; Soltis 1968, 76).

For researchers...

My research is an example of theoretical conceptualization, which highlights a series of unanswered and unexplored questions about adult experiential learning. It serves at least as a heuristic tool for the further construction and modification of central concepts. It is mutable and subject to modification and re-assessment in the light of continuous research, as Brookfield's (1992) criterion of reformulative consistency proposes.

Accordingly, theoretical refinement continues. The main categories with their preliminary properties need further specification and development. In particular, it seems important to me to generate theoretical properties for the categories (Glaser & Strauss 1974, 106). In addition, relationships between categories are in need of further modification and clarification. The category, which I find most intriguing, is that of adult personal experiential knowing as distinct from objective knowledge. I see it as the basis for the further generation of the theory. The fundamental question is thus essentially a complex philosophical - more precisely an epistemological - one. The complex phenomenon of adult experiential learning seems to derive from the basis of one adult's personal experiential knowing in relation to another adult's personal experiential knowing. The term 'knowing' has played a rather latent or minor role in earlier formulations. In particular, a focus on the substance and qualities of personal experiential knowing is needed. The question as to how this kind of knowing develops and is used in learning are in need of further exploration. This implies that the mysterious connection between knowing (and knowledge) and experience should be explicated further. In this we are only at the beginning. My tentative proposal is that the basic elements of personal experiential knowing are a hard core – an inviolate cluster of hypotheses at the center of knowing, and

a protective belt, a set of auxiliary hypotheses 'on the surface'. Furthermore, the assumptions underlying the hard core can not to be questioned owing to the presence of a negative heuristic. A positive heuristic, in turn, consists of a set of suggestions or hints stating how personal experiential knowing is to be altered. From the research viewpoint, it would be interesting to know how faith in the hard core functions to explain away anomalies and how the individual tries to cope with anomalies.

If personal experiential knowing (initially, first-order experiences) have only a crucial role in the adult experiential learning process, clarification of the properties of first-order experiences is one of the most important research tasks. Empirical support for this theoretical formulation is needed. Also, this conceptualization remains an abstraction without empirical investigation and support. For a formal theory to satisfy the criterion of empirical grounding, it would first have to gain some broad consensual agreement that its central insights, tenets, and propositions were grounded in a documented reality that was recognized by educators and learners alike. This means going directly into the field, if one is to understand what is going on (Strauss & Corbin 1991, 24). To deepen our understanding of the adult learner's personal experiential knowing, a phenomenological approach, which makes a distinction between appearance and essence, could be of value. For example, the simple and innocent phenomenological question "What is it like to be an adult learner?" assumes a deeper dimension (see van Manen 1990, 42, 46). Descriptions of personal life stories and daily individual experiences of adult learning may enable us to understand the nature of personal experiential knowing (ibid., 67, 72). Moreover, to deepen our of understanding of adult personal experiential knowing, the learner's everyday educational practices studied with the help of ethnographic or ethnomethodological methods could also be useful (see e.g. Gullestad 1996; Stanley & Wise 1989). Indeed, the concept of adult learner in itself is worthy of empirical investigation. A genderbased research perspective would be also interesting. Some researchers claim that experiential learning is a feminine learning style. On the other hand, some research has shown that critical thinking – one basic quality of the experiential learning process - is a masculine way of thinking. Is experiential learning then an adult way to learn?

The rhetoric of individualism and self-directed learning and the reality of social control and conformity are still clearly in conflict (see Tennatt 1986). The globally hegemonic American values of individualism, rationality and autonomy are, however, clearly present in current

descriptions. Therefore, the image of the adult learner becoming continuously more rational and more autonomous is worth the study. I have shown that the individual and social dimensions are intertwined in a complex way. I would emphasize the significance of shifting the analytic focus from the individual as learner to learning as a social act in connection with other individual learners. Instead of looking at the individual and social in either/or terms, an understanding of the dialectical relationship between them can help researchers and educators to understand how these dimensions co-constitute learning praxis (Hammer & McLaren 1991; see also Connelly & Light 1991; Popper 1977b: Usher 1989c). The solution to this problem requires a well thoughtout philosophy of the social dimensions that operate in what constitutes personal experiential knowing (cf. Dewey 1951, 9). This leads to the modification of the interrelationships of these four - epistemological, existential, ethical, and temporal - dimensions. In particular, unequal relations of power that are only touched upon in this monograph must be investigated more systematically.

For practitioners...

To what extent can this theoretical formulation can be understood by practitioners as a clear and accessible description of a formal theory which has some kind of connection with their own activities? Under what conditions might the theory fit with "reality", create understanding, and be useful (Rachal 1986; Strauss & Corbin 1991, 256-257). As I understand it, the invitational tone – further analysis, critique and refinement - not only concerns researchers' as an intellectual exercise, but it also invites practitioners to refine their understanding and their praxis and expand their theoretical views by building on their personal theory of adult experiential learning (see Driscoll 1994, 379-380). Accordingly, the workability, clarity and usefulness of my theoretical formulation should be assessed by practitioners themselves in their everyday professional life (see Brookfield 1992; Niiniluoto 1984, 154; Olszewski Walker & Coalson Avant 1988, 38; Strauss & Corbin 1991, 258). A social practice such as teaching is best understood and researched by those directly involved in it: teachers and educators (Jacobson 1998). The practitioner who applies a theory becomes a further generator of a theory and in this instance the theory is clearly seen as process (Glaser & Strauss 1974, 242). Application is thus, in one sense, the theory's further test (ibid., 244).

This conceptualization is not necessarily easy to translate into action (see Connelly & Light 1991), because it does not tell practitioners exactly what to do. It is not easy to illustrate theoretical concepts in concrete terms (Elmore 1993). However, the context-specific nature of this conceptualization arises out of its application in multitude of contexts and domains (see Kontiainen 1991, 1). On the other hand, I do not share Brookfield's (1992) perspective on prescriptive policing. Consequently, this theoretical conceptualization of adult experiential learning will not lead to normative judgments about what are the best practices in adult education (see Brookfield 1992; Steutel 1988). I do not present any clear implications for practice, even if it would be more likely to be attended to if its relevance to and implications for practice were clearly established (see Brookfield 1992). Practitioners working in a wide range of contexts should evaluate its practical consequences and its transferability by themselves. However, it will hopefully orient practitioners to think about at least three essential questions in any educational activity concerning adults: how to know the learner's epistemological perspective, how to be aware of his own responsibilities and how the knowledge content is structured.

In sum, work by both researchers and practitioners is needed in order to develop a deeper understanding of adult experiential learning, which is a gradually progressive affair. The concept of adult experiential learning is still a polymorphous and ambiguous one. Theory building in the area of adult experiential learning continues to rest on a foundation of conceptual sand and theoretical clarity is still missing. It can still be said that adult education research remains in a preparadigmatic state (Brookfield 1984b). A paradigm of adult education should, however, be defined (Criticos 1996). Both researchers and practitioners should be released from both the illusion of 'knowledge' and unrealistic optimism (cf. Palonen 1988, 14-16). Yet while conceptualizations organize and select our perceptions in such a way that we make novel associations between phenomena, they also set bounds to our understanding and interpretation of the world. They 'bracket' or isolate portions of the phenomenal world and invariably distort reality by emphasizing certain aspects of reality to the exclusion of others. (McLaren 1993, 14-15). This has occurred with the conceptualizations under study here. Having first served to sensitize us to new phenomena, a 'popular' or 'successful' theory can then blind us to what lies beyond its boundaries. In becoming generally accepted a theory is in

danger of being taken for granted and of being seen as a complete and immutable account of reality. (Dewey 1951,10; Sugarman 1996, 77.) For any theory and set of practices is dogmatic which is not based upon critical examination of its own underlying principles (Dewey 1951, 10).

When do we have the right to use the term 'experiential learning' (McEwan 1989)? Both constructivism and experiential learning theories rest on the assumption that knowledge is constructed by learners as they attempt to make sense of their experiences. Consequently, treating these approaches as separate to adult learning is one of the most serious intellectual misunderstandings in the area of adult education. What constructivists argue strongly, however, is that knowledge constructions do not necessarily bear any correspondence to external reality (Driscoll 1994, 361). The conceptualization presented here challenges this modern way of understanding about learning and educating. As I see it the theory of experiential learning should be developed as a theory of knowledge (see also Michelson 1996). The most fundamental nature of adult experiential learning could be nested knowing interactive epistemological perspectives - with a clear epistemological basis (see Lyons 1990). On the other hand, it has elements of the existential approach. In future, I would like to combine Kant's and Kierkegaard's ideas.

Since the theory of adult experiential learning is still in its infancy, it remains to be seen whether a single theory will emerge. I believe that an answer to this question would nevertheless seem possible, and therefore I hope that this process will stimulate further inquiry and research. I do believe that a single experiential learning theory could be the answer to many instructional problems concerning adults. A return to what appear to be the simpler and more fundamental ideas and practices of the past is needed, especially in relation to the phenomenon of experiential learning (see Dewey 1951, vi). But, at the same time I believe that there are no easy answers. Nevertheless, I have faith in the power of adult experiential learning and I am still - more than ever an advocate of adult experiential learning.

[&]quot;But then..." I ventured to remark, "you are still far from the solution ..." "I am very close to one," William said, "but I don't know which."

[&]quot;Therefore you don't have a single answer to your questions?"

[&]quot;Adso, if I did I would teach theology in Paris."

NOTES

- 1 Brookfield has discussed with colleagues and students the development of critical analysis toward literature and research in the field of adult education. This discussion has occured in many arenas (e.g. in specifying the criteria students should meet in producing dissertations which are critical interpretive reviews of the adult education literature). As such, Brookfield regards these criteria for formal theory building as provisional and awaiting refinement by the larger academic community.
- 2 As a researcher into adult experiential learning I have certain basic commitments or preconceptions, which are a part of my theory-ladenness (Haapala 1991; Hanson 1972, 19; Niiniluoto 1984, 224, 245). Firstly, I am convinced that learning engages the learner's whole being, which means that the intellectual, emotional and volitional dimensions of being should be taken into account, when researching a topic of this kind. An adult should not be viewed simply as a purely rational entity. Secondly, I examine this phenomenon from the assumption that a theory of adult experiential learning should be based on that which is unique to adult learning. I believe that there is difference between educating an adult or a child arising only of their different developmental stages. Thus, to focus upon an 'adult' point of view is, indeed, necessary (see Brookfield 1989; Griffin 1983, 63). Finally, educational phenomena are always dynamic and in flux - and, as such, they are difficult to engage in theories of any kind. It should be remembered that theories are always constructs of these fluid phenomena (see Usher 1989b). However, I believe that formal theory building is a useful way to try to capture the complicated and absorbing phenomenon of adult experiential learning. The consequences of these commitments are especially manifested in the generating of research questions and the making of methodological choices.
- 3 This procedure is very similar to Giorgi's (1970) method of phenomenologically based research, where discrimination of the "meaning units" is essential. Discriminations are, namely, divisions of the entire running text into discrete units of meaning each of which can stand on its own as expressing relevant meaning.

- 4 Kolb describes the structure of social knowledge through Pepper's (1970) four world hypotheses: formism, mechanism, contextualism and organicism. According to Kolb "the significance of Pepper's metaphysical analysis lies in the identification of the basic inquiry structures for refining knowledge" (1984, 119). He finds an apparent isomorphism between Pepper's system of world hypotheses and the structure of the learning process: experience grasphed through apprehension and transformed through intention results in *divergent* knowledge (organicism); experience grasped through comprehension and transformed through intention results in *assimilative* knowledge (mechanism); experience grasphed through comprehension and transformed through extension results in *convergent* knowledge (formism); experience grasphed by apprehension and transformed by extension, results in *accommodative* knowledge (contextualism). (Kolb 1984, 42, 111-112.)
- 5 I have named these categories along the lines "suggested" by theories under study. The properties (*) have been taken directly from the texts.
- 6 These questions will be discussed in more detail in chapter 5.
- 7 'Perception' belongs to the family of epistemological terms which centre around the concept of knowledge (Hamlyn 1963, xi; Scruton 1996, 328). In this study 'perception' is an umbrella term, and is divided into three parts in the Kantian manner.
- 8 Kant accomplished his first major epistemological task by proving in this way the existence of a priori elements in understanding (Green 1992, 38). The categories, according to Kant, are as follows: of quantity (unity, multiplicity, universality), of quality (reality, negation, limitation), of relation (substance, causality, reciprocity), of modality (possibility impossibility, existence non-existence, necessity contingency). Kant held that, although a knowing subject do not experience the categories as such, he becomes aware of them in connection with experience. (Kant 1996, 60-67.) It is thus permissible to think that new experience may enrich and clarify the system, though without ever making it final. In fact, there is no theoretical reason why in the course of time new categories should not be discovered ad infinitum. (Jaspers 1962, 26-27.)
- 9 My topic commenced as learning. I later noticed that all the themes which I was handling under this topic were strongly connected to *the individual subject*, whether he was called an adult, a learner or an adult learner. Therefore I chose to use the expression 'individual dimensions of adult experiential learning'. The other side of adult experiential learning concerns interaction with others, i.e. social elements of the learning process. Individual and social elements interpenetrate in a complex way in the experiential learning process, but are, however, simultaneously present.

- 10 It is important to recognise that all learning, whether it is termed experiential learning or not, has an experiential basis (Jarvis 1987).
- 11 Husserl described the natural attitude as the original, pre-reflective, pre-theoretical attitude, which is prior to critical or theoretical reflection (see e.g. van Manen 1990, 7; Roberts 1992, 268-269).
- 12 This 'needs-meeting' ideology or 'services for felt needs' -approach has been widely criticized (see e.g. Griffin 1989; Jarvis 1987; Wilson 1992). Knowles, especially, has been criticized for this kind of theorization.
- 13 Knowles and Mezirow argue about these interests quite similarly, "something of which individuals are less conscious than they are of their interests" (Knowles 1980, 27) and "our real interests like those of the alcoholic may be hidden from us by physical, ideological or psychological distortion or coercion, by deprivation or by unquestioned social norms or other assumptions" (Mezirow 1991c, 216). Mezirow claims that, in addition to learner's expressed needs and interests defined within his current meaning perspective, assessment of learner 'needs' should be broadened to include real interests, which the learner would prefer if he had more perfect knowledge, greater freedom and less distorted meaning perspectives (ibid., 226).
- 14 Although Kolb's model is one most often used both in practice and in research, and its high level of abstraction has been seen as one of its strengths (see Sugarman 1985), it has left much space to criticism. In particular, Kolb's learning cycle has been criticized for many reasons: some have expanded it because of too simplistic a form (see e.g. Barnett 1989; Jarvis 1987; Miettinen 1998), some criticize the relatively undeveloped parts of the learning cycle (see e.g. Pelsma & Borgers 1986; Sugarman 1985) or even the choice of words. Sims, Veres III & Heninger (1989) argue that Kolb's 'accommodation' implies passivity and compromise and that 'implementation' would be a better word. This famous learning cycle is, however, only one part of the whole theory, but for a more complete view of Kolb's learning theory the phases of acquisition, specialization and integration are important.
- 15 Schön's work is not, however, sufficiently analytical and articulated to enable to follow the connections that must be made between elements of experience and elements of cognition so that we may see how reflection-in-action might be understood to occur (Munby & Russell 1989).
- 16 Revans emphasizes the social dimensions of experiential learning rather than individual ones. Accordingly, Revans' conception of learning will be treated in more detail in chapter 5.
- 17 Knowles is not capable of explaining what actually happens in the learning process (see e.g. Grace 1996; Merriam 1987; Podeschi & Pearson 1986; Tennatt 1986; see also Manninen, Kauppi & Kontiainen 1988, 40). His

- theorizing is concernd more with the external organizing and management of learning than with the act of adult learning itself. Hartree (1984), for example, has even asked whether Knowles is presenting a theory of teaching or one of learning.
- 18 Mezirow examines many definitions of reflection, including Dewey's and Schön's. He finds similarities between his own definitions and Schön's 'reflection-in-action'. He equates Schön's tacit 'theories-in-action' or 'frames' with what he himself calls meaning perspectives (Mezirow 1991c, 112-114).
- 19 Development of reflective judgment appears to be correlated with formal schooling in which abstract thought is emphasized (Mezirow 1991c, 144).
- 20 Reflection is *not* same as introspection (being aware of one's empirical self) or physical reflection (as in mirrors) or 'thinking hard about something' (Roberts 1992, 5-6). Mezirow too has defined what reflection is not: not simple awareness, not cognition, not introspection (becoming aware of the fact that we are perceiving, thinking, feeling or acting in a certain way) (1991c, 106-107).
- 21 This kind of recognition has to be distinguished from the kind which asks why something is and from the kind which is looking for the larger 'Meaning of Life' (see Danner 1995; Merriam & Heuer 1996).
- 22 Arendt developed this extended explanation from Kant's distinction between reason and intellect (see Arendt 1978a; 1978b; see also McKenzie 1987).
- 23 The critical theory, and by implication perspective transformation, is based on philosophical assumptions that are challengeable (McKenzie 1987).
- 24 In this connection I am not concerned about organizational, cultural or societal development in larger frameworks, although these theorists have written about them. I agree with Knowles and Mezirow that the same basic learning process should be *applied* to all types of learning activities, whether they are individual learning, group learning or community development projects. In particular, Mezirow has pointed out forcefully to certain of his critics, who accuse him of the lack of a coherent, comprehensive theory of social change (see Collard & Law 1989; Cunningham 1992). I agree with Mezirow that adult learning transforms meaning perspectives, not society, not politics. Nevertheless, significant learning, involving personal transformations, could have significant implications for social action (Mezirow 1991c, 206-212). Knowles, in turn, has been accused of preparing individuals to *adapt* to technological change (see Fisher & Podeschi 1989; Griffin 1989; Wilson 1992; my italics) and being apolitical (see Brookfield 1989).
- 25 Knowles' conception of personal growth and the self-actualized person has been criticized because it remains elusive and is uncritically

- constructed (see e.g. Griffin 1989; Tennatt 1986; see also Oddi 1987). In addition, it is unclear whether personal growth should be guided by either the *need* or the *ability* of adults to be self-directing (see Tennatt 1986).
- 26 I have divided the social dimension into two major categories, the epistemological and the existential. At first, I was interested in 'teaching' and broadly in three basic questions concerning the context of learning, pedagogical procedures in learning process and the educator's role. At the moment, however, I think that the terms 'existential' and 'epistemological' better describe my concerns.
- 27 Discussion is not, of course, the only possibility. Knowles, for example, proposes a list of other more participatory experiential techniques: the case method, the critical-incident process, simulation, role playing, skill-practice exercises, problem-solving cases, field projects, action projects, laboratory experiments and methods, consultative supervision, demonstration, seminars, work conferences, counseling, group therapy, and community development (Knowles 1980, 50). However, I would like to argue that discussion is included *inside* these techniques.
- 28 Kolb's work has been mainly concerned with the learner's processes without intent to clarify the educator's role in designing learning activities. Nevertheless, Sugarman (1985), for example, regards Kolb's learning cycle as a model of effective teaching. More recently, Kolb too has shown interest in the nature of dialogue (see Hāmālāinen & Siirala 1998).
- 29 Kolb and Knowles suggest an 'opening session' at the beginning of the learning process. Knowles answer to the 'unsettling first steps' is an orientation or opening session, a preparatory learning-how-to-learn activity. Knowles argues that it helps learners to make the transition to becoming self-directed. The opening session includes e.g. relationshipbuilding, a climate-setting exercise, a short presentation of self-directed learning, skill-practice exercises and the construction of a learning contract. (1989, 89-91.) Kolb's proposition is an explicit discussion of the learning process, since many learners resist required courses designed to broaden their interests. One way to deal with this is that the educator and the learner share explicitly their respective theories of learning. From this discussion the learner can gain an insight into why the subject matter is taught as it is. The discussion can help the educator to identify the variety of learning styles presented in the class. Furthermore, a third benefit is that both teacher and students are stimulated to examine and refine their learning theories. (Kolb 1984, 202.) Schön too proposes that building a relationship conducive to learning should begin with "the explicit or implicit establishment of a contract that sets expectations for the dialogue", i.e. what the educator and the learner will expect to give to and

- get from each other. Furthermore, there is no single 'right' contract or relationship; different ones may be equally effective. (Schön 1988, 167.)
- 30 For me as a researcher, truth is, however, about disclosing the world rather than accurately representing it. The emphasis is on *understanding* rather than 'finding out', on *development* rather than certainty. Nevertheless, I believe that we gradually approach some kind of universal and ahistorical truth about phenomena. All beliefs claim to truth, 'answers'. Ultimately, non-persistent certainties or relative truths are the founcation from which persistent truths are derived. Therefore, I do not reject the notion of one truth or one "right" way. But I also believe along with relativists that all knowledge is human construction (see Lyons 1990; Roberts 1992, 48).
- 31 This orientation to wordless action as teaching has been seen as one strength of Schönian description (see McKinnon 1989; see also Lawrence 1989; Munby & Russell 1989). McKinnon argues that imitation presents itself as a process of selective construction. A learner may coordinate the two strategies of imitation: reproducing a process and copying its product. He progresses from imitating the other to imitating himself. There imitation is a highly creative and constructive process.
- 32 This Schönian educator-learner relationship resembles the apprenticeship of the craft tradition (see LaBoskey 1989). Nolan (1989), in turn, discovers the close similarity between Schön's view of reflective supervision and clinical supervision.
- 33 Kant associates these truths with necessity, possibility and actuality (see Roberts 1992, 103-104).
- 34 Participatory consciousness reflects a holistic epistemology that replaces the traditional relation between 'truth' and 'interpretation' in which the idea of truth antedates the idea of interpretation. Participatory consciousness does not stand in opposition to the concepts of objectivity and subjectivity: it simply effaces them. According to this epistemology we cannot 'reach' anything, but we can let go of something. (Heshusius 1994.)
- 35 The lists in the endnotes 35, 36, 37, 38 and 39 in this section describe in the theorists' own words the tasks they require of the adult educator. They are drawn out from the lists which I made earlier concerning the work of the educator. The width of each endnote indicates where the emphasis has been in theorists' work. The first list, which concerns the abilities to recognise perspectives, is short: *Schön*: guided practice requires instructor understanding of the individual perspective of students; *Knowles*: to take into acount the adult's need to be self-directing, the experiences of adults, and problem-centered orientation to learn that is closely connected with the developmental tasks in adulthood; *Kolb*: to

have an ability to make contact with the students' inner resources, attitudes and ideas; to meet the student's goals, learning style, pace and life situation.

36 The list, which concerns the abilities to generate and select educative second-order experiences is as follows: Schön: the coach's ability to adapt demonstration and description to the learner's changing needs; to cope with their reactions to the predicament in which he has helped to place them.much depends on the fate of the student's learning predicament: the teacher has a predicament complementary to the student's; the coach must learn ways of showing and telling matched to the peculiar qualities of the student before him, learn how to read her particular difficulties and potentials from her efforts at performance, and discover and test what she makes of his interventions; Mezirow: to help learners see and come to grips with the discrepancies between avowed beliefs and their actions; to help learners link self-insights with social norms and thereby realize that their dilemmas are shared; for the educator or the therapist, the relevant questions are "How does the learner respond to the situation?" and "What assumptive rules does s/he follow?"; to take into account both the way the learner indicates the rules s/he follows and the perceptions of others familiar with the learner; educators must beware of placing learners in a vacuum by making them aware of the need for collective source change without helping them acquire the information and skills needed to implement it; *Knowles*: to help learners identify the life problems they experience because of the gaps in their personal equipment; the educator has a responsibility to create conditions and provide tools and procedures for helping learners discover their 'needs to know'; to notice that the timing of learning experiences coincide with those developmental tasks; to plan with the learners a sequence of learning experiences; to select the most effective methods and techniques; to share his/her thinking about options available the selection of materials involve the learners in deciding among these options jointly; to expose the learners to new possibilities for self-fulfillment identify these resources and link learners with them effectively.

37 The list, which concerns the abilities to guide the learning dialogue, is following: *Revans*: a wise counsellor puts up suggestions for the subject to knock down; he must contrive that the subject convinces himself that the course of action is feasible; not degenerate into a contest between counsellor and subject precipitated; can withdraw; when subject is likely to be confused, the adviser cannot size up the problem tormenting the subject; great patience, ability to listen to what the subject is trying to say; the subject himself turns questioner of the adviser; *Schön*: responsibility for initiating a breaking of learning bind, in the first instance, must

lie with the instructor, who is presumably better equipped to do what the student cannot as yet do; to encourage, "opening up the possibilities"; to teach "technique"; nonevaluative: answers questions with questions, suggests instead of critiquing and to relate current issues to larger ones; creates a reward system that emphasizes methodology of inquiry versus getting a particular answer; to implant new ideas, to dispose of or modify old ones and through dialogue to develop and refine their (leaemers') knowledge and skills; Mezirow: to help a learner become aware of and assess alternative meaning perpsectives for viewing a problem is not to tell the learner what to do but only to present different sets of rules. tactics and criteria for judging; provides different/alternative meaning perspectives that offer new ways of responding to a situation; to help learners look critically at their beliefs and behaviors, assumptions, premises, not only as these appear at the moment but in the context of their history (purpose) and consequences in the learner's lives; actively foster learners' critical reflection upon their assumptions, not only concerning the content and process of problem solving, but also concerning the premises behind their sociolinguistic, epistemic and psychological beliefs; to help learners focus upon and examine the assumptions – epistemological, social and psychological – that underlie beliefs, feelings and actions; assess the consequences of these assumptions; identify and explore alternative sets of assumptions/points of view; to initiate, facilitate, encourage learners to challenge, create, elaborate and transform their meaning schemes and meaning perspectives.

38 The list, which concerns demands on educator's own depth of understanding of the topic, is following: Knowles: the teacher should know his subject matter; the teacher should be enthusiastic about his subject and about teaching it; to gear the presentation of his own resources to the levels of experience of particular learners; Schön: has built up a repertoire of examples, images, understandings and actions (many ways of "telling"); the coach must learn ways of showing and telling matched to the peculiar qualities of the student before him, learn how to read her particular difficulties and potentials from her efforts at performance, and discover and test what she makes of his interventions; in unfamiliar situations he is able to make sense of their uniqueness, he need not reduce them to instances of standard categories; ability to reflect on, and encourage reflection on dialogue itself; Revans: to enrich their own intellectual understanding of managerial tasks, but they must also sense the emotional overtones of carrying responsibility for actions with uncertain outcomes; evaluate their own efforts; to discharge it effectively, they must teach themselves what they are, precisely, trying to do; the really good teacher recognizes that, should his pupils begin to approach his own standards, they will pose questions to him to which he has no answer; suggest that both should try to find out from others who might also be interested to know the answer; a reputation to defend, he may be wholly sure that he need not consult any other source, he is simply the victim of self-idolisation; the same individual may, from time to time, occupy both roles, those of identifying the questions to ask is the task of the leader, of the wise man; finding the answers to them is the business of the expert; the true leader must always be more interested in what he cannot see in front of him (the mark of the wise man); *Mezirow*: educator must not simply focus on the materials/ the new data presented to be learned or their "presentation skills".

- 39 The list of tasks, which refer to authority-orientation, is following: *Knowles*: to have full responsibility for determining what is to be learned: to accept dependency when it clearly is the reality; a timekeeper, taskmaster and enforcer of schedules of events in order that the learner can become immersed in the analytical exercise necessary to reach a solution and not worry about having to set goals and manage his/her own time; makes decisions concerning flow and nature of activities in the class session mostly prior to the course; Kolb: is the accepted representative of the body of knowledge - judging and evaluating learner output, interpreting information that cannot be dealt with by the rules of inference and enforcing methodology and scientific rigor of the field of study: the responsibility to check out which assumptions are realistic in a given situation; to correct the error; to give her a way of understanding what is wrong; can give specific instructions, judge student's product or process, tell the student how to set priorities, propose experiments; Schön: the master asks the student to give up his autonomy: he must invite him to enter into a temporary relationship of trust and dependency; a learner becomes dependent on teacher, turn to them for help in acquiring understanding, direction and competence.
- 40 From this point of view, power enters the structure of the dialogue (see e.g. Hart 1990; Latomaa 1992, 14-16). Mezirow, for example, has been criticized for failing to recognize the importance of power in distorting educational and dialogic relationships (Collard & Law 1989; Hart 1990).
- 41 Although the emphasis in this section has mostly been on one-to-one process, between *one* adult learner and *one* adult educator, in practice the situation is even more complicated along with fellow learners.

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Towards the essence of

adult experiential learning

THIS BOOK focuses on seeking to locate the essence of a central phenomenon in the area of adult education - adult experiential learning. As a somewhat new educational orthodoxy, adult experiential learning has tended to attract scholars and practitioners in the field of adult education, especially educators, across a broad diversity of contexts.

This study attempts to address the prevailing conceptual confusion surrounding adult experiential learning and, at the same time, develop an alternative conceptualization of it on the basis of the theories put forward by Malcolm Knowles, David Kolb, Jack Mezirow, Reginald Revans and Donald Schön.

Anita Malinen's aim is not to close the debate on adult experiential learning. Rather it is hoped that this conceptualization will serve to keep open the dialogue between theory and practice.

"Malinen has produced a closely argued, philosophically sophisticated study that shows a thorough grasp of a relevant literature in adult learning and education, philosophy and research methodology. Her application of a Kantian perspective to the understanding of experiential learning is a creative piece of intellectual work that intrigued and provoked this reviewer. I learned much from this study and was prompted to rethink some of my own ideas in this area... Interesting, well written, well conducted, and well researched conceptual analysis." Distinguished Professor Stephen Brookfield, University of St. Thomas

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