REFRAMING RESEARCH INTO 'SELF-DIRECTION' IN ADULT EDUCATION: A CONSTRUCTIVIST PERSPECTIVE

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ABSTRACT

Research into self-direction has been hampered by the absence of a
consistent theoretical framework, and the indiscriminate application of the
term 'self-direction' to different phenomena. The purposes of this study
were: (a) to critically analyse the use of the term 'self-direction' in adult
education and to ascertain whether there are differences among the
phenomena subsumed under that label; (b) to critically survey the
literature, and synthesise research findings; (c) to compare the significance
of 'self-direction' in adult education with other sectors of education; (d) to
identify and evaluate assumptions underlying past and present research
traditions in 'self-direction'; and (e) to reconceptualise 'self-direction' from a
constructivist perspective and to formulate themes for future research. It
was shown that 'self-direction' has been used to refer to three different
phenomena: (i) as a personal quality or attribute (personal autonomy); (ii)
as the independent pursuit of learning outside formal instructional settings
(autodidaxy); and (iii) as a way of organising instruction (learner-control).
Two distinct approaches were used in undertaking the study. The first
involved a critical analysis and review of literature in each of the three
domains, the second was based on a form of conceptual analysis. Major
paradigms in educational research were surveyed. It was asserted that
assumptions underlying the interpretive paradigm were congruent with the
phenomenon of self-direction and that, despite its limitations, there are
advantages to adopting a constructivist perspective.
Major findings were: (1) lack of internal consistency in the literature
precludes the development of a coherent 'theory of self-direction' from

within the literature; (2) autodidaxy can be usefully distinguished from learner-control; (3) autonomy in learning does not necessarily lead to personal autonomy, nor does personal autonomy always manifest itself in the learning situation; (4) autonomy has both personal and situational dimensions; (5) understanding the perspective of learners is vital to understanding strategies used and outcomes attained; (6) personal autonomy in learning comprises both cross-situational and situation-specific dimensions; (7) research into learning outcomes should stress qualitative rather than quantitative dimensions of knowledge acquisition; and (8) constructivism sanctions action-research and other naturalistic inquiry modes. The study incluuded an agenda for reaseach into autodidaxy and learner-control from a constructivist perspective.

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I. BACKGROUND TO THE STUDY

A. INTRODUCTION

In recent years, the literature of adult education has reverberated with the call for adult educators to surrender to learners some measure of control over the teaching situation. This demand is not recent. As early as 1816, Pole wrote of the need for a specialized method for teaching adults in which they were to be treated as the "sincere friends" (p. 35) and equals of the teacher in many respects. Neither is the call for a democratisation of teaching limited to adult education, but has been a recurring preoccupation in the literature of education at all levels from kindergarten to university.

In adult education, the term which embraces this form of 'self-direction' is andragogy. In other sectors of education, a similar concern can be found, to a greater or lesser extent, in a variety of guises including, amongst others, open education, individualised instruction, discovery learning, student-centred instruction, independent study, and collaborative learning.

At first sight, perhaps, there seems little to unify such diverse themes which, to use Griffin's (1977) phrase, tend to look more like a 'mish-mash' than a 'movement.' Some advocates of open education, for instance, would shudder to be mistaken for supporters of individualised instruction, which they might view as extremely narrow and, in its competency-based form at least, the complete antithesis of 'open' education. Similarly, those with an interest in collaborative learning might regard independent study as altogether too solitary and lacking in what they see as essential interpersonal contacts, either with teachers or other learners. To some extent, such mutual suspicions are well-founded, and these

various terms are by no means synonymous. However, they do seem to constitute a constellation of ideas: collectively they represent an ideology "in which many . . . initiatives have passed over to the [learners], who are now expected to be much more independent, self-directed or, in a word, autonomous" (Dearden, 1972, p. 449).

The move toward increasing autonomy for adult learners is buttressed by many supporting arguments. Its proponents invoke such varied considerations as: rapid social and technological change, and the consequent need for constant new learning; the concept of democracy, with its vision of equality; changes in psychology and in the view of how individuals learn; cherished ideals such as liberty and individualism; and, especially in adult education, certain ideas about what it means to be adult in this culture. It is also based on a large and growing body of literature concerning the fact that adults can, and do, learn many things for themselves outside formal institutional structures. This phenomenon of people teaching themselves represents the second of several usages of the term 'self-directed' learning, although in this dissertation, it will be referred to as 'autodidaxy.'

The interest in both learner-control and autodidaxy is part of a much larger preoccupation with 'autonomy,' both as a social ideal, and an educational phenomenon, and many people refer to this broader goal, as well as its more specific manifestation within education, as 'self-direction.'

The focus of the dissertation is 'self-direction' in adult education. However, it can be seen that the term 'self-direction' is used to refer to at least three different phenomena: 'self-direction' as a generalised personal attribute (personal autonomy); 'self-direction' as the independent pursuit of learning in

non-institutionalised settings (autodidaxy); and 'self-direction' as a way of organising instruction (learner-control). This has accordingly necessitated an analysis of several distinct bodies of literature. It would have been possible to limit the study to any one of the three components which appear here, but as it is part of the present purpose to establish that these domains are separate, a study of each was called for.

B. STATEMENT OF THE PROBLEM

In the past two decades, a thin trickle of interest in the area has swollen into a veritable torrent of books, journal articles, dissertations, research reports and conference presentations. This abundance of material presents a problem, threatening, as it does, to engulf and overwhelm the researcher. But the lack of precision and clarity has even more undesirable consequences.

Although it is rarely made explicit, it is commonly assumed that there is some sort of connection between autonomy in learning, and personal autonomy in a wider sense. Some theorists, particularly in adult education, link the incidence of 'self-directed learning' outside formal instructional settings—'autodidaxy'—with personal autonomy. Others claim that the enhancement of personal autonomy is an outcome of increasing learners' control over certain features of the instructional setting. Others again seem to assume that an increase in learner-control will lead to an increase in autodidactic activity which, in turn, will result in enhanced personal autonomy. The situation is complicated by the fact that many theorists also hold the existence of personal autonomy to be a necessary prerequisite to the exercise of autonomy in learning. Accordingly, personal autonomy is viewed simultaneously as a *means* and as an *end* of

education.

This state of confusion is a stumbling block for practitioners and theorists alike. While professional differences of opinion are only to be expected, it is hard to take seriously a concept such as 'self-direction' which is used by different writers to mean so many different things. Many practical and theoretical problems ensue from this tendency of authors to confuse ends and means, and to lump together phenomena as diverse as independent study and autodidaxy. In particular, it is not unusual to find authors who begin by writing about autodidaxy, and end up making recommendations for the conduct of instruction in adult education, or *vice versa*. It will be argued that this tendency to view autodidaxy as simply one end of a continuum of instructional techniques ignores its unique features and has stifled research and thinking.

A second problem is that research into autodidaxy has effectively been stale-mated for several years. Despite one or two interesting findings, there has not been any major breakthrough or dramatic new line of inquiry opened up by researchers. A potentially fertile area of educational inquiry seems to have 'dried up,' and it will be argued in this dissertation that this is largely because investigators have not had a sturdy and defensible theoretical framework in which to ground research.

A third problem area concerns learner-control which, like autodidaxy, has yielded confusing and contradictory research findings and where, in recent years, there have been no significant new insights into the dynamics of the phenomenon. It will be argued in this dissertation that, for the most part, adult educators have not familiarised themselves with earlier research into learner-control, nor with related phenomena in other domains of education.

In summary, while the area of 'self-direction' is held to be central to the field of adult education, it is plagued by terminological imprecision, and by a lack of progress in research and, in the case of learner-control, in practice as well.

C. CONTEXT OF THE STUDY

It is widely acknowledged that the way in which any research problem is formulated or 'framed' (Schön, 1983) will influence the actual conduct of inquiry (Cohen & Manion, 1985; Garfinkel, 1981; Koetting, 1984; Pepper, 1942; Popkewitz, 1984; Sarbin, 1977). One of the most basic distinction concerns whether an issue or question is fundamentally one of psychology or sociology, and the choice of perspective is a matter of no small concern, for the adoption of one approach necessarily directs attention to certain aspects, processes or qualities of the learning situation, while at the same time obscuring or suppressing others. Accordingly, it is important to ascertain whether the issue of individualism in learning is basically a sociological or a psychological phenomenon (Garfinkel, 1981, p. 13).

At one level, it is clearly a psychological entity, and researchers have been justified in considering 'self-direction' as essentially a matter of individual preference or personal inclination. Within an environment in which individualism is widely, albeit tacitly, approved as a societal ideal (Lukes, 1973; Spence, 1985), it is not surprising to find that much research has been directed at exploring ways in which people's individuality may be recognised and enhanced in the learning situation. Alternatively, it is also clear that relatively little learning occurs in complete isolation, and that people are significantly influenced by the

expectations and perspectives of others - notably those who have had, or continue
to have, a major impact on their attitudes, habits, values and beliefs. As
Sullivan (1984) expresses it:

> The person...is embedded in real historical relations. She or he comes
> into a world that is already a momentum and where there is a solid,
> weighty and dense social structure in which the person is influenced
> and which he or she operates on. The personal world...is embedded in
> larger structured totalities that are impersonal in nature but
> nevertheless affect the viability of the personal world. (p. 53)

Acknowledging the importance of social and historical influences on individuals in
society, there are strong grounds for examining individualism in learning as a
sociological phenomenon, and some authors have actually adopted this perspective.
Brookfield (1984a), for instance, argues for a consideration of independent learners
within their socio-cultural milieux; Hargreaves (1980) claims that the educational
system is excessively concerned with individualism, and that this threatens
society's "organic solidarity," Borgström (1985) points to the role of 'self-directed
learning' in reproducing, and even exacerbating, social inequalities; and Shapiro
(1984) argues that individualisation of instruction is part of the hegemony-creating
and sustaining aspects of education generally. These writers are in the minority,
however, by far the majority of researchers and theorists have chosen to consider
self-direction from a psychological point-of-view.

Like many others, the present study is concerned mainly with
psychological questions. However, a more interpretive approach is advocated and
it is hoped that, as a result, these questions will be more broadly based than
some previous research in this domain. Even so, it is recognised that the
adoption of this approach will still leave untouched important and provocative
considerations of a sociological nature, and this, while constituting a distinct

limitation of the study, might serve to stimulate interest in some of the broader questions which are only treated superficially here.

D. NATURE OF THE STUDY

All fields of study develop and progress through the cumulative efforts of many researchers and theorists (T. S. Kuhn, 1970; Lakatos, 1970; Laudan, 1977). Individual contributions sometimes confirm and consolidate existing knowledge in a field, sometimes they make a novel contribution which results in the pursuit of new directions of inquiry. From time to time, an attempt is made to stop and take stock of the existing state of knowledge, and current directions in research. Such stock-taking is called meta-research, which is defined as "systematic study of the processes and products of inquiry which characterize a discipline or field of study" (Sork, 1982, p. 1).

Sometimes, research in a particular domain gets 'bogged down' or 'stale-mated', and little progress is made until some new perspective—often a revised epistemological formulation or a new research methodology—is proposed and accepted. Very often, the new approach is imported or borrowed from some other field of inquiry, but it may have the effect of restarting research, which subsequently makes quite rapid progress in new directions.

In adult education, there is, as Sork (1982) and others point out, an emergent tradition of meta-research. There are also instances of research traditions (for example that concerning motivational orientations of adult learners) which undergo something resembling a paradigm shift, and proceed with renewed vigour. The present study concerns the field of 'self-direction' in adult education which, it is argued, seems to have made relatively little progress in recent

years. The study is in the nature of meta-research, in that it draws on the work of other theorists and writers. It

(iii)   to compare the significance of 'self-direction' in adult education with its place in other sectors of education; follows several previous studies which have attempted to review and summarise parts of the same literature base (Moore, 1973; Coolican, 1974; Geis, 1976; Tough, 1978; Skager, 1979; Jankovic et al., 1979; Cross, 1981; Brookfield, 1982; Mocker & Spear, 1982; Caffarella & O'Donnell, 1985, 1986), but it differs from these in two major respects.

First, an attempt has been made to review and synthesise major themes in three distinct areas of research (personal autonomy, autodidaxy and learner control), and to search for underlying similarities and differences between the domains. The second major difference is that it considers the possibility of reframing research from a particular epistemological position. Thus, it contains not only what Sork (1982) has called a "critical or interpretive review of research on specific topics," but also a "taxonomy of needed research" from a particular perspective.

E. PURPOSE OF THE STUDY

The study was conceptual in nature, and had the following purposes:

(i)   to critically analyse the use of the term 'self-direction' in adult education and to ascertain whether there are differences among the various phenomena presently subsumed under that label;

(ii)   to critically review the literature, and to synthesise research findings on 'self-direction';

(iii) to compare the significance of 'self-direction' in adult education with its place in other sectors of education;

(iv) to identify and evaluate major assumptions underlying past and present research traditions in 'self-direction'; and

(v) to reconceptualise 'self-direction' from a constructivist perspective, with a view to formulating themes for future research.

F. METHODOLOGY

Two distinct approaches were used in undertaking this study. The first comprised a critical analysis and review of the literature in three domains - personal autonomy, autodidaxy and learner-control. In the case of autodidaxy, the bulk of the literature is in adult education, but in the case of personal autonomy and learner-control, material from elementary, secondary and higher education is also included.

As a result of this survey of the literature, a number of dilemmas, paradoxes or impasses in research were identified. These became the centrepiece for a second stage, based on a form of conceptual analysis. In this second stage, a particular world view or metaphysical commitment—constructivism—was examined. It is argued that many of the difficulties presently manifest in the literature could be resolved, or would not have arisen, if a constructivist perspective were adopted.

G. SIGNIFICANCE OF THE STUDY

As will be discussed in the body of the dissertation, adult education has long sought a star to which to hitch its wagon. As a field of study and practice, it has looked for a unique theoretical framework to distinguish it from other sectors of the educational domain. In choosing 'self-direction,' however, it seems to have chosen a 'falling star'; a field characterised by confusion, conflicting claims and, in the case of learner-control, a disappointing lack of success in enhancing learning outcomes.

This dissertation will clarify some of the imprecise thinking about the subject, and provide researchers and practitioners with a way of framing their thinking and practice that, it is hoped, will generate new insights and hypotheses for study.

H. OUTLINE OF THE DISSERTATION

Chapter one comprises an introduction, and background to the study. Chapter two begins with an overview of 'self-direction,' and an attempt to explicate why it has become such a central theme in the discourse and recent practice of adult education. It is shown that the term 'self-direction' is used in the literature to refer to at least three different phenomena, various objections to this situation are noted, and it is argued that, to avoid confusion, the term 'self-direction' should be abandoned and replaced in each of the three usages.

Chapter three analyses literature pertaining to personal autonomy, derives a working definition of personal autonomy, and examines the extent to which its attainment is influenced by educational (particularly adult educational) interventions.

Chapter four presents a critical analysis and review of the literature on 'self-directed learning' in what Jensen (1960) referred to as 'natural societal settings,' or autodidaxy. Chapter five presents an analysis of research on the skills and competencies of the autodidact, and on the development of such competence in self-teaching.

Chapter six contains an overview of learner-control, its various degrees and dimensions, derived from a study of the literature in elementary, secondary and higher, as well as adult, education. A number of the arguments commonly raised in favour of increasing learner-control within adult education are critically analysed.

Chapter seven deals with the transition, for both teachers and learners, Chapter nine acts as a bridge between the literature surveys which constitute the first part of the study, and the subsequent reconceptualisation of self-direction from a constructivist perspective. It introduces the notion of the learner's *sense* of personal control, and then compares and contrasts the assumptions implicit in much previous research into self-direction with those underlying constructivism. from situations of teacher-direction to those of learner-control. It is demonstrated that frequently programs which ostensibly lead to increased It demonstrates how, in the context of adult education, a constructivist perspective might lead to productive new directions in research, theory-building and practice in 'self-direction' (autodidaxy and learner-control). learner-control do so in fairly minor or inconsequential ways, and that there are significant conceptual as well as practical difficulties in trying to promote autonomy within formal instructional settings.

Chapter eight acts as a bridge between the first and second parts of the

dissertation. It reviews the assumptions underlying varying paradigms in educational research, and demonstrates the inadequacy of the positivistic approach. It argues that the interpretive paradigm (in the form of constructivism) is more congruent with, and appropriate to the study of, the phenomenon of 'self-direction.'

Chapter nine contains an explication of constructivism as a way of viewing educational phenomena. It considers the constructivist view of human nature, the constructivist understanding of knowledge, and the constructivist view of learning. Chapter ten introduces the notion of the learner's *sense* of personal control, and then compares and contrasts the assumptions implicit in much previous research into self-direction with those underlying constructivism.

Chapter eleven attempts to reframe research into 'self-direction' using a constructivist perspective. It demonstrates how, in the context of adult education, a constructivist perspective might lead to productive new directions in research, theory-building and practice in 'self-direction' (autodidaxy and learner-control). It is shown that constructivism allows for a new way of looking at enduring problems. However, because it is a different paradigm from that which underpins most research in this field, it actually calls for a whole new approach to research in this domain.

The twelfth and final chapter is a synthesis of the preceding ones. It explains the distinction between learner-control and autodidaxy from a constructivist perspective, and summarises the main findings of the study.

II. THE PLACE OF 'SELF-DIRECTION' IN ADULT EDUCATION

A. ADULT EDUCATION'S SEARCH FOR AN IDENTITY

Although the primary focus of this dissertation is 'self-direction in learning,' it seems appropriate to begin by exploring why self-direction should be a valued feature of adult education at all.

Throughout its history, but more particularly in the past decade or so, attempts have been made by scholars and theorists to identify, analyse, define, redefine, map or otherwise delineate the essential characteristics or boundaries of the field of adult education (e.g., Lindeman, 1926; Bryson, 1936; Jensen, Liveright & Hallenbeck, 1964; Schroeder, 1970; Champion, 1975; Campbell, 1977; Little, 1979; Boyd, Apps & Associates, 1980; Rubenson, 1982; Tight, 1983; Sinnett, 1985). A number of these attempts are the result of "professors of adult education, nervously trying to stake out a territory separable from other territories, both within educational studies in particular, and the social sciences and humanities in general" (Welton, 1986, p. 8).

Several features are commonly mentioned which ostensibly differentiate adult education from other sectors of education: it has an extremely diffuse and nebulous mandate; it is distinguished by an ethos of voluntarism among both teachers and learners (including what Ranger (1985) describes as its 'nocturnal ritual'); it claims to place a higher emphasis on meeting the needs of learners than other sectors of education do; and much of its activity is characterised by what Bernstein has called weak classification and weak framing (Bernard & Papagiannis, 1983; Stalker-Costin, 1986). As Keddie (1980) points out, many of these claims are ideological, rather than empirical, deriving from what Welton

(1986) has characterised as the attempt by adult education to develop from within itself its epistemological foundations.

According to Welton (1986), attempts to provide a theoretical framework for adult education have been based on a "shaky and porous foundation," namely an 'adult characteristics episteme.' He goes on to examine critically the three 'modalities' within this episteme: firstly, the claim that adult education is distinctive because there are forms of knowledge which are distinctively adult (the 'adult knowledge' modality); secondly, because adult educators seek to meet the needs of their clients through flexible and responsive provision and open access (the 'needs, access and provision' modality); and thirdly because of something special and unique about teaching methods [1] employed with adults (the 'methodological' modality). This last has, in turn, been dominated by two concepts and their attendant bodies of literature: andragogy and self-directed learning. Whilst recognising the close relationship, and strong interconnections, between these two notions, it is the latter which claims the attention of this present work.

1. Definitions of adulthood

Central to each of these three modalities, and indeed to the 'adult characteristics episteme' itself, is the notion of adulthood, and accordingly, over the years, the construct of adulthood has received a good deal of attention. In 1964, in a paper on "The Definition of Terms," Verner wrote:

. . . the precise meaning of the term *adult* is actually quite vague - particularly when it is used to identify the clientele of adult education.

The notions of who is an adult vary from "those past school age" through "grownups" to "mature individuals" - perceptions so indefinite as to be all but meaningless. Attempts to arrive at a

precise identification of an adult tend to fall into the categories of age, psychological maturity and social role. (p. 28)

Subsequent research has tended to emphasise one or other of these three categories; age, psychological maturity or social role. However, notwithstanding nearly two decades of further research and enquiry (Bova & Phillips, 1985), there are still few, if any, satisfactory and comprehensive conceptualisations of adulthood. Perhaps this is because adulthood is a residual concept, what is left after defining other stages in the human life cycle (Jordan, 1978). Perhaps it is simply because adulthood is such a broad, amorphous and diffuse phenomenon.

Despite Paterson's (1979) assertion that; "Adults are adults, in the last analysis, because they are older than children" (p. 10), age has proven to be an unsatisfactory criterion for determining the threshold of adulthood. Studies have variously cited 16, 18 or 21 as the 'magic age,' based on laws which permit one to vote, drink, drive or be drafted into the armed services (Bova & Phillips, 1985, p. 38). Yet, it is not difficult to think of instances in which age alone is a poor indicator of adult status: the eldest child who, orphaned at age 15 becomes responsible for her or his younger brothers and sisters or, at the other extreme, the 25 year old student who, still living at home, is protected from life's vicissitudes by his or her doting parents.

According to H. M. Kallen (1962), "adulthood, even if determinate biologically, is culturally a variable . . . Images of it are collective ideals which the societies committed to those ideals strive to have their young embody. The common name for those strivings is education" (p. 38). In our society, it is true that our ability to recognise ourselves and others as adult is based, at least in part, on developing independence, along with the adoption of responsibilities (such

as worker, spouse, parent, citizen etc.). However, definitions of adulthood based on social roles have a disconcerting tendency towards circularity: "The adult . . . can be distinguished from a child or adolescent by his or her acceptance of the social roles and functions that define adulthood." (Darkenwald & Merriam, 1982, p. 77)

a. The place of autonomy in defining adulthood

The third class of definitions, namely those concerned with psychological maturity, are potentially the most promising for the present purpose. Some of these definitions portray adulthood as the development or acquisition of an interrelated set of psychological characteristics, usually including independence or autonomy or freedom from the influence of others. Other definitions, such as those of Maslow or Rogers, "stress the idea that adulthood is a *process* rather than a condition, a process in which men and women continually strive toward self-actualization and self-fulfilment." (Darkenwald & Merriam, 1982, p. 40) Whether viewed as a *process* or a *condition*, however, the common element is the achievement of autonomy (Birren & Hedlund, 1984).

This fact has profound significance for adult education. Darkenwald and Merriam (1982) claim that the mission of adult education "is not preparatory, so much as it is one of assistance - helping adults to realize their potential, make good decisions and in general, better carry out the duties and responsibilities inherent in the adult role." (p. 77) Thus, it would appear that one of the primary tasks of adult education is to develop and to permit the exercise of individuality (Hostler, 1981, p. 37) and autonomy;

>. . . while the fostering of mental autonomy is an important objective
>in the education of children, it is of special importance in the

education of adults. In deeming someone to be an 'adult,' we are ascribing to him various rights and responsibilities in virtue of certain distinctive moral and personal qualities which we presume him to have . . . the qualities of impartiality, objectivity and balance, at least in some minimum degree, and the ability to draw on his experience with some measure of sense and skill . . .

The project of fostering mental autonomy is the project of helping adults to be adult . . . (Paterson, 1979, pp. 120-1)

The argument thus far might be summarised as follows: adult educators have sought a unique and distinctive foundation for their work. Of all the criteria which are alleged to provide such a distinctive foundation, the most compelling and unique, is probably the nature of the client group itself (i.e., adults), and central to this construct of adulthood is the notion of autonomy. This then raises the question: What is meant by the term autonomy in this context?

B. A QUESTION OF TERMINOLOGY

In adult education, the term most commonly used as a synonym for autonomy is 'self-direction.' However, it is not necessary to venture far into the literature to discover that 'self-directed' and 'self-direction' have a number of meanings.

For many authors, self-direction is seen simply as a method of organising instruction. Thus, in 1967, MacNeil undertook "A comparative study of two instructional methods . . . Lecture-discussion and self-directed study". Three years later, in 1970, Himmel presented a dissertation entitled; "A critical review and analysis of self-directed learning methods utilized in the teaching of undergraduate psychology courses". Redditt's (1973) doctoral dissertation comprised; "A quasi-experimental comparison of a group lecture method and a self-directed

method in teaching basic electricity at the college level," and in 1978 Harrison wrote an article which counselled on "How to design and conduct self-directed learning experiences"!

For others, self-direction is not so much a method of teaching as a characteristic of learners. Cheren (1983) for instance writes of; "Helping learners achieve greater self-direction," Kasworm (1983b) presents a model of increasing self-directedness in her article on "Self-directed learning and lifespan development" and, since the appearance of Guglielmino's Self-directed Learning Readiness Scale (1977), there has been a succession of studies based on the notion that self-direction is a measurable attribute, distributed throughout the adult population (Bayha, 1983; Box, 1982; Brockett, 1983b; Curry, 1983; Mourad, 1979; Sabbaghian, 1979; Savoie, 1979; Skaggs, 1981; Torrance & Mourad, 1978).

Moreover, lurking beneath these different interpretations is an even more basic distinction. Although 'self-directed learning' inside formal instructional settings has captured the imagination, and consumed the energies, of many adult educators, the popularity of the term is due to research findings about the extent of 'self-directed learning' outside formal instructional settings. In the past twenty years, dating from the original work of Tough (1966), there has been a growing awareness that most, and perhaps all, adults engage in self-initiated, self-planned and self-executed learning projects largely independent of any institutional affiliation or formal support. It is the rapidly burgeoning body of literature about this phenomenon which has thrust the term 'self-directed' into such prominence, and in many respects transformed 'self-direction' into a rallying point for adult educators.

1. Objections to the term 'self-direction'

These are all important concepts. However, they are by no means synonymous, and it is confusing when one term—self-direction—is applied to describe such varied phenomena. Accordingly, and although it might be considered somewhat quixotic to attempt to dislodge a term which has become so firmly embedded in the discourse of adult education, there are many sound reasons for advocating the abandonment of the terms 'self-direction' and 'self-directed' in favour of something else.

The first objection is that 'self-directed learning' has been contaminated through overuse. In particular, indiscriminate use has blurred the distinction between the sort of 'self-directed learning' which is possible in formally constituted adult education programs, and that which takes place in situations not formally designated as 'educational' or 'natural societal settings' (Jensen, 1960). It will be argued in this dissertation that there are material differences between these activities, differences which should be reflected in the adult education lexicon.

Secondly, there is confusion as to whether it is a process or a product: 'self-directed learning' can be an activity in which people engage, or the outcome of such an activity. This derives from the fact that the word learning is, as Brookfield (1984a) points out, "a gerund; that is a word which functions colloquially as both a noun and a verb" (p. 61).

A further disadvantage of the term 'self-directed learning' is that in may respects the notion of self-direction is redundant. Since it is impossible for anyone to *learn* on behalf of another, one could argue that all learning is in effect self-directed. Sometimes, self-directed learning is contrasted with other-directed

learning, but this usually refers to control of the external conditions, rather than control of the act of learning itself. This leads to the final point.

The final charge against 'self-directed learning' is that—even disregarding the above criticisms—it is too narrow. It does not adequately represent the phenomenon of managing one's own education, which is usually implied. In 1983, at the Annual Conference of the American Education Research Association, Boshier argued that the term 'education' "should be reserved to describe the process of managing external conditions which would facilitate . . . internal change [i.e., learning]. Hence an adult . . . who assigned his or her own learning goals, who located appropriate resources, and who evaluated the progress made in attaining those goals would be engaged in *self-education*, rather than *self-directed learning*" (Brookfield, 1984a, p. 61).

However, even the term 'self-education' is unacceptable. As Hamm (1982) points out, it may imply any one of several things: education *of* the self, education *about* the self, or education *by* the self. Of these three, it is only the third which is of interest for the present purpose, and many authors, from Plato onward, have written at length of the inconceivability of anyone actually educating himself or herself in the fullest sense of the term. As Hamm states:

> Proponents of self-education make much of the notion of self-teaching. But is this logically possible? One cannot teach if one is not able in some way to display the subject matter to be learnt. If one does not know that subject matter, then it is not only pointless to teach oneself, but it becomes impossible to do so, because one cannot learn what one already knows. If one does not know the subject matter, it is still possible to learn it, say from experience or trial and error, but that is not teaching unless one mistakenly equates teaching with learning. (p. 95)

All in all, despite its widespread use in the adult education literature, and even

its adoption by authors who had earlier advocated alternative terms (e.g. Brookfield, 1980a, 1980b, 1981a, 1982a, 1982b, 1984a, 1984b, 1985c, 1985d; Penland, 1977, 1979, 1981), the term 'self-directed learning' has been found to be too vague for the present purpose. Accordingly, it was decided to make use of alternatives to cover the various phenomena presently subsumed by the one term 'self-directed learning.'

2. Suggested alternative terms

One potential solution would have been to invent some new words— a process which Glaser and Strauss (1967) refer to derisively as 'Intellectual capitalism' (p. 11). The alternative was to scan the literature for a term, or terms, considered to be more precise, or at least with discrete ranges of meaning. This procedure yielded no less than thirty words and phrases[2] which are either partially or wholly interchangeable with 'self-directed learning' in one or other of its meanings. Unfortunately, many of these alternative terms also suffer from some of the logical or linguistic deficiencies expressed above, or else they, too, have been used rather indiscriminately. Nonetheless, it is hoped that their use in this present context will avert some of the ambiguity which attends their appearance in the wider literature.

Basically, there are three uses for which alternative terms were selected. These are: 'self-direction' as a personal attribute (which embraces self-directedness in learning); 'self-direction' as the individual, non-institutional pursuit of learning opportunities in the 'natural societal setting'; and 'self-direction' as a mode of organizing instruction in formal settings.

3. 'Self-direction' as a personal attribute

When adult education authors apply the term 'self-direction' or 'self-directed' to people, they usually mean one of two things. Either they refer to a general disposition towards taking control of, and giving direction to, one's life or else they mean capable of undertaking learning without outside direction. These are assumed to be linked. It has been decided to refer to 'self-direction' in the former sense as 'personal autonomy.' This is dealt with in chapter three.

In the second case, self direction or self-directedness in learning also has two meanings. It may refer either to the propensity to accept and exercise control over valued instructional functions within an instructional setting, or else the ability and willingness to learn things for oneself, without institutional support or affiliation. The term 'independent study' or 'learner control, will be used to apply to the first situation, 'autodidaxy' or 'autodidactic learning' to the second.

There is a relationship between these various characteristics (personal autonomy, autodidactic learning and independent study) but, as will be discussed later, they are not necessarily synonymous, nor does the existence of one necessarily imply the existence of the others.

4. 'Self-direction' in natural societal settings

To identify the situation where the learner voluntarily initiates, plans, conducts and evaluates his or her own learning project or enquiry without any institutional framework (Jankovic et al., 1979, p. 5), the term 'autodidaxy' will be used. This is equivalent to Brookfield's (1981, 1982) formulation of 'independent learning,' Gibbons and Phillips' (1978, 1979, 1982) notion of 'self-education,' Strong's (1977) concept of 'autonomous learning,' and the

individual, self-planned component of Tough's (1967, 1978, 1979a) 'learning projects' or 'major learning efforts.' The term autodidaxy is favoured for several reasons.

For a start, it describes a unique educative situation, which should not be confused, in the reader's mind, with any other. Secondly, it embodies the dual notions of teaching and learning, and moreover, the prefix 'auto' means more than just 'self,' but implies both:

1. "independence, freedom of action, and

2. a process carried out with one's own resources, without outside authority"

    (Jankovic et al., 1979, p. 15).

Thirdly, after an extensive review of current usage and literature in both English and French, it was endorsed by the 1979 'European expert meeting on the forms of autodidactic learning' (Jankovic et al., 1979).

As Tough and others have pointed out, there will be occasions when an autodidact will turn to someone else for help. It may be a relatively minor interchange, or it may turn into a more extensive and protracted relationship. However, so long as the initiative rests with the learner, who still has undisputed control over the twin dimensions of objectives and evaluation, this phenomenon is still treated as autodidactic learning, albeit in a modified form, and accordingly it will be referred to as 'guided' or 'assisted' autodidaxy. In practice, it may prove extremely difficult to distinguish assisted autodidaxy from independent study. In view of the propensity of adult education agencies to conduct their activities outside 'formal' settings, there may be virtually no detectable difference in the external appearance as judged by an outside observer, and the only way to ascertain which it is, would be by referring to the

intentions and understandings (and perhaps misunderstandings) of the people involved.

This issue is dealt with in greater depth later, but it raises the fact that autonomy may best be viewed as a variable which has both personal and situational characteristics and that, as Dearden and others have commented, one of the defining characteristics is whether or not, in any particular situation, the actor considers himself or herself to be acting autonomously.

5. 'Self-direction' in formal instructional settings

Many adult education activities occur in contexts recognisably similar to other sectors of education. The physical setting may be different (sometimes more luxurious, but frequently more frugal and ascetic); the pupils may be referred to as 'learners' or 'participants'; and the teacher may have some other title such as trainer, helper, tutor, guide, facilitator, coach or instructor. Nevertheless, there is a recognized, pre-existing relationship, based on a complex network of mutual expectations between the teacher and the taught, and a number of (mostly tacit) rules governing their conduct towards each other.

Among these is the expectation that the teacher will accept responsibility for certain functions in the instructional situation, and that the learner will be responsible for other, different functions. Although some authors write as if the teacher's responsibilities and those of the learner are simple, mutually exclusive domains which can be distinguished from one another on the basis of objective criteria, others acknowledge that control over the teaching/learning situation is more like a continuum than a dichotomy. It is perhaps useful to think of these actors as occupying positions on a continuum extending from teacher-control at

one extreme to learner-control at the other, and the deliberate surrendering of certain prerogatives by the teacher is accompanied by the concomitant acceptance of responsibility by the learner or learners. In the sense that there can be a dynamically changing equilibrium in this arrangement, it is reminiscent of Mark Hopkins' famous image of the teacher on one end of a log, with the learner on the other end.

Diagrammatically, the situation may be portrayed as a Tannenbaum and Schmidt type continuum, where each diminution in the teacher's control may be compensated for by a corresponding increase in the learner's, so that it resembles a sliding scale from complete teacher-direction at one extreme to total learner-control at the other. Both Gibbons and Phillips (1982, p. 76) and Millar et al. (1986, p. 437) include such diagrams to express the gradual shift in control from one party to the other. To describe this continuum, the term 'learner-controlled instruction' will be used.

Stance of the teacher:	Tells	Sells	Tests	Consults	Joins

Exercise of authority by the teacher

Exercise of responsibility by the learners

Stance of the learner:	Submits	Buys	Approves	Chooses	Shares
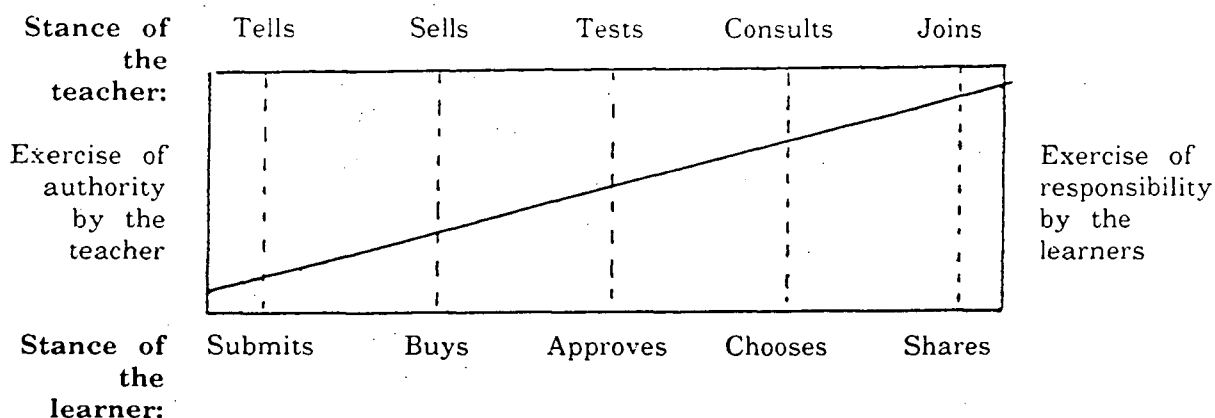
Figure 1: A Hypothetical learner-control continuum
(adapted from Millar et al., 1986, p. 437)

Although the term 'learner-control' was reasonably commonplace in the

1960s (e.g., Campbell & Chapman, 1967; Mager & McCann, 1961), it suffered a decline in usage, presumably because of its unfashionable 'behaviouristic' connotations. However, it was rehabilitated by Snow in 1980 and, for the present purposes, has the advantage that it is logically possible to speak of learner-control as "both a dimension along which instructional treatments differ, and a dimension characteristic of individual differences among learners." Thus, as Snow points out, "it is perhaps the first instance of an aptitude and treatment variable being potentially definable in common terms" (1980, pp. 157-158).

If learner-control is conceived of as a range or continuum (or more likely a series of continua, for it is possible to exert differing *degrees* of control over various *dimensions*), then one end of the range will involve a great degree of learner control over valued instructional functions. Various instructional strategies could be placed at intervals along this continuum, to imply the differing balance of teacher-direction and learner-control:
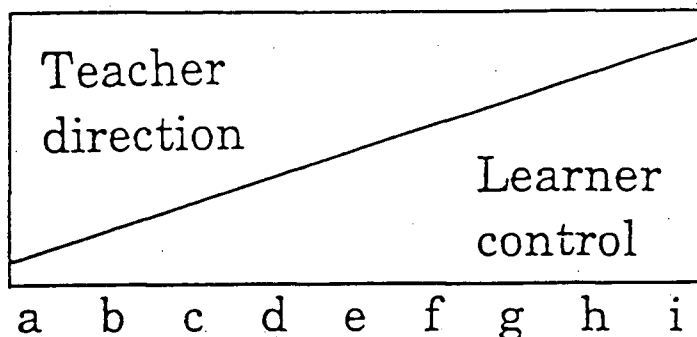
Figure 2: A hypothetical learner-control continuum showing different instructional strategies

At the far left might come indoctrination (a), with almost total teacher-direction and little room for learner-control at all. Then might come, in sequence, lectures (b), lessons (c), programmed instruction (d), individualised instruction (e), personalised instruction (f), computer managed learning (g), discovery learning (h)

etc., until finally the point is reached where learners have accepted almost all control over valued instructional functions. This point, at the far right-hand edge of the continuum (i), has been called here 'independent study.'

In discussing the relationship between individualised instruction, and independent study, Percy and Ramsden (1980) write:

> Individualization of learning tasks, observe Dressel and Thompson (1973), can be the 'first step toward independence.' . . [it] may foster the motivation for independent work and, if properly conducted, will merge into independent study as responsibility for direction is transferred from teacher to student. But independent and individualized study are not equivalent. (p. 6)

As will be discussed later, independent study is the form of learner-control which most closely resembles autodidactic learning, but this resemblance is misleading, and the concepts are not the same. Just as individualised instruction is not synonymous with independent study, it will be argued here that independent study is not synonymous with autodidaxy.

a. Independent study as a form of learner-control

Like 'self-directed learning,' 'independent study' is a catch-all for all manner of educational practices having some bearing on the notion of learner-control. In reporting attempts to survey usages of the term, and to distill out of them common themes, Moore (1973b) wrote:

> in our first explorations of the literature, among references to 'independent study.' . . we found the following: "Why SUNY students fail to complete Independent Study courses" (the term 'Independent Study' here referring to correspondence courses); "a system of Instruments for the management of independent study" (here it meant individualized, programmed instruction in a school setting); "Independent Study in secondary schools" and "Final report on an Independent Study program for the academically able" (which described supervised reading programs in schools); and "A rationale and a role for

Independent Study" (which focuses on out-of-school, part-time degree programs for adults) . . . (p. 663)

In addition to all these other applications, the term 'independent study' has been used since the 1920s in American higher education to refer to; "teaching and learning which focuses on the individual instead of the group, which emphasizes the person-to-person relationship between teacher and student" and "the pursuit of special topics by individual students under the guidance of faculty advisers apart from organized courses" (Bonthius et al., 1957, pp. 3-8) For a long time, such practices were restricted to 'superior' or 'honors' students (Felder, 1963, 1964; Stein, 1954; Umstaddt, 1935), yet by 1960, Hatch and Bennet were able to state that:

> Of late, there has been much experimentation with independent study quite outside of 'honors' programs. In addition, there are other programs or practices that advance the purpose of independent study, but are not always identified with it. Included are Socratic, problem and case methods of instruction, student research and administrative and curricular practices that introduce greater flexibility into academic programs and so provide an opportunity for independent study. (p. 1)

Thirteen years later, in 1973, Dressel and Thomson published another major survey in which they defined 'independent study' as: "the student's self-directed pursuit of academic competence in as autonomous a manner as he is able to exercise at any particular time" (p. 1). Aside from importing yet another term into the field ('autonomous'), this definition also introduced the notion that independent study might be a situationally variable construct, depending on the individual student's capability to act 'independently' in a particular situation. The part of the term which has caused much of the confusion is 'independent,' and it was this which prompted Percy and Ramsden (1980) to observe:

> Talk of student 'independence' needs to begin from the question: of what is the student to be independent? In theory, at least, he might be independent of teachers, of fellow students, of prescribed course content or methods of learning, of specialisms and publicly acknowledged categorizations of knowledge, of limitations on sequence or pace of learning, of assessment, even of academic conventions in the use of evidence and sources. When a student simply works on his own on individually set tasks, when he has some control over the pace or mode of learning, or some choice of options, it may be more realistic to talk of 'individualized' study. (pp. 5-6)

This quote clearly acknowledges the notion of varying levels of independence, a point also recognised by Passmore et al. (1963) in their survey of teaching in Australian universities:

> We need . . . to begin by distinguishing a number of different levels of independence. At one extreme, the student is thought of as, in general, doing no work whatever beyond attending lectures, taking part in practical classes, reading his textbook, preparing for examinations. At this level, he is regarded as doing 'independent work' if he so much as opens his mouth in a discussion class, works at a set assignment, or reads any book or periodical except a set text. Thus in some departments the introduction of a 'tutorial' of any sort—even a 'tutorial' which is basically a class for the working out of exercises—the setting of any sort of assignment, the recommendation of any reading whatsoever, is thought of as the encouragement of independent work. At the opposite end of the scale, 'independent' work is defined as consisting in the tackling by the student of problems he has thought up by himself, by methods he chooses to employ, with the teacher acting only as a supervisor. So when departments describe themselves as making provision for independent work or say that they cannot possibly do so, they may be thinking of independent work at different levels. (p. 216)

For many, the term 'independent study' has special connotations relating to a physical separation of teachers and learners (e.g., Wedemeyer, 1975, p. 57). In the present context, no such significance is attached to it. Admittedly, it is hard to imagine an instance of independent study which would be carried out in a contiguous or face-to-face mode, but the separation of the learner from the

teacher is not necessary. Instead, it is more a function of independence in the form of "freedom in the self-determination of goals and activities" and of "learning programs which are carried on to the greatest extent possible at the convenience of the learner" (Wedemeyer, 1971, p. 550).

Overall, the definition which has been found most appropriate for the present dissertation is that proposed by Forster (1972) in her philosophical and historical analysis of independent study:

> Independent study is a process, a method and a philosophy of education: (1) in which a student acquires knowledge by his own efforts and develops the ability for inquiry and critical evaluation; (2) it includes freedom of choice in determining those objectives, within the limits of a given project or program and with the aid of a faculty adviser; (3) it requires freedom of process to carry out the objectives; (4) it places increased educational responsibility on the student for the achieving of objectives and for the value of the goals. The primary goals of independent study are to contribute: (1) to the development of an intellectually free and responsible person by placing greater responsibility on the student for his own education; (2) to the development of an independent person by creating instances in the educational process which require students to choose objectives and carry out decisions; (3) to the development of a person capable of continuing his education . . . by developing the skills of inquiry and critical thinking and increasing the student's active participation in his own education. (p. ii)

In this dissertation, the convention to be observed is that when the teacher or trainer determines objectives, sets tasks, or gives only some limited control over dimensions such as pace, mode or sequence of learning, such a situation would be classed as 'individualised instruction.' But the more the learner exercises independence from situational constraints or from 'publicly acknowledged categorizations of knowledge' the more they engage in independent study. For the present purposes, independent study does not necessarily imply solitary activity, it might well embrace 'self-directed groups' (Beach, 1965) as well as individual

learners. 'Independent study' is characterised by a high degree of learner-control over many instructional elements, including the setting of objectives, choices about pacing, content and methodology, and assessment of learning outcomes. As a result, it is frequently confused with the learning undertaken outside institutional structures, or what is referred to here as autodidaxy.

C. SUMMARY

In this chapter, it has been argued that adult education as a field of study and practice has sought unique characteristics to distinguish it from other sectors of the educational domain. Central to the enterprise of adult education is the construct of adulthood, and central to adulthood is the notion of 'self-direction.'

Self-direction, however, is applied to a number of different phenomena. Some see it as a personal characteristic or quality - either a general disposition or one which manifests itself in learning situations, others as the independent pursuit of learning beyond institutional frameworks, and others as a way of conducting instruction. For a number of reasons, this chapter advocates the abandonment of the term 'self-direction' in favour of several alternatives. Thus self-direction as a personal attribute is referred to as personal autonomy, self-direction in natural societal settings is called autodidaxy, and self-direction in instructional situations is referred to as learner control.

It was argued that learner-control might be thought of as a continuum, and that the end of the continuum which maximises learner-control could be referred to as 'independent study.' In many respects, independent study appears to resemble aotodidactic learning. However, it is argued here that the concepts

are not synonymous, and that educational agents such as teacher cannot make learners into autodidacts simply by diminishing their exercise of authority.

The next chapter will consider what it means to be personally autonomous, and whether or not personal autonomy can be influenced by educational interventions or educational experiences, in particular in adult education.

III. 'SELF-DIRECTION' AS A PERSONAL ATTRIBUTE

A. INTRODUCTION

As mentioned in chapter two, the term 'self-direction' is applied to people—as a personal attribute or characteristic—and to learning situations. In this dissertation, 'self-direction' in the former sense will be referred to as 'personal autonomy.' It is the purpose of this chapter to analyse literature pertaining to personal autonomy, to derive a working definition of it, and to examine the extent to which its attainment may be attributed to educational (particularly adult educational) interventions.

The term autonomy literally means 'self-rule'. Originally, the term applied to the property or characteristic of cities in ancient Greece; "The city had *autonomia* when its citizens were free to live according to their own laws, as opposed to being under the rule of some conquering or imperial neighbour" (Dearden, 1972, p. 448). In due course, the term was extended to smaller social groupings and the parallel between a self-governing city-state and an individual person eventually led to the adjective 'autonomous' being applied to persons as well as cities: "By analogy, the autonomous person is an independent agent, one who is in command of himself, the author of his own work, deeds and way of life, not subject to the authority of other persons or things" (B. Gibbs, 1979, p. 119).

In his paper on 'Autonomy and authority in education', B. Gibbs defines the essential characteristics of autonomy as intellectual self-determination, fortitude and temperance. These personal qualities, he argues, are precisely the cardinal virtues which Plato delineated in *The Republic*. Gibbs (1979) goes on to

demonstrate the parallels which Plato drew between the city and the individual soul, where the proper task of education is to establish within the soul something analogous to the constitutional government of the city. He deals with each of the three aspects of autonomy in turn, and notes that; "Just as the several elements of a self-governing nation must be unified and at peace with one another, so in a temperate soul there is 'friendship and accord' between the elements" (p. 123). In everyday discourse, the term 'autonomy' is used to denote a state of freedom, of independence, and perhaps of self-sufficiency.

Many people have attempted to define what may be meant by autonomy, and its multidimensional nature is reflected in its many possible definitions. Thus, an autonomous person is one:

* whose life has a consistency that derives from a coherent set of beliefs, values and principles (Benn, 1976);

* who engages in a "still-continuing process of criticism and re-evaluation" (Benn, 1976);

* who "is obedient to a law that he prescribes to himself" (Rousseau);

* whose thoughts and actions, being determined by himself, "cannot be explained without referring to his own activity of mind" (Dearden, 1972);

* who demonstrates a responsiveness to his or her environment, and the ability to make creative and unique responses to situations as they arise, rather than patterned responses from his or her past (Jackins, 1965);

* who is "capable of formulating and following a rule, pattern or policy of acting and working" (Gibbs, 1979);

* who has independence from external authority, free from the dictates and interference of other people (Gibbs, 1979);

*   who has mastery of himself or herself, free from disabling conflicts or lack of co-ordination between the elements of his or her personality; and

*   who, instead of taking over unquestioningly the judgements and opinions of others, scans evidence, examines assumptions and traces implications - in short, uses his or her reason (Paterson, 1979).

Two comments with respect to the above list are called for. First, many of these definitions emphasise the highly individualistic, situationally variable and psychologically complex nature of personal autonomy; features which should be, but often are not, reflected in the research paradigm used to study 'selfdirection' in learning (see chapter eight). Second, definitions such as the foregoing accord with common-sense understandings of the concept of autonomy. However, if the development, enhancement, or recognition of personal autonomy is to be acknowledged as a central feature of the enterprise of adult education, it is essential to have a more specific idea of what an autonomous person is like. Such an idea is expressed by Krimerman (1972):

> . . . if we cannot distinguish persons from objects, self-actualized individuals from those who lack any distinctive human excellences, then we can have no hope of finding reliable ways of liberating the former from within the latter, nor of developing (Rogerian) men "from whom creative products and creative living emerge" . . . We will be unable to assist ourselves or others in enlarging the scope of choice and autonomy or in moving towards what we think of as the most distinctive and desirable forms of human activity. (Krimerman, 1972, pp. 333-4)

Accordingly, the next part of this chapter will review literature on personal autonomy and will include an operational definition of what might usefully be meant by the term.

B. THE CONCEPT OF PERSONAL AUTONOMY

In discussing the sort of evidence one might search for to ascertain whether or not a person was autonomous, B. Gibbs (1979) distinguishes two conceptions of autonomy; those which concentrate on its intellectual dimensions, and those which regard it as more of a moral quality:

1. In one view, autonomy is equated with *critical intelligence, independence of thought and judgement, discernment,* involving not necessarily a high degree of intellectual originality and enterprise, but at any rate a readiness to think things out for oneself free from bias and prejudice . . . This conception of autonomy is probably the most familiar, for it is part of an individualistic, anti-authoritarian ideology which is very deep-rooted in Western capitalist democracies . . . (p. 121, emphasis added)

2. The other conception "envisages autonomy as fundamentally a *moral virtue* or a disposition of character rather than intellect: self-mastery or self-discipline, having command of one's own feelings and inclinations." (p. 121), where "self-mastery is conceived as something like what used to be called fortitude, or . . . temperance, or a combination of the two." (p. 122)

Crittenden (1978), for his part, writes of three overlapping components or dimensions to autonomy:

1. **"Intellectual autonomy** would require in the first place that a person not accept any of his important beliefs primarily on the authority of others, but on his own experience, his own reflection on evidence and argument, his own sense of what is true and right . . .

2. **"Moral autonomy** . . . in addition to independence of thought in determining and applying criteria of moral judgment . . . also includes the

executive capacities for carrying into practice what one decides should be done. The possession of these capacities is commonly described by such terms as tenacity, resoluteness, strength of will, self-mastery[3].

3.   ["**Emotional autonomy**] implies not simply that a person would exercise self-mastery in the face of strong emotional involvement, but that he would remain emotionally detached in his relationships to other persons and things" (p. 108, emphasis added).

Partridge (1979) argues that the development of personal autonomy is a sufficiently important goal that it justifies the compulsory imposition of liberal education on children, and the violation of the *prima facie* right to non-interference. She claims that three conditions distinguish the autonomous person: freedom of choice, rational reflection and strength-of-will.

The first of Partridge's criteria, freedom of choice, concerns "freely chosen acts . . . for which the agent has causally operative reasons as opposed to rationalizations" (p. 65) for acting in a particular way. "We do not attribute the exercise of autonomy to anyone whose freedom is constrained either outwardly or inwardly" (p. 65). Outward freedom implies the absence of physical constraints (such as violence or threat of violence), and psychological constraints (including, but not limited to, hypnosis and other forms of psychological manipulation). Inward freedom has been dealt with at length by R. S. Peters (1973), and includes the absence of acute deprivation, hysteria, paranoia, obsessions and delusions, psychopathy and various forms of compulsions such as kleptomania (pp. 123-124).

Partridge's second criterion for identifying autonomous people is rational reflection, and she goes on to define what is meant by this term; "in saying

that rational reflection is a necessary condition of autonomy, we are saying two things: (1) that one must have reasons for one's behaviour; and (2) that one's reasons must be good ones" (p. 69). Reasons are defined as "considerations which the actor takes into account in holding certain beliefs, proving certain points etc." (p. 69). Partridge states that this criterion does not mean that one has to consciously review one's reasons for doing everything, "but [that] very likely one could supply the reasons if asked to do so . . ." (Partridge, 1979, p. 69).

Being able to supply reasons is one thing, but being able to show that they are good is more difficult, and Partridge lists four criteria for deciding if reasons are good or not: (1) they must be deliberated on; (2) using non-arbitrary criteria; (3) in as objective a way as possible (which implies the ability and willingness to change one's mind or alter one's belief in the light of new evidence or changed circumstances); (4) using relevant and adequate evidence. She goes on; "We do not require that one's beliefs be true or one's reasons wholly accurate before we attribute the possession or exercise of autonomy . . . neither false belief nor errors in judgement necessarily constitute a threat to autonomy . . . " (pp. 73-74).

The third of Partridge's criteria for judging autonomy sounds somewhat quaint; it is strength-of-will. Where there is no strength-of-will to carry through with the choices one has made, according to Partridge, there can be no autonomy. This does not mean that a strong-willed person will not experience conflicts or indecision (indeed the more one engages in rational reflection, the greater may be the conflict one experiences). What it does imply, however, is that the strong-willed person, having systematically organised his or her priorities into some sort of hierarchical structure, is more likely to resolve conflicts and

dilemmas and arrive at a new state of equilibrium. The weak-willed person, on the other hand, is more likely to be swayed by whims and impulses, to be immobilised by indecision, and to act anomically rather than autonomously (pp. 74-75). According to R. S. Peters (1973); "The strong-willed [person] . . . sticks to his [or her] principles in the face of ridicule, ostracism, punishment and bribes" (p. 125).

It will be noted that these quotes are increasingly specific as to the type of behaviour which an autonomous person might be expected to exhibit. Krimerman (1972) goes even further than this. He concerns himself with autonomously selected beliefs and desires, which may be thought of as approximately equivalent to Partridge's criteria of rational reflection and strength-of-will respectively. He discusses them as follows:

1. Autonomous belief. The following lend support to the claim that a person's belief in a certain proposition (**P**) is autonomous:

    a. has the ability to explain **P** to others using words and in circumstances substantially unlike those in which **P** was first encountered;

    b. has tested and evaluated **P** against alternatives, even when there are no extraneous rewards (social, psychological or physiological) for doing so;

    c. is willing to relinquish or decrease belief in **P** when relevant counterevidence is presented; and

    d. is not angered, threatened or incapacitated when objections or alternatives to **P** are presented.

2. Autonomous desire. The following are among the considerations which might

be used to test whether a person's desire for a goal (**G**) is autonomous:

a. has the ability to explain (in terms and circumstances different from those in which the goal was first encountered) what **G** consists of, how it differs from other goals, and how it might be achieved;

b. has personally experimented with alternative goals without the threat of sanctions, or hope of rewards, for such experimentation;

c. is willing to curtail or eliminate the pursuit of **G** when autonomously held beliefs concerning **G** alter, or when it becomes apparent that attainment of **G** is incompatible with other, more highly valued goals; and

d. is not angered, incapacitated or threatened when exposed to criticisms of the value of **G**, or when temporarily prevented from pursuing or attaining **G**. (Krimerman, 1972, pp. 334-336 passim)

Dearden (1975) has also attempted to operationalise the concept of autonomy, and suggests that an autonomous person would characterisitically:

1. wonder and ask, with a sense of the right to ask, what the justification is for various things which it would be quite natural to take for granted;
2. refuse agreement or compliance with what others put to him, when this seems critically unacceptable;
3. define what he really wants, or what is really in his interests, as distinct from what may be conveniently so regarded;
4. conceive of goals, policies and plans of his own, and form purposes and intentions of his own, independently of any pressure to do so from others;
5. choose amongst alternatives in ways which could exhibit that choice as the deliberate outcome of his own ideas or purposes;
6. form his own opinion on a variety of topics that interest him; and
7. govern his actions and attitudes in the light of the previous sorts of activity (p. 7).

All of these actions imply an intentional control of one's life, and accordingly; "A

person could not be to any marked degree autonomous, without this being an important part of his self-concept" (Dearden, 1972, p. 460). With respect to all the criteria for judging an autonomous person, Dearden (1975) concludes:

> To be autonomous therefore, is very much a matter of degree . . . Unlike being six feet tall, married or a British citizen, whether a man is quite simply autonomous or not is something we will quite often rightly refuse to say. And our hesitation will be related to at least three dimensions of variability: the extent to which he shows initiative in forming judgements of his own, the firmness with which he then adheres to those judgements, and finally the depth of ramifying reflection which lies behind the criteria which he employs in making those judgements. (p. 9)

Krimerman (1972) concurs with this judgement that autonomy is a matter of degree, and even goes so far as to suggest that any given act might be assessed using the various criteria and rated along a scale according to how many of the criteria were satisfied, from "unequivocally or paradigmatically autonomous" to "an ideal case of non-autonomous behavior" (p. 336). Even though one might blanch at the practical, not to mention ethical, difficulties of attempting to classify people along a continuum of personal autonomy, nonetheless the notion that autonomy is a 'matter of degree' is a useful one. To the extent that autonomy is regarded as a developable capacity, the notion may have important educational implications because it would allow practitioners to identify and, with learners, work on areas of perceived weakness.

1. Towards a definition of autonomy

As a result of the foregoing discussion, it is now possible to conclude that an individual is autonomous to the extent that he or she:

1.   conceives of goals, policies and plans, and forms purposes and intentions of

his or her own, independently of any pressure to do so from others;

2. exercises freedom of choice in thought or actions, without inward or outward constraints or restrictions on his or her capacities to act or to reason;

3. uses the capacity for rational reflection, judging among alternatives;

    a. on the basis of morally defensible, non-arbitrary beliefs as to what is true or right, derived from personal experience and/or reflection;

    b. as objectively as possible;

    c. using relevant and adequate evidence;

4. has the will and the capacity fearlessly and resolutely to carry into practice, and through to completion, plans of actions arrived at through (1), (2) and (3) above, without having to depend on others for encouragement and reassurance, and regardless of opposition;

5. exercises self-mastery in the face of strong emotional involvements, reversals, challenges and setbacks, and remains emotionally detached as far as possible; and

6. has a concept of himself or herself as autonomous.

A list such as this may provide a profile of an 'ideal' or prototypic autonomous person, and might even serve as a checklist for designing learning activities to encourage personal autonomy. However, it is still not easy to be clear whether or not a person is autonomous. There are two reasons for this: first, there are many threats to autonomy not evident to an observer (and sometimes not even known to the subject himself or herself), and second, autonomy is situationally variable. These considerations will be dealt with in turn.

2. Threats to autonomy

In the original political context, autonomy was contrasted on the one hand with 'heteronomy' (meaning domination and rule by others) and, on the other hand, with 'anarchy' (meaning chaos and disorder occasioned by absence of government). These two situations have their parallel in the case of the individual people who may lack autonomy either because they are under the jurisdiction or influence of another, or alternatively because of discord and disharmony within themselves.

The situation of being under the control or influence of others is by no means easy to identify, and it is this which perhaps causes many educators to mistake the absence of overt or apparent constraint, for autonomy. At one level, it is often assumed that as long as people are not physically and psychologically threatened, they will behave autonomously. Clearly, if someone hands over his or her possessions at the point of a gun or, in less dramatic circumstances, enrols in a course because of threatened retrenchment, he or she is not acting autonomously. However, these are by no means the only types of pressure to which people are subject, and it is seriously questioned whether they can ever be entirely free from external pressures and considerations in living their lives. The fact of being part of a social community implies the acceptance of certain standards of behaviour, and rules (e.g., language).

While freedom may be *necessary* to the exercise of autonomy, and even to its development[4], the absence of external constraints in a particular context is not, in itself, a *sufficient* condition for autonomy. Certain other factors must be

present, yet this is frequently overlooked by adult educators who advocate certain freedoms in the instructional setting in the belief that this will inevitably lead to the exercise of autonomy. As Dearden (1972) says:

> A long term prisoner might gain his freedom, but have been so incapacitated for ordinary life by the institutional life of the prison that he exhibits only anxiety and withdrawal in this state of freedom, rather than the capacities of self-direction and choice which are characteristic of autonomy. (p. 451)

This issue will be dealt with in chapter seven, in considering whether or not it is logically possible for adult educators to *give* learners autonomy, to assist them to develop autonomy, or merely to create circumstances within which they might exercise autonomy.

But even supposing that people were ostensibly free to think and act as they like, this would still not guarantee that they would behave autonomously. A person would not be regarded as autonomous if, for instance, he or she were merely following some anomic whim or falling under the influence of some propaganda, advertising claim, opportunity or point-of-view which had been encountered. What is required is some stable set of personal beliefs (or 'rules') which guide and give consistency (but not rigidity) to their actions.

It will be recalled that, in the political domain, *autonomia* referred to 'self-rule' and the notion of rules or laws is one of the entailments which was carried over when autonomy was transplanted from the political to the personal domain. Accordingly, the existence, development and status of personal rules, laws or norms of behaviour or judgement are central to discussions of personal autonomy. One position holds that the fully autonomous person is, in every respect, the author of his or her own destiny, and that the criteria used to

make personal decisions are in themselves the product of his or her own enquiries, analysis and reflection.

An alternative point-of-view acknowledges that it is impossible for a person to achieve the maturity of adulthood without innumerable encounters with the environment and with other people; encounters which inevitably shape values or conceptions of right and wrong, good and bad, worthwhile and worthless. Few, perhaps, would agree with Skinner's (1971) observation; "as we learn more about the effects of environment, we have less reason to attribute any part of human behavior to an autonomous controlling agent" (p. 96). However, since there is a limit to the absolute number of such guiding principles in existence, and in view of the pervasive and profound influence of early conditioning, it is unlikely, if not impossible, for anyone to escape entirely the influence of others in forming personally relevant rules. This is not to say, however, that people must always be passive victims of their biographies, condemned forever to an acceptance of values and rules uncritically internalized at an early age. An autonomous person is able to assent to rules, or modify or reject them, if they are found wanting.

Irrespective of whether rules are autonomously derived, as in the first case, or critically assented to, as in the second, there still arises the question of what criteria people bring to bear in determining the value, legitimacy, or appropriateness of their 'first-order' rules. What is called for is a superordinate or 'second-order' value system by which to judge the 'first-order' rules. However, these 'second-order' criteria also have to be subjected to some sort of scrutiny, or else to be derived autonomously and in either case, they too need to be critically evaluated according to yet another higher order set of criteria. This line of reasoning is followed backwards in an infinite regress, until the point is reached

of the autonomous person making some 'criterionless choices.' At this point, as D. C. Phillips (1975) indicates, for all practical purposes, it becomes impossible to distinguish the Autonomous Person (AP) making 'criterionless choices' from the Person Lacking in Autonomy (PLIA), whose behaviour is based on following rules which have been internalized without being subjected to critical reflection[5]. Such a picture runs counter to the usual notion of the autonomous person as one who makes decisions on the basis of carefully considered values and beliefs.

From the foregoing, it can be seen that autonomy is a difficult concept to operationalise, and that it is not easy for an outside observer to be clear whether any given pattern of behaviour is autonomous or not. This is because autonomy cannot be detected solely from behaviour, but must also be understood in terms of the actor's (for instance a learner's) own intentions and understandings. Behaviour which may, on the surface of it, seem to be autonomous, may simply be independent, but in fact determined by some 'script' or 'program' implanted in the learner at an earlier time. In an attempt to get round this problem, Benn (1976) acknowledges the pervasive effect of socialising influences, but goes on to write:

> Within this conception of a socialized individual, there is room to distinguish one who simply accepts the roles society thrusts on him, uncritically internalizing the received *mores*, from someone committed to a critical and creative conscious search for coherence . . . (p. 126)

However, even this generalised definition is of limited use to a researcher or observer, unless he or she is somehow able to have access to the perspective of the research subject. This is because coherence, like autonomy in behaviour, is not inherent in the act itself, but is attributed to the act by the individual actor. This issue will be considered again in chapters eight to eleven.

A second reservation about the definition of autonomy presented earlier in this chapter is the failure to account for situational variability, and accordingly this will be considered next.

3. Personal autonomy as situationally variable

Much of the research into personal autonomy has been based on the notion that it is a context-free disposition; that once people 'become' autonomous, they will behave autonomously in whatever situation they find themselves. In terms of the argument put forward in this dissertation, there are two flaws with this line of reasoning. The first is that autonomy is more akin to a process than a product. That is, one does not 'become' autonomous in any final or absolute sense. The second flaw is that, although some people manifest more self-assurance, or clarity of purpose across a range of situations, it is impossible to judge whether or not a person is autonomous without specifying the context within which this autonomy will, or might, manifest itself. In other words, autonomy is not simply a personal quality or characteristic, but is a relation involving the interplay of personal and situational variables. Accordingly, any person could vary in the degree of autonomy he or she exhibits from situation to situation. For instance, a person who may be autonomous with respect to career or family, may lack autonomy (i.e., be dependent) when it comes to learning; or alternatively, a person who is autonomous with respect to learning how to sail a boat, might prove to be dependent when it comes to learning calculus or Spanish. This reservation about research into personal autonomy will also be discussed later in this dissertation.

C. THE DEVELOPMENT OF AUTONOMY

As mentioned at the start of the dissertation, there is a widespread belief that permitting or encouraging 'self-direction' in learning will lead to the development of personal autonomy as an educational outcome. It is the purpose of this section of the chapter to examine evidence concerning whether or not personal autonomy is attained as part of a natural developmental process, or whether it is susceptible to educational interventions. This is important because of the reciprocal relationship which is assumed to exist between personal autonomy and autonomy in learning.

In the discussion which follows, three alternative points of view are put forward. These are: (1) that autonomy is a trait, or innate disposition; (2) that it is acquired through non-educational processes of socialisation and maturation; and (3) that it is learned through educational experiences. Each of these will be dealt with in turn, and its educational implications considered.

1. Autonomy as an innate disposition

In the first case, which is sometimes called 'nativism,' autonomy is seen as a condition of freedom from the dictates and interference of other people, and is thus the situation into which children are born. One of the best known contemporary advocates of this position is Carl Rogers, who writes of the child; "Unlike many of us, he knows what he likes and dislikes, and the origin of those value choices lies strictly within himself" (C. R. Rogers, 1969, p. 243).

Rousseau is another famous advocate of the essential goodness and autonomy of the 'natural child,' as typified by the spontaneous, uninhibited and free behaviour of Émile. So, too, is A. S. Neill, father of the famous experiment

in free education at Summerhill.

One corollary of viewing autonomy in this way is that education must interfere as little as possible with the learner's natural inclinations and interests, as these represent the outworking of the person's autonomous preferences. For those who regard autonomy as an innate quality of childhood, one which is diminished or even extinguished by the processes of socialisation, education should consist of liberating the real self from within the social self (Strike, 1982, p. 151). Teachers should limit themselves to supplying resources required by the student's natural inclinations and, since liberty is the removal of restraint, autonomy is facilitated by having minimal intervention by the teacher. According to Dearden (1975), it is difficult to know what method of education is appropriate to such innately autonomous people:

> the only appropriate method would seem to be that of personal discovery. But if this method were taken quite literally, its effectiveness for most individuals would be limited, and it would make impossible the cumulative achievement of knowledge and skill from one generation to another. Nor would it be possible to apply any public criteria to the quality of what an individual discovered for himself. It could not be said, for example, that a conclusion he had reached was false, or insignificant or biased. It is difficult to see how we can speak seriously at all of the education of human beings, if they are interpreted as asocial and ahistorical atoms. (p. 115)

A variant of this 'nativistic' model is the view that there is one autonomy of childhood based on impulse, and another of adulthood based on reason, and that over time there is a progressive shift in emphasis from one to the other. Some see this 'handover of power' or transition as a purely developmental process which might potentially be deflected or otherwise adversely affected by education which, in this view, is seen as a socializing agency, capable of extinguishing the tender shoots of moral autonomy, and of perverting

the natural development of intellectual autonomy. Others, such as Dewey (1963), clearly see a mandate for education when he writes; "The crucial educational problem is that of procuring the postponement of immediate action upon desire until observation and judgement have intervened. Overemphasis upon activity as an end, instead of upon *intelligent* activity, leads to identification of freedom [autonomy] with immediate execution of impulses and desires" (p. 69). In this view, autonomy does not consist of following one's whims, but rather in the selective application of "observation and judgement," both of which skills can be sharpened through education.

2. Autonomy as an acquired quality

Although it may be plausible to attribute some dimensions of autonomy to childhood, few would seriously maintain that children are capable of the mature rational reflection, objectivity or emotional detachment implied by the term autonomy in the present context. As people develop and "become fully human" (Strike, 1982, p. 153), they "internalize available social and cultural resources." Earlier in this chapter, it was argued that autonomous adults will not simply accept what is thrust on them, but "children are in no position to judge the value of these cultural and social resources" (p. 153), and thus "all of us, in the first stage of our education, are Persons Lacking in Autonomy" (Phillips, 1975, p. 9).

As early as 1932, Piaget, discussed the socialization process of the child, describing the evolution of sequential stages which he identified as moving from

'heteronomy' to 'autonomy.' The following summary provides a delineation of behavioral and attitudinal components characteristic of heteronomy and autonomy:

Heteronomy	*Autonomy*
egocentrism	cooperation
unilateral respect	mutual respect
conformity	individual creativity
rigidity	flexibility
blind faith in authority	rational criticism
other directed	inner directed
dependence	independence.

According to Piaget, the normal process of development in the healthy person involves progressing from heteronomy in the direction of autonomy Another way of expressing this process of development is to talk of maturity. As people grow older, they mature and it is this which distinguishes children from adults; "most human beings acquire [maturity] gradually and informally over a period of years" (Strike, 1982, p. 129). There is no criticism implied in saying that a child is immature, although such a comment has quite a different connotation when applied to adults, because, "with the exception of the mentally ill or senile, all adults are in the maturity of their faculties" (p. 130).

Maturity, in turn, is linked to autonomy, in that "passive and uncritical acceptance of one's situation is characteristic of an essentially immature mind" (Overstreet, 1950, p. 250). As early as 1941, for instance, Angyal, in a foundational study on personality, argued that increasing maturity in the healthy adult is accompanied by an increase in independence. "According to Angyal, the psychological aspects of the individual . . . move toward greater autonomy, becoming less and less bound by the immediate situation, and the individual is more and more able to weigh possible outcomes and select that which is most advantageous, advantageous meaning that which leads to increased autonomy"

(Birren & Hedlund, 1984, p. 63).

If the linkages between age, maturity and autonomy were invariant, all older people could be expected to exhibit the hallmarks of autonomy. However, as has already been mentioned, it is evident that, in any given context, some people will behave more autonomously than others; that is, they will generate alternative goals, select decisively from among them, persevere with their intentions, exert disciplined self-control and so on.

R. S. Peters (1973) notes; "that since people are not autonomous when they are born, and since many people reach old age without attaining very high levels of autonomy, some learning process which is not purely maturational is involved in becoming autonomous" (p. 176). To the extent that characteristics of autonomy may be demonstrated by people who have had limited exposure to formal education, one can dismiss the claim that education is the sole (or for that matter, even the main) contributor to the development of autonomy. However, this does not preclude the possibility that education, including adult education, can contribute to the enhancement of autonomy. The question which arises is: what is the place of education in this "learning process which is not purely maturational"?

3. Autonomy as a learned characteristic

The development of personal autonomy is almost universally proclaimed as a goal of education[6]. However, if one refers to the definition proposed earlier, it is apparent that some aspects of autonomy are more amenable to educational intervention than others. For instance, some qualities or characteristics, such as those of emotional autonomy or perseverance, are partly personal attributes or in

any case attributes whose origins in the person are rooted deeply in their very earliest experiences at home and school. Other components of autonomy (for instance the ability to rationally reflect) may be taught, at least in part, as curricular content (Telfer, 1975, p. 28; Wang, 1983). Assertiveness training, life-planning skills, values clarification, synectics and creativity training, learning-to-learn, moral philosophy and critical thinking have all been advocated as content areas because of their alleged contribution to the development of personal autonomy.

Other dimensions (such as a self-concept of being autonomous) are not only more difficult to operationalise, but are best enhanced ancillary to, or concomitant with, some other content-oriented instruction. Thus, certain techniques of instruction, or ways of conducting teaching, have also been linked with autonomy. These include collaborative learning, guided learning, discovery learning, contract-based learning, individualised instruction, learner-controlled instruction, open learning, and independent study (or self-directed learning). This notion is hardly new; it is enshrined in Snyder's (1971) formulation of the 'hidden curriculum,' and in McLuhan's oft-quoted dictum that "the medium is the message."

Experience clearly shows, however, that even when people are exposed to such educational approaches, not all become more autonomous. In fact, none of these interventions—content or process—leads invariably to increased personal autonomy, and none has a monopoly on the development of personal autonomy because of the multidimensional nature of the latter (Dittman, 1976, p. 467).

Moreover, there is a high degree of interdependence amongst the various components of autonomy. Any attempt to develop one or two parts in isolation is likely to fail in the end. Similarly, if a particular strategy (such as a program

on learning-to-learn) is successful, it will predictably lead to increased critical awareness, and demands for more freedom of choice, and other manifestations of autonomy.

a. Personal autonomy and adult education

Before leaving the question of educational interventions, it is important to discuss, with respect to the development of autonomy, the proper and legitimate role of adult education. Five points will be made.

The first is that all forms of education should have aims which "cohere with the aims we set for life itself. Our philosophy of education must connect with, and in the end be justified by, our ethical, political and even our religious beliefs" (Hostler, 1981, p. 14). Adult education, too, derives its mandate from the society in which it occurs. This point is made by Botkin, Elmandjra and Malitza (1979) in their report to the Club of Rome, *No limits to learning: Bridging the human gap*;

> There is a near-universal demand for increased participation at all levels. More people are aware of, and are using, their capacity to obstruct rather than to support decisions reached without their concurrence, regardless of the merits of such decisions...
>
> The term participation is not new. Few words convey so powerfully the idea of the individual's aspiration to be a partner in decision-making, of the unwillingness to accept unduly limited roles, and of the desire to live life more fully. *Few terms suggest so forcefully* people's claim to influence both local and global decisions that shape their environment and lives, coupled with *people's aspirations for equality as well as their refusal to accept marginal positions or subordinated status.* (pp. 29-30, emphasis added)

This trend toward participatory democracy is clearly one of the "wider social changes" (Dearden, 1972, p. 449) contributing to increased interest in autonomy.

It affects education in two, related ways. The first is that for people to be able to participate fully, they need to be capable of autonomous thought and action and; "since [personal autonomy] is a fundamental value of our society, a responsibility is obviously placed on education to enable such autonomy" (Strong, 1977, p. i).

The second is through the inevitable demands for increased participation within education itself; as people become more accustomed to, and skilled at, informed participation and 'choosing,' in other aspects of their lives, they are likely to make increasing demands for similar power-sharing in relation to their education. Thus, to the extent that personal autonomy is a valued societal goal, it is reasonable to expect to find various forms of adult education attempting to foster personal autonomy as a goal.

It is, however, improper to speak of adult education as if it were a single, unified system—either conceptually or administratively. Adult education encompasses a greater diversity of locations, goals, clients, techniques and contents than other sectors of education. Again, as Hostler (1981) notes, "It comprises a host of courses, usually part-time and mostly conducted in the evenings, . . . [It has] a multitude of different goals, some of which are broad and long term, while others are immediate and more restricted, which overlap, diverge and even conflict in subtle and complicated ways" (p. 1). Thus, it is not reasonable to expect that all forms of adult education will have, either implicitly or explicitly, the goal of promoting personal autonomy.

The second point relates to the first. It is not uncommon to find, in the literature of adult education, the assumption that all adults are autonomous or 'self-directing,' and that instruction should therefore be conducted in ways that

acknowledge autonomy. On the other hand, as Brookfield points out, adult educators constantly claim that the development of autonomy is a major goal of adult education. Thus, adult educators are confronted with a paradox: how can they assume the existence of certain circumstances at the outset, and at the same time hold those circumstances to be the desired goal or outcome of their activites (unless thay are implicitly acknowledging that adult education has no appreciable effect)? So long as the same term—'self-direction'—is made to serve for both purposes, this apparent contradiction will continue. But the analysis in this chapter helps to show that in one context, the term 'self-direction' (or autonomy) refers to certain philosophical assumptions about human nature (such as the constructivist view that people have a tendency to impose meaning on their worlds), while in the other context, 'autonomy' is referring to a specific psychological orientation.

The third point, related to the constructivist theme of this dissertation, is that adults are not, for the most part, passive or inert, nor are they sitting round waiting to be 'made more autonomous' by the actions of adult educators. If people are to be regarded as 'self-constructing,' it means that they should be treated with respect by educators; to use Schön's memorable phrase, they must be 'given reason.' They must also, as Strike (1982) points out, be 'given reasons.' The fact that they are self-constructing, however, does not preclude the possibility of increasing their personal autonomy in learning, but it emphatically does preclude the possibility of "making" them autonomous. There is, as Torbert states, a paradox inherent in "forcing people to be free" and, accordingly, educational structures which attempt such a task must be managed with "deliberate irony." This is a theme which will be resumed in chapter seven.

A fourth point concerning the linkages between adult education and personal autonomy rests on the confusion in the literature between autonomy as a **means** and as an **end** of education. Frequently, adult educators fall into the trap of assuming that there is a direct causal link between so-called autonomous modes of learning and the development of personal autonomy. Mezirow (1981), for instance, has written:

> It is almost universally recognised, at least in theory, that central to the adult educator's function is *a goal and method of self-directed learning.* Enhancing the learner's ability for self-direction in learning as a foundation for a distinctive philosophy of adult education has breadth and power. It represents the mode of learning characteristic of adulthood. (p. 21, emphasis added)

This quote embodies an error of thinking, namely that "of mistaking the means for the end . . . making no distinction between the characteristics of an ideal end product and the characteristics of the process that is supposed to lead to such a product" (Hamm, 1982, p. 102). Does the use of methods which encourage learner-control lead to more global qualities such as critical judgement, autonomous action and self-initiated inquiry? H. A. Lewis (1978) points out that:

> To approve 'autonomy' as an ideal for students is one thing: to commend 'autonomous' methods of learning is another - however autonomy is defined. If, for the purposes of argument, we gloss it as independence, it is not quite obvious that independent methods of learning promote independence - auxilliary causal relationships must be established. (p. 152)

In summary, although the use of autonomous learning may encourage the development of autonomy, the relationship is by no means automatic. It is clear that a person may be exposed to so-called autonomous modes of learning, without internalising the values of autonomy, or necessarily being enabled to

think and act autonomously (V. N. Campbell, 1964; Torbert, 1978). Conversely, it may be possible, as Dearden (1972) points out, to develop autonomy without recourse to autonomous methods.

Fifth and finally, adult education does not have a monopoly on the development of autonomy as an aim. Since pre-Socratic times, philosophers have argued that education can, and indeed should, develop in people the capacities and predispositions to allow them to function autonomously. Accordingly, it has been claimed variously as the true purpose of elementary, secondary and higher, as well as adult education. However, with rare exceptions, education—some would maintain, even higher education (Entwistle and Perry, 1974)—has failed in this. As discussed elsewhere in this dissertation, since autonomy is a process, rather than a product, and is continually renewed and constantly reasserted, it may be an ideal candidate to be considered as the prime purpose, and organising principle, for lifelong education.

D. SUMMARY

It has been the purpose of this chapter to review literature pertaining to personal autonomy: how it might usefully be defined, how it may be recognised and how it is developed. It has been shown that, by definition, in order to be regarded as autonomous, a person needs both to be free of constraints (internal and external), and to have a coherent and robust set of personal values and beliefs which give consistency to his or her life. After an extensive review of literature on personal autonomy, much of it derived from the philosophy of education, a composite definition was arrived at. A person may be regarded as autonomous to the extent that he or she:

1. conceives of goals and plans;

2. exercises freedom of choice;

3. uses the capacity for rational reflection;

4. has will-power to follow-through;

5. exercises self-restraint and self-discipline; and

6. views himself or herself as autonomous.

Hence a person would be judged to be autonomous on the basis of his or her actions and ability to explain and justify those actions by invoking a coherent set of beliefs (or criteria). It was also argued, however, that it is difficult, if not impossible, for a person to escape entirely the effects of socialising influences in determining his or her attitudes, habits, values and beliefs. Accordingly, it is probably impossible for an individual to attain autonomy in the strongest or ideal sense.

Within the conception of a socialised individual, however, some people are more apparently autonomous than others. It was argued that it is impossible to judge the extent of a person's autonomy without reference to his or her personal understandings and intentions. It was also stated that the same person may be more or less autonomous in different circumstances, and that accordingly autonomy is situation-dependent, rather than a context-free disposition. Autonomy is determined partly by the situation, and partly by the individual's understanding of the situation. This is a major point which will be discussed in chapters nine, ten, and eleven.

In discussing the achievement or acquisition of autonomy, it was argued that personal autonomy, as a general rule, increases with age, but that it is amenable to educational intervention—both in the form of direct curricular content,

and in the way in which education is conducted. Moreoever, it was asserted that these dimensions are not, and cannot be, independent of one another, and that the continuing development and exercise of personal autonomy is a lifelong pursuit, involving all aspects of the education system—formal as well as nonformal—and all aspects of the individual person.

With respect to the relationship between adult education and personal autonomy, five points were raised: (1) the development of personal autonomy is sanctioned by sections of society as an educational goal, but not all parts of adult education will have this as a primary goal or aim; (2) adults are presumed to be 'self-constructing' (see chapter nine), but they are not always capable of exercising control over their own learning and this capability may be learned; (3) since adults are seen as 'self-constructing,' it is not possible to force them to be autonomous against their will; (4) the presumed link between so-called autonomous methods of learning and the development or enhancement of personal autonomy is more complex than many adult educators recognise; and (5) adult education is not alone in its espousal of personal autonomy as a desirable goal of education and, considering the long-term and multidimensional nature of personal autonomy, it should serve as an organising principle for lifelong education.

Earlier in the chapter, it was argued that autonomy (or 'self-direction') cannot be judged in the absence of some context or environment. In the case of education, that context is learning. Attention will now be turned to the more specific issue of 'self-direction' in learning. However, as mentioned in chapter two, there are at least two distinct meanings to the term 'self-direction' within learning. One refers to the independent pursuit of learning goals outside

institutional structures (autodidaxy), and the other to the exercise of learner-control within formal instructional settings. These two phenomena will be dealt with separately.

IV. AUTODIDACTIC ACTIVITY - A CRITICAL ANALYSIS

A. INTRODUCTION

In view of the fact that 'self-education' is the oldest (and some would argue, the most venerable) form of education, the literature on the subject is vast. Clearly, it lies outside the ambit of this dissertation to review all that has been written on the topic over the centuries. Even if one limits the inquiry to literature published in the past 25 years, it would still be a massive undertaking to review it all.

However, systematic inquiry into learning in non-institutional settings has become a major area of interest in adult education in recent years, and it is the purpose of this chapter, and the next one, to present a review and critical analysis of the major strands in this research endeavour. Whereas chapter five is concerned with the narrower focus of the 'self-directed learner' or autodidact, this present chapter deals with a range of contextual and background issues. In this chapter, an attempt is made to identify key authors and landmark studies, to pinpoint lines of inquiry which seem to have 'dried-up' or have proved disappointing, as well as to highlight areas which seem to offer promising new directions for research. The purpose of this is to suggest that research has been stultified by the lack of a consistent theoretical perspective, and to draw attention to the potential offered by constructivism to provide such a framework. For the person interested in adult learning, especially learning by working-class adults, nineteenth century Britain would have been a fascinating social laboratory. Newspapers began to proliferate; circulating libraries sprang up in towns and villages throughout the country; labour unions coalesced out of friendly societies;

adult Sunday schools were established by many non-conformist denominations; Mechanics' Institutes, Scientific and Literary Societies flourished; and Universities made their first tentative forays into extramural and extension work.

In the midst of all this educational activity, many people quietly went about the business of educating themselves (ref. e.g., Smiles, 1859, Stephens & Roderick, 1983). George Craik captured a number of them in his book *The Pursuit of Knowledge Under Difficulties*. Published originally in 1830 by the Society for the Diffusion of Useful Knowledge, Craik's book offers an insight into the extent and significance of autodidactic activity. In his introductory chapter, he wrote:

> Originally, all human knowledge was nothing more than the knowledge of a comparatively small number of such simple facts as those from which Galileo deduced the use of the pendulum for the measurement of time, and Newton the explanation of the system of the heavens. All the rest of our knowledge, and these first rudiments of it also, a succession of individuals have gradually discovered, each his own portion, by their own efforts, and without having any teacher to instruct them. In other words, everything that is actually known has been found out and learned by some person or other, without the aid of an instructor. There is no species of learning, therefore, which self-education may not overtake; for there is none which it has not actually overtaken. All discoverers (and the whole of human knowledge that has not been divinely revealed is the creation of discovery) have been self-taught, at least in regard to that which they have discovered . . . (1866, p.13)

Of course autodidaxy is no more the invention and preserve of nineteenth century Britain than it is of twentieth century North America. Newsom (1977) discusses the prevalence of what he terms 'lifelong learning' in sixteenth century London, Long and Ashford (1976) adduce evidence of its extent in Colonial America and Bouwman (1982), Houle (1984), Kulich (1978), McClintock (1982) and Tough (1967) all attest to the historicity of the phenomenon.

It is for others to speculate as to why it took so long for the domain of autodidaxy to become the object of sustained scholarly enquiry. However, the fact is that the current eruption of interest in the topic, at least in adult education, can be traced back, more or less directly, to Houle's study of 22 continuing learners, published in 1961 under the title *The Inquiring Mind.* Tough (1967), who is usually credited with having 'sparked the revolution,' traces the origin of his own interest to a time in January, 1963, "when he received an assignment in a graduate course taught by Professor Cyril O. Houle at the University of Chicago" (p. 1).

At around this same time, in the early 1960s, Verner suggested, almost in passing, that "research into self-education might be a fruitful area of investigation for adult educators" (Verner, 1964, p. 31), and the following year, Johnstone and Rivera released their massive survey of adult education activity in the United States, in which they stated that, with an estimated total of nine million adults active in learning on their own, "self-instruction is probably the most overlooked avenue of activity in the whole field of adult education" (1965, p. 37). As Brookfield (1984a) wryly observes; "These authors' intimation of promise, of a veritable publications bonanza for graduate students and professors who might mine this research vein, have been well justified" (p. 60).

Since these first, tentative beginnings, research into autodidaxy has gathered momentum. Now, as Brookfield observes, "by almost any standard imaginable," it is one of the chief growth areas in adult education research. It is the intention of this chapter to review and critically analyse the literature on autodidaxy generally: its nature and extent; the 'process' itself; the help sought and obtained by learners; and theoretical, conceptual and background studies. The

next chapter will present findings on the nature of the learners.

B. DESCRIPTIVE AND VERIFICATION STUDIES

Although people have been aware of the existence of autodidactic activity for centuries, Tough was the first to operationalise the concept in such a way that it could be studied systematically. The basic building block of Tough's study is the 'learning project,' which he defined as "a major, highly deliberate effort to gain certain knowledge or skill (or to change in some other way)" (1979, p. 1). Such a definition implies intention, and hence excludes serendipitous, incidental or adventitious learning. Tough specified that, to be included, a learning project would need to involve a series of related 'learning episodes' adding up to at least seven hours. In his 1978 review of the literature, he wrote; "The typical learner conducts five quite distinct learning projects in one year. He or she learns five distinct areas of knowledge and skill. The person spends an average of 100 hours per learning effort - a total of 500 hours per year" (p. 252).

Mocker and Spear (1982) write that; "Within five years of the release of his book, Tough's work had sparked not less than 25 dissertations, theses and independent research studies. These, and numerous subsequent studies, used Tough's interview approach and modifications of his interview schedule to broaden the description of the self-directed learner and the learning process, while confirming and refining the findings of Tough's original work" (p. 12). To the extent that these findings may be generalised, these efforts have established that learning projects are carried out:

□   **in the general population** (Tough, 1966, 1967, 1978, 1979; Penland, 1977, 1979)

▫ **by sub-groups of the general population:**
- women (Moorcraft, 1975);
- black adults (Shackelford, 1983);
- prospective parents (Cobb, 1978);
- older adults (Hiemstra, 1975, 1976);
- older women (Grenier, 1980);
- single and divorced mothers (Bonneau, 1984);
- mothers of young children (Bogenschneider, 1977; Coolican, 1973);
- rural adults (Lensch, 1980; Peters & Gordon, 1974);
- parents of teenagers (Clarkson, 1975; Orlando, 1977);
- those undergoing spiritual growth (Wickett, 1978a, 1978b);

▫ **by those traditionally classed as 'hard-to-reach'** (this classification overlaps, to some extent, the one above):
- low income urban adults (Booth, 1979a, 1979b; Umoren, 1977);
- undereducated rural adults (Leean, 1981);
- adults of low educational attainment (Armstrong, 1971; Brookfield, 1982b);
- disadvantaged adults in urban Montreal (Serre, 1977);
- unemployed adults (Johnson, Levine & Rosenthal, 1977);

▫ **by various occupational categories:**
- farmers (Bayha, 1983);
- professionals (McCatty, 1973, 1975; Sexton-Hesse, 1984);
- nurses (Kathrein, 1981; Skaggs, 1981);
- teachers (Fair, 1973; Kelley, 1976; McCatty, 1976; Miller, 1977; Strong, 1977);
- engineers (Rymell, 1981);
- extension agents (Miller & Botsman, 1975);
- university and college administrators (Benson, 1974);
- clergymen (Allerton, 1974; Morris, 1977);
- pharmacists (Johns, 1973; Levchuk, 1977);
- adult and continuing educators (Addleton, 1984; Zangari, 1977);

▫ **by adults living outside North America:**
- Jamaican adults of low literacy (Field, 1977);
- adults in Haifa, Israel (Hirschfeld, 1981);
- rural women in Cameroon (Bravay, 1983);
- professionals in Accra, Ghana (Denys, 1973);
- adults in Kinshasa, Zaïre (Kondani, 1982);
- agricultural extension officers in Victoria, Australia (Underwood, 1980);
- teachers in England (Strong, 1977);
- adults of low educational attainment in English Midlands (Brookfield, 1982);
- cross-section of adults in Sweden (Borgström, 1985);

▫ **within groups formed around shared interests:**
- women (Knoepfli, 1971);
- labour unions (M. J. Brown, 1972);
- 'Two-stroke' clubs (Banks, 1985);
- self-help groups (Farquharson, 1975);
- learning networks (G. R. Lewis, 1978; Luikart, 1976, 1977);
- political lobby groups (McCreary, 1984);

□   **by students:**
-    adults matriculating into community colleges (Geisler, 1984);
-    adults participating in co-operative extension programs (Bejot, 1981);
-    adult basic education students (Baghi, 1979; Kratz, 1978);
-    adult high school graduates (E. A. Johnson, 1973);

In recent years, there have been few significant advances in this particular line of research. Caffarella and O'Donnell (1985) maintain that research in this area has "reached the point of dullness" (p. 3), and one is inclined to agree with their judgement that, at least with respect to verification studies, "enough is enough" (p. 3)!

As Brookfield (1984a) has observed, "It is . . . easy for unsympathetic outsiders to critique a body of research for its apparent methodological naïveté or conceptual confusion" (p. 60), and the following comments are not intended to denigrate or belittle the contribution which Tough and others have made to adult education's body of knowledge. Nonetheless, a number of significant and legitimate criticisms have been aimed at these verification studies.

The first is that the population samples are biassed in favour of urban, middle-class, English-speaking North Americans. In his 1984 review of the literature, Brookfield describes as "highly questionable," the assumption "that the behaviours exhibited by this educationally advantaged collection of adults will be displayed by adults from a range of different class and ethnic backgrounds" (p. 62). The sheer volume of research into the learning activities of such people inevitably means that more is known about them than about other groups. Indeed, the propensity of researchers (particularly those pursuing graduate studies) to use samples of convenience means that teachers and students in colleges and universities, as well as other professionals, are likely to be over-represented in the research literature. A somewhat ritualised and inconclusive debate between

Brockett (1985a) and Brookfield (1985b) on this point did little more than to emphasise the well-attested fact that generalisations about the population at large may be invalid, given the patchy and uneven nature of research in the social and behavioural sciences.

It is interesting to note that Brookfield, whilst denouncing the pre-occupation of researchers with samples of middle-class Americans as "a dangerous act of intellectual ethnnocentrism" does not refer to several studies conducted in France (Caceres, 1967) or in French-speaking Canada (Pineau, 1978). One of these latter studies, published in English as well as French (Serre, 1978), concluded that; "French speaking adults in disadvantaged and less well-educated groups show a keen interest in learning. Their performance compares well with that of other groups in the number of projects engaged in and the quality of learning involved" (p. 19).

A second criticism is methodological. It concerns the "probing and prompting" which is called for by Tough's interview schedule. Tough himself writes; " . . . in general, the less training the interviewers have in understanding the concept of the learning project and in probing skilfully for additional projects, the fewer learning projects they uncover. Even interviewers trained in depth, however, state that they are probably missing some projects because people cannot recall them after several months . . . " (1978, p. 252). This admission has prompted the observation by Pedler (1972) that the projects identified may be artifacts of the methodology; "from the account of the interviews, it appears that a lot of probing occurred so that gratuitous responses may have been recorded and the case overstated" (p. 89). Certainly, the Sexton-Hesse study (1984), which used a different research approach, found a

number of respondents with no learning projects at all. Moreover, Borgström's recent large-scale study in Sweden, used a "lower limit of twenty hours" (1985, p. 5), and found that "14% had participated in self-directed learning." This is substantially lower than Tough's figure of 73% (1978, p. 253) and, unless the Swedish population is significantly different from the Canadian one on which Tough's findings are based, this suggests that a very large proportion of the learning projects reported by Tough were of between 7 and 20 hours' duration. In his 1983 critique of this research, Boshier observed that the limit of seven hours was arbitrary, poorly operationalised (e.g., did it include or exclude travelling time?), and seems low for a learning endeavour of any consequence.

Because of the alleged unreliability of self-report data, especially that involving recall, Boshier (1983) has "suggested one alternative technique, that of study participants using diaries to record present learning activities, and thus reduce the prompting necessary for recalling past activities" (Caffarella & O'Donnell, 1985, p. 3). Tough (1978) comments that "one experiment with daily learning diaries yielded higher figures than the interview . . . [as did] rambling two and a half hour follow-up conversations with interviewees" (p. 252).

Another criticism concerns the alleged inappropriateness of interview schedules, especially with less well-educated respondents. Brookfield (1984), for instance has criticised an over-reliance on "measurement scales, structured interview schedules, questionnaires and prompt sheets" (p. 63). He goes on to say:

> . . . it is apparent that researchers adopting formalised measures of self-directed learning . . . , administering an interview schedule in a standardised fashion, or presenting a self-completion questionnaire to subjects, are likely to be regarded with suspicion by working-class adults with poor educational attainments and distressing memories of their school experience. (p. 64)

The issue of methodological ingenuity is dealt with later in this chapter, but it seems clear that, as with educational research generally, no one methodology has a monopoly or is uniquely well-suited to every research question in a particular domain. Eisner's (1981) dictum seems appropriate:

> Each approach to the study of educational situations has its own unique perspective to provide. Each sheds its own unique light on the situations that humans seek to understand. The field of education in particular needs to avoid methodological monism: our problems need to be addressed in as many ways as will bear fruit. (p. 9)

In conformity with this recommendation, some researchers are now employing a range of different approaches to examine a particular issue from various perspectives. This process, known as 'methodological triangulation,' "involves a complex process of playing each method off against the other so as to maximise the validity of field efforts" (Denzin, 1978, p. 304). It is contended here that the perspective of the learner has been largely neglected in this research, and that valuable insights has been lost as a result.

Overall, the existence of autodidactic learning projects has now been established beyond question. Despite some of the methodological criticisms discussed here, there seems little doubt that autodidaxy does constitute an important domain in the education of adults, and one which may have significant implications for the practice of adult education. Researchers are now turning their attention from these descriptive and verification studies to other, more sophisticated questions, such as; "What is the actual process of learning on one's own?," "What sort of relationships do autodidacts enjoy with those who assist them?," and "What is the significance of this practice, both to the learners themselves, and to society at large?"

C. THE AUTODIDACTIC 'METHOD'

Autodidaxy poses researchers with conceptual and practical problems, for in the autodidact, the tasks of *competent instructor* and *proficient learner* (Clark, 1973, p. 13) are fused (in the argot of organisational theory, 'simultaneous role occupancy'), and the problem is simply this: is autodidaxy to be treated as a model of teaching and researched alongside other such models (Joyce & Weil, 1980); should it be viewed as a learning situation and thus be researched from a learning point-of-view; or is it a phenomenon unique in education, which should be studied 'on its own terms' and without reference to (or at least without reliance upon) other aspects of education? It seems that, implicitly or explicitly, different researchers have come to different conclusions, and thus the research findings seem at times confusing and incommensurable.

Some researchers have treated autodidaxy as a pattern of organising instruction. For instance, according to Tough (1979, pp. 116-117), there are thirteen preparatory steps which need to be performed by the autodidact[7], and Knowles, in his 'Guide for self-directed learners and teachers' (1975) lists the following general stages:

1.   establishing learning climate;

2.   diagnosing needs;

3.   formulating goals;

4.   choosing and implementing appropriate learning strategies;

5.   evaluating learning outcomes.

Despite the allegedly 'learner-centred' nature of autodidaxy, lists such as this one seem suspiciously like the sort of formulæ which might be offered in schools of teacher education. It is almost as if someone steeped in the realm of education,

and more particularly in the profession of teaching, had superimposed a template (and a normative one, at that) over a much more fluid, organic and unpredictable process.

Autodidaxy certainly involves aspects found in teaching: it involves some sort of goal setting, finding and utilising appropriate resources, trying different ways of attacking the subject matter, responding to feedback, evaluating and moving on. Such functions need to be performed, and lists of tasks such as the above may possibly serve to identify the kinds of functions an autodidact might need to perform, but the fragmentation of such a holistic process as self-teaching is like that of "vivisecting the nightingale to prove the secret of its note" (Laidlaw, quoted in Welton, 1986). Moreover, it is not a teaching method which is at the disposal of the program planner, nor a teaching technique to be used by an educational agent, because the entire initiative rests with the autodidact. The tendency of some authors to treat autodidaxy as either a method for organising education, or as 'just another technique of instruction' has led to difficulties in researching this domain. This issue is dealt with in chapter eleven on reframing research.

Clearly autodidacts are learners. It has often been observed that learning is an internal and invisible process, not susceptible to direct observation, and a researcher is accordingly obliged to rely either on behavioural manifestations of learning, or else on the practice of asking learners to examine and report on their own internal states. In either case, there are difficulties because autodidacts are neither readily identifiable nor easily contacted, simply because of the non-institutional nature of their learning endeavours. But more importantly, autodidacts confront difficulties (and enjoy opportunities) not commonly encountered

by learners in more formal settings. In fact, it may be that research into autodidaxy could, because of its unique nature, contribute to an understanding of the processes of both teaching and learning.

Accordingly, it is argued here that autodidaxy is best understood neither as a model of teaching, nor of learning, but that it needs to be studied 'on its own terms.' Moreover, because autodidaxy occurs in 'natural societal settings' (Jensen, 1960) rather than in laboratories or classrooms, it is proposed that the best way of studying it is primarily through naturalistic techniques (Hiemstra et al., 1981; Merriam et al., 1983; Lincoln & Guba, 1985) which emphasises the action in its context. Those studies which have attempted to portray learning in its 'natural habitat' (Häyrynen & Häyrynen, 1980; Larsson & Helmstad, 1985; Marton & Säljö, 1976; Thomas & Harri-Augstein, 1985) have revealed how rich and informative such an approach can be.

In the sections which follow, research into the nature of the autodidactic 'method' is discussed under the following headings: the autodidactic process, sources of information and assistance with the learning project.

1. The autodidactic process

In the previous part of this chapter, it was shown that autodidaxy is an extremely widespread activity. It occurs in diverse settings and concerns a varied, possibly limitless, range of subjects. It is the intention of this section to attempt to discover from a review of the literature, if there is a distinctive pattern of inquiry which might be termed **the** autodidactic process. In particular, the following questions will be considered: do autodidacts pass through transitional stages in their learning?; if so, are they consciously aware of doing so?; and can

they reliably reconstruct their experience as a self-teacher? It will be shown that, although there are certain regularities in the ways in which autodidactic projects are conducted, the search for generalised law-like relationships has obscured and submerged individual differences between autodidacts, and between autodidactic endeavours.

Methodologically, one of the problems with studying autodidaxy is that, by its nature, it is entirely in the hands of the learner. Moreover, as Thomas (1967) noted, such people are frequently pursuing knowledge or skills in order to use them, and are not conscious of themselves *as learners* at all, certainly not at the outset[8]. Thus, it is difficult to locate research subjects and to pursue the progress of their projects. Despite this difficulty, researchers have used a variety of techniques for 'capturing' information about the autodidactic process. Those considered here are: (1) reconstruction through interview; (2) written sources such as biographies, and reflective essays; (3) learning journals and diaries; and (4) recurrent interviews throughout the duration of a learning endeavour.

Clearly, one potential research strategy is a reconstructive one, asking people to recall and reconstruct their experience of learning something for themselves. There are many drawbacks to such an approach, not the least of which is people's frequent inability to recall the details of what might have been, at the time, crucial events in the learning process. The research work of Tough and others has been brought into question because of the fallibility of memory with respect to *what* they learned; how reliable are retrospective recreations of the *process* itself? Despite this reservation, the small number of available research studies based on recollections of learning events is rich and stimulating. Several research groups which have explored autodidaxy in such a way, have come up

with different views of steps in the autodidactic process.

Leean (1981), for instance, followed up a Tough-like survey of undereducated adults in rural Vermont with intensive interviews with a sub-sample. The findings stressed the environmental and contextual elements in autodidactic learning and, as Mocker and Spear (1982) state; "The importance of past experiences and family background was found to be significant in the content and motivation for learning, as well as in approaches to learning and problem solving. Self-directed learning may be guided by a rational problem-solving model, but most of the subjects were aware of times when problems were solved through a non-rational or an altered state-of-consciousness" (p. 19).

Peters, Johnson and Lazzara (1981) began their research into the learning projects of both literate and illiterate adults in Tennessee with the assumption that most learning projects are actually efforts to solve a problem. They devised a research methodology involving a four stage textual analysis. Their research process they refer to as "hermeneutic and interpretive," and they note in their interim report that the process of autodidactic learning is idiosyncractic in that it represents "the person's reasoning pattern applied to a specific problem situation" (Mocker & Spear, 1982, p. 20).

In their own research, Spear and Mocker (1981, 1984) found that, contrary to expectations, only rarely did adult learners pre-plan their learning. Instead, they discovered that autodidactic activity more often than not arose out of some 'triggering event' (referred to by Mezirow as a 'disorienting dilemma') or change in life circumstances, and that the structure, method, resources and conditions for learning are all directed by circumstances. To describe this

phenomenon, they coined the term 'The Organizing Circumstance,' and Caffarella and O'Donnell (1985) comment; " . . . learning sequences progress as the circumstances created in one episode become the circumstances for the next logical step. Needless to say, the organizing circumstance is an exciting new aspect of self-directed learning, and an area which calls for further research" (p. 5).

Other researchers who have been prepared to defy the orthodox in their research into autodidaxy are Danis and Tremblay at the University of Montreal. Growing out of the work of Flavell (1979) on metacognition, and Maudsley (1979) on metalearning, they have found intriguing indications of the ways in which autodidacts become aware, and take conscious control, of their habitual patterns of perceiving, of searching, of learning and of developing. They made a detailed content-analysis of the learning experiences of ten autodidacts, and conclude that the experience does not conform to either a linear or a cyclical sequence, but rather that; "the self-taught adults proceed in a heuristic manner within a learning approach which they organize around intentions, redefine and specify without following any predetermined patterns" (Danis & Tremblay, 1985a, p. 139). Like Spear and Mocker, they note the impact of unpredictable events on the learning process, and conclude; "the self-taught adults take advantage of any opportunity that random events may offer them in order to learn."

This is not to say that autodidacts are directionless victims of circumstance, lacking in any clear goals or intentions. On the contrary, they tend to be more purposeful, tenacious and disciplined than other learners, and are constantly alert to the possibility of learning in all sorts of situations. There appears to be the sort of fusion of intention and response, of action and

reflection, captured by Freire (1972) in the term 'praxis,' and this in turn seems to be mediated by some higher-order process such as metalearning or metacognition (Tremblay & Danis, 1984).

A second potential source of information concerning the autodidactic process might be the written records which autodidacts have prepared, often for themselves, though sometimes for a wider public. Many eminent (and some not-so-eminent) people have left behind biographies or autobiographies. While these are frequently an intriguing source of information about the life events which shaped their personal development and learning, or even their self-education (ref. e.g., Adams, 1931), they rarely disclose much about the learning process itself (Jackson, 1979).

Gibbons and his associates (1980) content-analysed the "biographies of twenty acknowledged experts without formal training beyond high school, in search of commonalities that might suggest ways people become effectively self-directing in learning and accomplishment" (p. 41). Although their paper makes fascinating reading, they tend to emphasise personality and situational characteristics which encourage autodidaxy, rather than exploring the internal dynamics of the process itself. They do, however, confirm the role of serendipity in many learning endeavours; "Accidents or coincidence seem to play an important part. Chance occurrences often led to a new perspective that enabled them [i.e., the subjects of the study] to solve problems and make breakthroughs in understanding" (p.48).

Perhaps the most elaborate self-analysis of the autodidactic process of learning is a paper by Griffin (1981), in which she imaginatively reconstructs a learning project carried out in, and in relation to, her own home. She traces the

constant shifting between, and interaction among, various facets of her valuing and judging system, but does not introduce the notion of metacognition, or any higher-order process mediating the transitions. She does, however, note that; "There was no predictable, orderly sequence of use of the various [aspects]. Their occurrence seems almost random. At this time, I have no reason to expect that other learning experiences would follow any predictable sequence" (p. 6).

Griffin identifies five dimensions which were engaged—sometimes together and sometimes individually—in pursuing her learning project: the rational, the physical (or physiological), the emotional, the relational, and the metaphoric or intuitive dimensions. What emerges is a picture of the enormous complexity and unpredictability of a learning effort: critical insights were gained at various points, and she comments that if events had taken a slightly different turn at any point, "the results for my learning and for the project would have been quite different" (p. 6). Like many other writers on autodidaxy, Griffin stresses the interdependent nature of much learning in this mode. The autodidact, as Moore (1973b) suggests, is "not to be thought of as an intellectual Robinson Crusoe, castaway and shut-off in self-sufficiency" (p. 669).

Another methodology which might potentially be used to discover more about the nature of the process itself is the learner's keeping a diary or working journal. According to Powell (1985), in his essay on autobiographical learning:

> Educational practitioners who have employed personal documents as tools for learning have either asked students to keep some form of diary in which to record activities as they occurred (Christensen, 1981; French, 1976; Hettich, 1976; Ingram, 1979) or have encouraged the creation of wide-ranging accounts of earlier educational experiences which are then explored in order to prepare for future life events . . . (p. 42)

Such sources have also been used by researchers to discover more about the learning process (R. M. Smith, 1986). One of the difficulties of using such an approach with autodidacts has already been alluded to; by definition such people are undertaking learning projects on their own initiative without formal institutional affiliation, and there is no simple mechanism for capturing the early (and perhaps decisive) phases of a project. Moreover, a high degree of self-discipline, not to mention critical reflectivity, is required to report on one's own learning as it unfolds. Judging from the valuable insights which researchers in other fields have gained from the use of journals or diaries, however, it would seem a most productive line of enquiry in trying to understand the autodidactic process and the stages or phases thereof.

An example of this potential is provided by Feldman's (1980) research into what he terms 'non-universal developmental phenomena.' As part of this research, he asked students at university "to begin a hobby that they have always wanted to learn, but had not had time to try" (p. 18). He terms this ingenious assignment 'metahobby,' and he goes on to describe the process and its outcome:

> Their assignment for the semester is to spend a reasonable amount of time learning how to do something challenging with which they have had little experience. The only constraint is that the hobby they choose has to be sufficiently difficult that they are unlikely to master it fully in a semester's time. They are instructed to reflect upon the experience in a journal and try to relate their experience to developmental theory . . .
>
> . . . Amazingly, almost all of the students thus far have been able to conceptualize their 'metahobby' projects in terms of developmental levels and developmental transitions which seem plausible and natural. The metahobbies have ranged widely— belly-dancing, ethnic cooking, sculpture, skiing, autobody work, calligraphy, radio broadcasting, to name only a few. The range is remarkable, but the common threads are, from our point of view, even more impressive. There is a real sense that the students' analyses are not simply a

> relabeling of experience. The notion of developmental levels and transitions within the variety of discipline-based domains selected seems to make a profound difference to these students as they reflect on their experiences . . . (p. 18)

Feldman has attempted to study the processes by which an independent learner 'gets on top of' or masters a subject. There is reason to suppose, on the basis of these findings, that the learner's attainment of autonomy (with respect to any particular subject matter or content) is likely to pass through distinct stages - slower or faster for each individual. Feldman calls this a 'non-universal' development, because it happens in an invariant sequence and involves the hierarchical integration of ideas, but it is not universal (i.e., not everyone learns it) and it does not happen spontaneously. If all four of these conditions applied, it would be classed as a universal developmental domain— the type studied by Piaget and his followers (Feldman, 1980, pp. 6-7).

Whereas Feldman asked learners to maintain a diary or journal during their 'metahobby' project, Taylor (1979, 1980) attempted to capture the process of learning on one's own by interviewing eight respondents (six women and two men) each week for thirteen weeks as they worked through personally selected learning projects. They were also interviewed again several months later. Based on a content analysis of the interview transcripts, she hypothesised, in any learning sequence, four phases or 'seasons' which she labelled 'detachment,' 'divergence,' 'engagement' and 'convergence'. According to Taylor (1980), these four occur in an invariant sequence though, as she mentions, "it is only near the **end** of a long process that we become conscious, able to name the direction of our learning" (p. 197).

a. The heuristic nature of autodidactic learning

Despite the range of research methodologies utilised in studying autodidaxy, the heuristic and somewhat unpredictable nature of the process has become abundantly clear. Various researchers have noted the impact of random events on the progress of a learning endeavour, and the constant reorganisation of intentions and plans as the project unfolds. In her research, Taylor (1980) found that learners were not able to state with precision what they expected, or even hoped, to learn. In fact, they were only able to engage fully and actively in learning once they were "able to relax **without** certainty as to an end state." She goes on; "By attempting to plan programs on the basis of asking learners to specify objectives at the outset, we are likely limiting the usefulness of such opportunities to that of consolidating old understandings, not coming to new ones" (p. 197). The same point is made by Frewin (1976, 1977), in his study of goal-setting behaviour in autodidaxy, and by Burstow (1984), who comments:

> If I am authentically learning, if I am truly spiralling, I will not be able to predict where I will go with accuracy. If I can predict with accuracy, there is a way in which I already know what I am purporting to learn; there is a way in which I have already arrived at where I have decided to go. At the very least, I am not giving myself fully to the process as indeed I must if authentic learning is to occur. The goal specified in the learning contract—do not forget—is not the *true goal*. The true goal, as Sartre had indicated, is what we desire at the *end*, not what we desire at the *beginning*. (p. 200)

It seems that these findings confront the researcher with something of a paradox. Clearly, the autodidact, in common with other learners, does not enter into a learning engagement without some goal or purpose in mind. Equally clearly, it appears that the autodidactic process is a complex and unpredictable one, which unfolds as it goes along. It seems that, although some autodidacts

are no doubt more methodical and systematic than others, the nature of learning
something entirely new (or solving a problem) precludes the setting of objectives
at the outset. In studying such a phenomenon, what is called for is a research
paradigm which is sufficiently flexible and responsive to adapt to the constantly
shifting perspective from which learners define and redefine their purposes
(Thomas & Harri-Augstein, 1985, p. 310). In this dissertation, it will be
suggested that constructivism provides such a paradigm. In turn, constructivism
sanctions the use of naturalistic modes of inquiry. Although this perspective has
rarely been applied to the study of autodidaxy, evidence will be assembled from
other bodies of research to support the claim that it is an appropriate approach
to such a study.

2. Sources of information

Many researchers who have established the existence, direction or duration
of autodidactic projects, have also enquired as to the sources of information
which autodidacts use. When someone sets out to learn something entirely new
to them, it seems clear that they will make use of a variety of resources and,
at the beginning at least, this is more likely to be on the basis of ready
availability, than any 'objective' measure of appropriateness. Since the range of
resources used is limited only by the imagination or ingenuity of the learner, it
is, for all practical purposes, limitless. Moreover, it is difficult to collect reliable
information because of questions of definition. In her research, McCreary (1984)
found that it was often difficult to distinguish 'sources' of information from
'channels' used. One person using a library might claim to have used a human
planner (i.e., the reference librarian) while another classifies this as a non-human

planner (i.e., a book or even an institution). For all these reasons, aggregate lists are of only passing interest.

Not unexpectedly, most autodidacts in this society make extensive use of printed material, and accordingly "reading . . . is an especially important learning activity in many self-planned learning projects" (Tough, 1979, p. 119). This fact has provided the basis for considerable research into 'adult independent study' by librarians. It has also attracted the attention of publishers—both academic and popular (J. Rogers, 1979)—and of researchers with a special interest in learning from the printed word (e.g., Rothkopf, 1976; Säljö, 1982). The fact that so much emphasis is placed on the written word clearly has important implications for those with limited literacy skills and this may, in turn, influence the nature of the learning projects undertaken by poorly educated adults. This subject will be discussed in greater detail later in this chapter, under the heading of social implications of autodidaxy.

With the increasing impact of advanced technology on people's lives, the question of both intentional and incidental learning from electronic media—especially radio and television—has received increasing scholarly attention. Furthermore, as Tough (1979) notes, "as computers become less expensive and easier to use, they may play an increasing role in helping learners find appropriate resources" (p. 124).

Turning to some specific findings, it is interesting and potentially useful to discover, for instance, that farmers use commercial radio and university field days as important learning resources (Bayha, 1983); that adult education directors find interpersonal learning cliques a useful source of professional knowledge (Beder et al., 1983); and that self-taught experts and avid hobbyists use other

enthusiasts as resources and supports for their learning (Brookfield, 1981a). According to Shackelford (1983), black adults use acquaintances as their most frequent resource, a finding also reported by Booth (1979) with low income adults, and librarians would certainly be interested, and probably troubled, by Shirk's (1983) finding that libraries and librarians were ranked low by adults as learning resources.

Some media are more interactive than others, and some more subject to the control of the learner than others. A television broadcast, for instance, occurs at a predetermined time, and pace, and the autodidact has comparatively little opportunity to stop, analyse, reflect or to disagree, because of the 'one-wayness' of the medium. A video tape of the same information, while still inert, is at least able to be played at the convenience of the learner, interrupted, replayed and so on, and accordingly, the learner has greater control, and the potential, at least, for a more considered reaction and response.

The dominant approach to research about sources of information has been to consider some inherent quality or characteristic of the source itself. However, what is of greater interest and importance is the learner's judgement about the resource; what value or potential it has from the point of view of the individual. Accordingly, this perspective is discussed in chapter eleven, on the reframing of research.

3. Assistance with the learning project

It has been customary to distinguish resources (often, but not always, inanimate) from helpers, particularly those who help an autodidact with planning and conducting a learning endeavour. Apart from the individual learner's

self-planned effort, both Tough (1978) and Penland (1979) distinguish non-human planners (such as television programs, programmed instructional materials or work books), from human planners (who may be 'professional' or 'amateur') and group planners (such as workshops or classes). Their findings, however, differ sharply as to the relative importance of each type of planner.

Whereas Tough (1978) claims that only 3% of learning efforts had a non-human planner, Penland (1979) claims 22.7%; and while Tough shows 73% of learning projects to be self-planned, Penland's research revealed that only 25.3% had been planned by the learner. These differences are clearly significant in the overall pattern of research, although they are almost certainly artifacts of the respective research designs (Penland, 1979, p. 171).

Disregarding these differences in percentages, the problem is how to distinguish self-planned from other-planned learning endeavours. Tough himself consistently refers to the 'other' or the 'hidden' 80% of adult learning, and he invokes the image of an iceberg[9] to make the point:

> Imagine that the entire range of the adult's learning efforts is represented by an iceberg. For many years, adult educators paid attention to the highly visible portion of the iceberg showing above the surface of the water. Attention was focussed on professionally guided learning—the providing of courses, classes, workshops, and other learning groups, plus apprenticeship, tutorials, correspondence study, educational television, programmed instruction, and so on. Virtually everyone still agrees that all of this professionally guided learning is an extremely important phenomenon in the world today. At the same time, though, it turns out to be only 20% of the total picture, only the visible part of the iceberg. The massive bulk that is hidden below the surface turns out to be 80% of the adult's learning efforts . . . (p. 253)

There are two drawbacks to this analogy. The first is that it is unclear whether the percentages relate to adult education in total or to the activities of an

individual learner. Does it mean that 20% of adult learners account for 100% of professionally guided adult learning, or that 20% of any given adult's learning will be professionally guided? This slippage is evident in the literature.

The second, and more significant, drawback is that it implies a clear, easily identifiable break between the other-planned (above the waterline) and self-planned (submerged) forms of adult learning. But it is not so easy in the real world of learning and research.

There are many instances where an autodidact might call on another person for help, while retaining the initiative and control over the learning event. Such a case would be if a learner telephoned an acknowledged expert in his or her field for an answer to a specific enquiry. In this instance, the learner would clearly reserve the right to take the advice or leave it, and the person telephoned would in truth be a 'resource person' Not all situations are as clear cut as this, however.

With the exception of the situation mentioned above, it is clear that people are not mere resources, to be called on at the whim or discretion of the learner. The involvement of another person in the learning situation introduces a significant dynamic variable and thus potentially a question arises as to whether the learner is 'self-directed' or 'other-directed'. Conversely, there are instructional situations which are so loose, so informal, so democratic and so learner-centred, that an outside observer would be hard-pressed to say whether it was self-planned learning or not. Similarly, what of the autodidact who goes to an expert for help, enrols in a course or workshop, or attends a seminar? If the overall goals, the criteria for judging success, and the prerogative to accept or reject, all still rest with the learner, has such a person surrendered the claim to

being self-taught?

It is in this domain, which is here called 'guided' or 'assisted' autodidaxy, that the educative activities of the self-teacher most closely resemble those of the independent learner (defined as someone with maximum learner-control within an instructional context).

If one could be permitted to build on Tough's metaphor, it is that part of the iceberg which is sometimes above the surface, sometimes below, glimpsed for an instant, then submerged again beneath the stormy seas of research where there is great potential for confusion, or mistaking the one mode for the other, and accordingly it is this distinction which creates the greatest difficulty for the researcher.

Considering the importance of this distinction, not only for this dissertation, but more generally for the issue of writing and theorising about assisted autodidaxy versus independent study generally, there seems to have been remarkably little research into the distinctiveness of the relationships which autodidacts enjoy with those who help them. Various researchers have classified these helpers as either 'professional' or 'amateur,' and have sometimes further subdivided this into 'intimates' and 'acquaintances'. However, comparatively little is known about the quality of the relationship which exists, or might exist, between an autodidact and his or her assistants.

There are, however, four similar relationships about which a reasonable amount is known, and these may be taken as analogies from which to draw parallels. They are the relationship between a mentor and a protégé, between an adviser and a graduate student, between a counsellor and a client, and lastly between a librarian and a library user. Each of these four will be considered in

turn, before examining the research literature on 'assisted autodidaxy' itself.

a. The mentoring relationship

The first of the relationships which resembles, and arguably embodies the elements of, assisted autodidaxy is the mentoring relationship, which has been extensively researched in both corporate (Bolton, 1980; Clawson, 1979, 1980; Misserian, 1980; Phillips-Jones, 1982; Woodlands Group, 1980) and educational (Bova & Phillips, 1984; DeCoster & Brown, 1982; Lester & Johnson, 1981) contexts.

The prototype was Mentor in Homer's *Odyssey*, the tutor to whom Odysseus entrusted his son Telemachus when he set off to fight in the Trojan wars. Mentor played a number of roles, including "that of teacher, father figure, trusted adviser and protector to an inexperienced young man" (Daloz, 1983, p. 24). In the organisational context, mentors are often seen as sponsors or patrons "who can offer the wisdom of years of experience from which to counsel the younger individual as they move ahead in their careers" (Klauss, 1981, p. 489).

In the educational setting, a mentor closely resembles a Rogerian facilitator; the mentor does not assume a traditional authority role, but instead "provides a learning environment . . . and relationship for the protégé to expand his learning potentials and goals for self" (Ruth & Frey, 1983, p. 5). Central to this supportive learning environment is the highly personal nature of the relationship between a learner and a mentor, and "if there is disharmony between the mentor and protégé, such as when tension arises when the protégé becomes overly dependent or condescending towards the mentor, then learning will not be achieved" (Klauss, 1981, p. 491).

In the same way that a non-directive teacher does not determine or impose learning goals on a learner, the mentor helps the protégé focus on goal setting, particularly in the areas of personal development and learning experiences. As Daloz expresses it, "the trick for the teacher or, in this case, the mentor is to recognize the agenda or goal on which the learner is already embarked, and which the teacher can only facilitate or thwart, but not himself invent" (Daloz, 1983, p. 27).

According to Levinson et al. (1978), mentoring is "defined not in terms of the formal role, but in terms of the character of the relationships and the function it serves. A mentor's primary function is to be a transitional figure . . . (p. 98) as the learner or protégé "grows in their own sense of intellectual competence, as well as in their sense of purpose, their feelings of autonomy, and their personal integrity" (Bova & Phillips, 1984, p. 16). Because the mentoring relationship is a transitional one, its character is likely to change over time, and Bova and Phillips (1984) cite a six-stage developmental model of mentoring (see Figure 3).

1	2	3	4	5	6
Entry	Mutual trust building	Risk taking	Teaching of Skills	Professional Standards	Dissolution
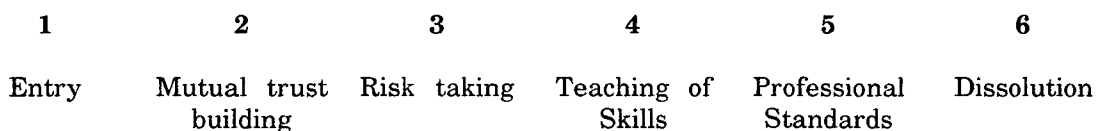
Figure 3: Developmental model of the mentoring relationship
(Bova & Phillips, 1984, p. 19)

If the relationship between a mentor and a protégé is analogous to the relationship between an autodidact and his or her assistant(s), then the above model could be used in researching the stages or phases an autodidact

experiences in achieving autonomy. This point will be discussed again in chapters ten and eleven.

b. The supervisory relationship

The second situation which is seen to be analogous to that of assisted autodidaxy is the relationship which exists between a graduate student and his or her research supervisor. Bargar and Duncan (1982) state that in the ideal situation, the adviser should "(1) establish an empathic relationship with the student that will enable her to understand, at some optimal level, the cognitive and affective dimensions of the student's research endeavors; (2) help assure that the problem is consonant with the student's own developmental endeavors and her own creative capacities; (3) ensure that the student retains major control of the research problem in all its complexity; and (4) avoid invoking arbitrary time constraints yet openly maintain normative expectations for progress . . . " (p. 24).

One of the recurring problems in graduate research, and a potential problem for the autodidact seeking help as well, is the issue of 'ownership'. The intention is "to maximise the student's personal and professional investment in the research problem, thus helping assure the highest level of the student's *independence* in the scholarly activity" (Bargar & Duncan, 1982, p. 22). In practice, however, ownership of the research often appears to be shared ("Whose scholarly reputation is on the line during the final, oral defense?" (p. 22)). According to Bargar and Duncan (1982) there are several indicators which might show when an adviser is taking over a problem from the student:

> The most obvious of these appears when the adviser discovers his own solution to some aspect . . . **and** feels that this is **the** correct

solution. There seems to be little harm in the advisor discovering potential solutions to troublesome aspects of the problem . . . [but] the harm seems to grow with the degree of pressure the advisor puts on the student to accept such solutions . . . (p. 22)

To avoid the likelihood of ownership subtly being wrested from the grasp of the learner, Bargar and Duncan (1982) suggest the following five ways in which helpers can actually help:

1.   identify potential resources of which the learner may be unaware;

2.   help the learner to refine his or her present understandings;

3.   assist the learner with analysing the problem, and help to overcome blocks, including emotional blocks. Heisenberg, the physicist, has defined an expert as "someone who knows some of the worst mistakes that can be made in his subject, and how to avoid them" (Heisenberg, 1971, p. 210). Helpers can intervene at times when 'worst mistakes' are most probable;

4.   encourage the learner to synthesise the most novel, exciting or important discoveries, without "supplying the learner with his own ready-made insights" (Bargar & Duncan, 1982, p. 27) and;

5.   provide informed, balanced and helpful feedback when this seems called for.

This last point is taken up by E. M. Phillips (1981) in her research into the experience of British students undertaking doctoral studies. She writes that, over time:

the students gradually imposed their own boundaries of action and time as they learned how to evaluate their work by interpreting the feedback for themselves, instead of relying on their supervisors to do this for them.

At first, the postgraduates had been unable to do this, but most of them gradually acquired the ability to perceive, interpret and act upon the information contained in the feedback . . . to reflect on their own performance and evaluate it.

This resulted in a gradual increase in autonomy so that their perception of the supervisory role changed. Instead of seeing it as one of tutor, primarily concerned with generating external approval and information, the supervisory role was perceived as one of colleague. (p. 12)

Three important points for research into autodidaxy emerge from this analysis. The first is that, once again, the personal dimension in the supervisory role is emphasised. The supervisor is to the student no more a 'mere resource' than the mentor is to the protégé. In both cases, the relationship bears a marked similarity to the situation of an autodidact seeking help with a learning project. The second is the issue of 'ownership': has the helper actually relinquished control or is she or he exerting subtle pressure on the learner to "do things my way"? The third point is whether or not learners have the sense of being 'in command' of the learning situation: have they accepted responsibility for such functions as imposing their own boundaries on time and action and evaluating their own work, or are they still "relying on their supervisors to do this for them" (E. M. Phillips, 1981, p. 12)?

c. The counselling relationship

As with the situation of the graduate student, almost without exception, writers on counselling stress the need for the client (or learner) to maintain 'ownership' of the situation, while the counsellor responds to the client's (or learner's) needs. A recurring theme is respect for the individual, along with a non-judgemental, non-interventionist, supportive attitude. Personal qualities such as empathy, respect, authenticity and warmth are frequently cited as desirable in the counsellor. The counsellor, however, is not simply a mechanic of the

emotions, however skilled, but needs also to have excellent skills of communication and analysis, especially in order to clarify points of confusion or contradiction in the client's understanding.

It is perhaps this perspective which encouraged Curran (1972) to claim that the distinction between counselling and education is a false one. He notes that counselling is, for many people, associated exclusively with the emotions, and education with the intellect, but that people themselves are not compartmentalised in this way. Hostler (1981) expresses it thus; "a person is far more than an embodied intellect: he has also a moral conscience, an æsthetic sense, a wide range of emotions and a spiritual sensibility, besides many idiosyncrasies of taste and temperament, which we significantly call 'personality'. Criticism has grown in recent years of the way adult educators have tended to ignore all these other facets of the self (Alexander, 1975, p. 23) and their current concern is to promote a more rounded and comprehensive kind of growth" (p. 33). It is this view which underlies Curran's (1972) formulation of 'Counseling-learning: A whole person model for education'.

The relationship between counselling (in the form of therapy) and education is widely, though often tacitly, accepted. Educators frequently talk in terms of diagnosis, of prescription, of analysis and remediation; indeed the language of counselling has infiltrated much of the discourse of adult education (Harris, Legge & Merriam, 1981). Many adult educators are familiar with the work of Carl Rogers, and his notion of student-centred teaching, but as he makes perfectly plain, student-centred teaching is simply the educational analogue of client-centred therapy, and this connection is a recurring theme in *Freedom to learn* (1969). In that book, he outlines a number of roles for the facilitator of learning, which

are highly relevant for the person seeking to help the autodidact;

(i) setting a supportive climate of inquiry;
(ii) helping to elicit and clarify the purposes of the learner;
(iii) relying on the learner to implement those purposes which have meaning for him/her, as the motivational force behind significant learning;
(iv) organising, and making available, a wide range of resources;
(v) regarding him- or herself as a flexible resource;
(vi) accepting both intellectual and emotional expressions from the learner;
(vii) collaborating as a co-learner and equal partner;
(viii) being authentic in sharing both thoughts and feelings with the learner;
(ix) being alert to the expression of strong feelings (such as anger, pain or conflict) by the learner, and being empathic rather than judgemental; and
(x) recognising his or her own limitations, and acknowledging the difficulties of establishing really deep, meaningful interpersonal relationships with the learner. (C. R. Rogers, 1969, pp. 164-166)

Despite the widespread, and indeed somewhat uncritical, acceptance of Rogers' idea in adult education, it is important to note that the non-directive approach is not always appropriate, and that in counselling, it has increasingly come under challenge in the health sciences. It has been shown to be inappropriate and unacceptable for some clients especially when they are seeking direct guidance. As will be discussed later in this chapter, autodidacts seek both emotional support and direct assistance with content. One potential area of inquiry would be to ascertain what types of assistance were most highly valued by autodidacts at different stages in their individual learning projects.

d. The librarian/client relationship

The fourth analogy for assisted autodidaxy is the relationship which does exist, or at least can exist, between a librarian and a client. Perhaps surprisingly, some of the best research into autodidaxy (referred to as 'Adult Independent Study' in the library literature), has been by librarians and information scientists, and some of the most far-reaching and innovative proposals

for the provision of support come from the same source.

Libraries have a long connection with self-managed adult learning (Birge, 1979; T. Kelly, 1970; Lee, 1966). Throughout the nineteenth century, particularly in countries such as Australia, Canada, New Zealand, and the United States, the establishment of reading rooms accompanied the spread of literacy and the explosion of interest in many early forms of adult education—Mechanics' Institutes, Literary and Scientific Societies, Adult Sunday Schools and so on. Frontier College, one of Canada's most spectacular indigenous adult education innovations, grew directly out of the Reading Camp Association (Bradwin, 1928; Fitzpatrick, 1920).

In more recent times, the public library has become the focal point of initiatives to provide educational and self-educational opportunities to a wide range of the adult population (Gould, 1976; Mavor et al., 1976) within a lifelong learning perspective (Conroy, 1980). Although many recent studies have been concerned with questions of organizational policy and institutional access, there has also been a reappraisal of the work of the librarian, changing from a custodial to a more consultative and advisory role (Carr, 1979; Dadswell, 1978; Dale, 1979, 1981; Reilly, 1978, 1981; J. C. Smith, 1986). Carr (1979) is a good example of this genre:

> The agent and the learner create complex relationships over time, entailing far more than the provision of useful resources and appropriate referrals. pragmatic objectives, and previous experience of one learner. Collaboration, reciprocity, and trust lead to empathy, confidence and candor in effective interactions. Dyadic bonds emerge slowly, engender unity and integrity in the learning alliance, and exist beyond the content of the learning. (p. ii)

More recently, J. C. Smith (1986) has reported on a research project in which

public librarians were asked about their perceptions of autodidacts, and how best to assist them. Despite their reluctance to categorise people, Smith was able to discern two basic types of autodidacts, which she labels 'confident learners' and 'timid learners.' One librarian (J. C. Smith, 1986) indicated how her approach might differ according to how she viewed the learner:

> "I'd probably be more motherly to the sort of person who looks, you know, weak and in need of lots of support. I'd be more 'jokey' and relaxed with a person who is very confident." (p. 251)

Many of the librarians had a few maxims or 'rules of thumb' for dealing with autodidacts. These seemed, according to Smith (1986), to fall into three categories:

> 1. The importance of all questions
>   "That's it, more than anything: just being considerate and treating every question like it's important."
>   "We never, never give the impression that 'Golly, how can you be so stupid as to ask for that?'"
> 2. The proactive approach
>   "You don't sit around waiting for the people to come to you, you go out and approach them."
>   "So we definitely don't say, 'The books are over there'. We try to question them and see if the initial question really reflects what they want to know; or if that is just their way of getting into the subject."
> 3. The 'invisible line' of privacy
>   "I have to know when to stop and realize there is a limit with some people that I can go."
>   "I think you just have to know at what point you have to stop."
>
> Once the librarians moved beyond these maxims to speak about individual cases, they stressed the importance of evaluating and responding to each interaction based on all the cues present in that particular interaction . . .
>
> Many of the librarians interviewed for this study seemed to indicate that they, like qualitative researchers, have to look beyond "the words as they come at you," and find the meaning behind the words. When this meaning is discovered, it is possible that the librarian and the learner mutually arrive at a point where truly facilitative interaction takes place. (pp. 251-252)

There are several points here which might profitably influence research into autodidaxy. The first is the reiteration of the interpersonal relationship between the learner and the librarian "entailing far more than the provision of useful resources and appropriate referrals" (Carr, 1979, p. ii). The second is the notion of confident and timid learners. From the point of view of the learners, it would be valuable to know how they viewed themselves; from the perspective of the helper (in this case, the librarian), how they determine whether a learner is confident or not. The point is how these perceptions affect the quality of the relationship and the nature of the help given. These concerns are discussed in chapter eleven.

e. Assisted autodidaxy

As early as 1964, Miller pointed out that "if we are to become serious about developing the autonomous learner, the nature of the helping relationship is an extremely important matter to investigate, and should constitute a research objective of high priority in adult education" (p. 225). In the same year, Solomon, in his introduction to a book about continuing learners, declared; "it is important . . . to know of the kinds of behaviors and roles taken by them [self teachers] in relation to family, friends, associates, and the larger society" (1964, pp. v-vi).

It was from these early cues that Tough took the direction for his research. In his earliest published monograph, entitled appropriately *Learning without a teacher: A study of tasks and assistance during adult self-teaching projects*, Tough (1967) wrote:

> When one first thinks about self-teaching, it seems reasonable to assume that the self-teacher learns without much assistance from any

other person. . . . [But] after conducting several exploratory interviews and analyzing his own self-teaching, it became evident to the writer that some self-teachers obtained assistance with several major tasks from a fairly large number of persons and that some of this assistance clearly influenced the self-teacher's progress. Each assistant provided advice and information, renewed the learner's confidence and enthusiasm, or assisted in some other important way. Selecting and reaching an appropriate assistant was sometimes very difficult or time-consuming for the self-teacher, but failure to obtain the assistance could hinder or even halt his progress. (p. 29)

Tough (1967) suggested four factors which help to explain why an autodidact might seek assistance. As well, he developed a typology for categorising types of assistants:

In the present study, friends, neighbors and relatives were divided into those who were especially close (intimates) and those who were not (acquaintances). Subject matter experts were divided into those who were approached primarily because of a personal relationship and those who were not. Two other categories, librarians and fellow learners, were added. (p. 31)

Several investigators have since noted the type or amount of assistance sought and obtained by autodidacts, frequently using Tough's classificatory scheme to report their findings. Others have attempted to classify the types of assistance sought, rather than the type of assistant. One investigator who has studied in detail the help sought by autodidacts is Tremblay (1981, 1983). Based on semi-structured interviews with twenty experienced autodidacts, she obtained some 2000 statements concerning various forms of help sought. These were then content-analysed to generate a classification scheme concerning needs for help, difficulties encountered, criteria for selecting a resource, and lastly the competencies and qualities of a helper. Under this last heading, Tremblay identifies four themes: management of the learning project, content expertise,

communication skills, and interpersonal relationships. Not unexpectedly, respondents noted the need for help with planning, organizing and evaluating their learning projects, and they commonly sought out, as resources, people who were experts, able to suggest further resources to assist with their learning project.

An ideal helper needs to be a good listener to grasp what an autodidact needs, and an effective communicator to explain and clarify points of difficulty or confusion. He or she needs to be flexible, to adjust to the needs of the learner, and above all, neither to deprive the learner of 'ownership' of the situation nor to force his or her point of view onto the learner (Tremblay, 1983, p. 235).

The helper also requires certain interpersonal skills. Respondents in Tremblay's study commonly mentioned warmth; availability; inspiring confidence in themselves and encouraging self-confidence in the learner; showing respect for, and interest in, the learner; and providing encouragement as often as needed. Both Tremblay and Burstow stress the authentic responsive nature of the relationship between and an autodidact and the people selected as assistants. Burstow (1984) writes that:

> Meaningful learning, meaningful change, according to a Sartrean paradigm, is not facilitated by detachment or technical know-how. It is not facilitated either by creating a vacuum or bombarding the learner with highly adroit flipchart diagrams or multimedia presentations. It is facilitated by intimate understanding, by concern, by involvement . . . What follows from this is the notion that self-directed learning itself needs to be modified to make more room for the 'other.' (p. 199)

Tremblay (1981) emphasises that the relationship between an autodidact and his or her assistants cannot be reduced to a formula: "De plus, il souligne que l'aidant ne devrait pas être prisonnier d'une seule approche ou d'une choix déterminé de techniques . . . " (p. 70).

From the foregoing, it can be seen that assisted autodidaxy requires that the helper have some subject-matter expertise and a genuine responsiveness to the needs of the learner. Moreover, the ideal relationship is not, as some have depicted it, a technical one—with the helper acting merely as a resource person—but includes a substantial component of warmth, empathy, authenticity and interpersonal contact. Such a relationship takes time to establish, and depends on mutual respect and candour.

The relationship needs to be seen as a transitional one with respect to the learning project, having a definite end-point once the learning project is complete, or the learner has attained a degree of autonomy with respect to the subject matter being learned. As discussed in chapter seven, this can be a difficult role for the adult educator because it lacks some of the personal and professional rewards expected, and customarily associated with 'teaching' in the usual sense.

Finally, despite the promise of Tough's early work, it seems that research into assisted autodidaxy has tended to concentrate more on the external characteristics of both assistants and assistance than on the subjective meanings and implications which such help has for the parties involved. This is a theme which will be taken up again particularly in chapter ten in comparing the assumptions underlying much previous research with those underlying constructivism.

f. Group related autodidaxy

Before leaving the subject of assistance with autodidactic projects, it is necessary to point out that not all 'self-directed learning' is a solitary activity. At least some autodidactic projects arise from, and occur within the context of, membership of a group. There is a small embryonic research tradition into this particular aspect of autodidaxy, with contributions by, amongst others, Banks (1985), Beder et al. (1983), Brookfield (1983), Elsey (1974), Luikart (1976, 1977), McCreary (1984), Percy (1981), and Spath (1982).

Thomas (1967) compared and contrasted the role of *student* with that of *member*. The student role is familiar in schools, colleges and universities and most mediated adult education. It is typified by external direction of the learning process, and by clear role definitions including a consciousness on the part of the learner, of his or her role as a student. The member, on the other hand:

> is neither dependent upon institutional authority nor particularly self-conscious about the engagement in learning. It is the collective goal that is important, not individual enhancement, and thus the learning is merely a means to a collective end. The member did not, for the most part, become a member to learn something of advantage to himself, but to do something . . . (p.71)

Having established this basic assumption, Thomas (1967) goes on to discuss the role of a 'teacher' in such a situation:

> The goal is both determined and, to a degree, described in detail by the group, and the teacher is hired to provide help towards that goal. If the teacher deviates too far from the member's perception of the means to that goal, either the group dismisses the teacher, or members begin to drift away from the group. The teacher carries with him the presumed authority of relevant knowledge and to a certain degree the authority of the institution from which he comes, but it is a fragile authority which must be proved and won

repeatedly in intercourse with the group . . .

The physical venue of this experience is almost always the learner's familiar action-bound setting—the union hall, the conference room, the community centre—and the teacher comes to him rather than he to the teacher. (p. 71)

At least two important implications for research are raised by this notion of studentship versus membership. Firstly, there is reason to believe the learning outcomes obtained in situations of studentship and membership will differ sharply. This is dealt with in chapter eleven, in discussing the work of Säljö and others of the Göteborg group in Sweden. Thus, it would be desirable for a researcher to be able to distinguish these situations from one another. However, there may be no external differences on which to base such a distinction. For instance, although it is most likely that learners in a conventional 'school' or training situation would think of themselves as students, the mere fact that an activity takes place in the "learner's familiar action-bound setting" is no guarantee that they would view themselves as members. The distinction is an internal one, made by the learners themselves, and it would therefore be necessary to refer to the internal processes, intentions and understandings of the participants. This perspective is rarely encountered in the literature on autodidaxy.

Secondly, the 'teacher' has only a "fragile authority which must be proved and won repeatedly." Unlike many learners, autodidacts have the power to 'hire and fire' their helpers, and thus research into the bases of the assistant's authority and acceptability in the eyes of the learner would seem to be a profitable new direction for research. Both of these possibilities are discussed in the chapter on reframing research in 'self-direction' (chapter eleven).

D. THEORETICAL, CONCEPTUAL AND POLICY STUDIES

Thus far, this chapter has tended to focus on the internal and interpersonal dynamics of autodidactic learning. However, researchers have also made an attempt to place autodidaxy into the broader context of educational activities, and this is discussed in the remainder of the chapter.

Despite the millions of words which have been expended, worldwide, on the subject of autodidaxy, it still cannot be said to have a robust theoretical foundation. Attempts to provide one have taken basically two forms: either to construct a theoretical framework out of the literature itself, by means of some sort of inductive or grounded theory building, or to subsume it within some existing theory base.

If Tough's original work (1966, 1967) signalled the virtual beginning of serious research in this area, there have been several attempts to summarize and review the literature as it has evolved. The first was Coolican's 'Self-planned learning: Implications for the future of adult education' (1974). In 1978, Tough himself reviewed the progress of study in the domain, and mentioned twenty-four studies which, in essence, replicated his own original research. He identified eight principal areas for future inquiry.

In October 1979, Unesco conducted an 'Expert meeting on the forms of autodidactic learning' in Paris, and the Final Report of that meeting (Jankovic et al., 1979) contains a number of stimulating and provocative insights, many of which have not found their way into the North American literature. In particular, the socio-political ramifications of promoting autodidaxy are dealt with at length, along with the policy implications for organizations and governments seeking to foster this form of learning.

Cross, in her book *Adults as learners* (1981), drew heavily on the summaries by Coolican (1974) and Tough (1978). Although impressed by the rapid progress of research in this area in a relatively short time, she observed that little is known about what actually happens during the course of a learning project: "Whether one wants to know how to facilitate learning or how to present information to adults, more in-depth study of how learning actually takes place in everyday settings is a necessity, one that should receive first priority in the 1980s" (Cross, 1981, p. 199).

The year 1982 witnessed the appearance of two major reviews, one by Brookfield in England, and the other by Mocker and Spear in the United States. Brookfield's work consisted largely of an extended bibliographic essay, and the Mocker and Spear study was more in the nature of a literature review, and an attempt to place autodidaxy into the context of lifelong learning.

More recently, Caffarella and O'Donnell prepared a background paper for the 1985 meeting of the American Commission of Professors of Adult Education, which had established a task-force on self-directed learning (Brookfield, 1984, p. 59). Finally, in August 1986, an invitational conference on 'self-directed learning' was held at the University of Georgia-Athens. Although the proceedings of the conference are not yet published, it is understood that it constituted a major state-of-the-art review, combined with an attempt to set directions for future research.

Most of these studies have included some sort of agenda for future research, and over the years it is possible to discern an increase in the sophistication of these recommendations. For instance, early reports tended to call simply for 'more of the same,' though with different samples. However the 1979

Unesco meeting suggested the need for a co-operative international effort to clarify concepts in the field, as well as some studies to examine the relationship between schooling and adult education. Brookfield has consistently maintained the need for qualitative research approaches, and Mocker and Spear (1982), in their discussion, pointed to the possibilities inherent in naturalistic research approaches. Overall, however, research agendas in this domain have tended to suffer the same fate as in other areas of adult education, they have been heeded by a few, and ignored by many (Sork, 1982).

In addition to these cumulative summaries, there have been at least four attempts to explicate the theoretical basis of autodidaxy. Three of these (Gibbons et al., 1980; Moore, 1973b, 1977; and Penland, 1981) are based on empirical research and take the form of grounded theory building. The fourth (Boyd, Apps & Associates, 1981) comprises an attempt to derive from within the literature, a theoretical framework for what they have called the 'individual transactional mode' in adult education.

Although each of these studies has highlighted important areas of enquiry, and has tended to demonstrate the cumulative nature of research findings, none of them could be considered to constitute a systematic integrative review (Cooper, 1984; Jackson, 1980) or a wholly satisfying theoretical framework. The result is that, even now, researchers into autodidaxy do not definitively know what *is* known about the field, or what is *not* known. Moreover, it is abundantly clear that research into autodidaxy has been based on several different views of knowledge, of learning and of human nature itself. It is argued here that the absence of an internally consistent and defensible view to guide future research is likely to hamper the development of an integrated perspective, and

constructivism will be suggested as an appropriate paradigm for such research.

1. Autodidaxy and lifelong education

Instead of attempting to develop a theoretical basis from within itself, an alternative approach to the study of autodidaxy has been to place it within a broader context, such as the framework afforded by lifelong education (Brockett, 1983; Clark, 1973; Council of Europe, 1975; Gibbons & Phillips, 1982; Rubenson & Borgström, 1981; Skager, 1978, 1979, 1984). Lifelong education, itself, however, is a notoriously nebulous and fluid construct.

Despite Yeaxlee's use of the term 'lifelong education' as early as 1929, it has only entered the educational lexicon in the past two decades. From the late 1960s onwards, there has been a series of publications, most of them emanating from Unesco, dealing with the concept itself, and its implications for education worldwide (Cropley, 1977, 1979, 1980; Dave, 1973, 1976; Duke, 1976; Ingram, 1979; Jessup, 1969; Lengrand, 1970; Parkyn, 1973; Skager & Dave, 1977) Other terms have been coined which describe similar educational reforms: for instance 'permanent education' by the Council of Europe and 'recurrent education' by the Organization for Economic Co-operation and Development (OECD). This, in turn, has spawned a specialist literature which attempts to define and distinguish these concepts, often through minutely detailed content-analyses of published articles and reports, and unpublished documents (Alanen, 1982; D. Kallen, 1979).

According to the definition adopted by the Unesco Institute of Education, lifelong education should;

1.   last the whole life of each individual;

2.   lead to the systematic acquisition, renewal, upgrading and completion of

knowledge, skills and attitudes made necessary by the constantly changing conditions in which people now live;

3.   have as its ultimate goal, promotion of the self-fulfilment of each individual;

4.   *be dependent for its successful implementation on people's increasing ability and motivation to engage in self-directed learning activities;*

5.   acknowledge the contribution of all available educational influences, including formal, non-formal and informal. (Cropley, 1979, p. 3, emphasis added)

In 1972, lifelong education was proposed by the International Commission on the Development of Education (Faure, 1972) "as the master concept for educational policies in the years to come for both developed and developing countries" (p. 182). According to one of its chief proponents, Ravindra Dave, (1973) the Director of the Unesco Institute for Education:

> It is a very comprehensive idea which includes formal as well as non-formal learning extended throughout the lifespan of an individual to attain the fullest possible development in personal, social and professional life. It includes all desired learning that occurs in a planned or incidental way in the home, educational institutions, community and place of work. Lifelong education encompasses all stages and aspects of education in an integrated and articulated manner. (p. 30)

As Rubenson and Borgström (1981, pp. 116-117) point out, the Unesco Institute of Education has consistently emphasised the importance of the individual learner and has argued that one of the major goals of lifelong education should be to develop learners capable of self-directed learning. The Institute has dealt with this concept in a comparative evaluation of school curricula (Skager & Dave, 1977; Ingram, 1979) and in more general analyses, often in the form of speculations of a normative character (e.g., Cropley, 1980).

One of the most interesting aspects of this work has been the attempt to

operationalise what self-directed learning would mean for both the content and the process of school education. Skager and Dave (1977) list the following five criteria:

1. participation in the planning, execution and evaluation of learning: learners are involved in planning both school and out-of-school activities.
2. individualization of learning: organisational facilities are provided for making individualised teaching and learning practicable.
3. development of self-learning skills: opportunity is provided for use of a variety of learning sources, media and materials.
4. development of inter-learning skills: learners share responsibility in the teaching/learning process.
5. development of self-evaluation and co-operative evaluation skills: group or individual work is evaluated co-operatively. (p. 53)

There are two notions central to the concept of lifelong education. The first is "the belief that learning . . . occurs throughout life, albeit in different ways and through differing processes[10]," and the second is "the conviction that all individuals ought to have organized and systematic opportunities for instruction, study and learning at any time throughout their lives" (Cropley, 1977, p. 21).

Lifelong education differs from the conventional or traditional model of education in two major respects. The first is its insistence that people should have the opportunity to participate in educational activities throughout their lives (not simply from 6 to 16, or 6 to 21), and that artificial barriers to, and between, levels of education should, as far as possible, be eradicated. This is referred to as *vertical integration*.

The second difference is the acknowledgement that people learn in a wide variety of contexts and settings, and that at any given stage of life—whether they are enrolled in formal educational activities or not—people are learning; from

friends and family; from libraries; at work; in clubs and societies; in churches and other religious bodies; from radio, television, newspapers and so on. This is defined as *horizontal integration* or 'lifewide education' (Cropley, 1979, p. 15). Knapper and Cropley (1980) put the issue in perspective when they comment that, "in a sense, learning is far too important to be left solely to professional educators in direct teaching situations. Rather, educators would be better employed devising some means to foster self-directed learning and help it to take place productively and efficiently" (p. 3).

It can be seen that the phenomenon of autodidaxy fits into both the horizontal and vertical dimensions of lifelong education: It is at once one of the most common ways in which adults pursue learning throughout their lifespan, as well as being a way in which people everywhere supplement (and at times substitute for) the types of learning received in formal settings. It is in this respect that autodidaxy has become almost synonymous with lifelong education in the minds of many.

However, there is another important link between the two concepts, for lifelong education takes, as one of its principal aims, equipping people with the skills and competencies required to continue their own 'self-education' beyond the end of formal schooling. Autodidaxy is thus viewed simultaneously as a **means** and an **end** of lifelong education and this has contributed to some confusion in writing and thinking about it.

2. Implications for policy

In the same way that a pebble dropped into a pond creates a series of concentric ripples, it is possible to view the impact of autodidaxy, first with respect to the role and function of the adult educator or other agent, next with regard to institutions and organisations, and finally its impact on society at large. This, then, is the framework which will be used to review some of the policy implications and recommendations concerning autodidaxy (Hiemstra, 1980).

a. The role of the educational agent

In 1965, from 24-26 October, a conference on the Theory and Nature of Independent Learning was held at the University of Wisconsin-Milwaukee. The announcement for that conference (Gleason, 1967) bore the following statement:

> Recent insights from the behavioral sciences have expanded our conceptions of human potential through a recasting of the image of man, from a passive, reactive recipient to an active, autonomous and reflective being. What are the implications of this impelling new image for our concern with . . . the learner? (p. v)

In view of the extensively documented propensity of humankind to undertake autodidactic learning in one form or another, it is interesting to ponder, along with Jourard: "How did man [woman] ever come to be conceived as a passive, reactive recipient? By whom was [s]he so conceived and why? And who recast the image?" (Jourard, 1967, p. 79)

Perhaps the greatest single service performed by Tough and his various followers has been to promote the notion that adults are authors of their own destiny, and to emphasise the need for educators to respect the integrity and personhood of their clients. Many formulations which advocate increased

learner-control, democratisation, learner autonomy or collaboration in the adult teaching/learning situation either implicitly or explicitly appeal to the notion of autodidaxy as a basis of support. For instance, Knowles's work on self-directed inquiry (1975) does so, and indeed the whole notion of andragogy which has been the subject of so much scholarly debate recently, is explicitly based on the assumption of adult self-directedness[11].

On the other hand, several researchers in the field of autodidaxy have extrapolated from their findings, recommendations for the conduct of adult education. For instance, Tough (1979) has made explicit suggestions about how educators in instructional settings should acknowledge the 'self-directedness' of adult learners, and Hiemstra (1980) advocates that adult educators should use practices which encourage learner-control and autonomous learning both in classroom settings and professional practice.

The relationship between an autodidact and his or her helper(s) was dealt with at length earlier in this chapter. There it was shown that the relationship may vary over the life of a project; that it involves a substantial degree of interpersonal involvement; and that it probably has a finite life, once the learner achieves a degree of autonomy with the project or else attains his or her learning goals. Clearly it is impossible to legislate the conduct of a helping relationship, but the primary concern of any helper—amateur or professional—should be with the needs and perceptions of the learner.

In line with this, the autonomous person may opt to make a strategic suspension of his or her independence: in the words of the Nuffield Group (1975); "autonomy . . . implies a freedom to choose between independence, interdependence and dependence, *as the need is recognised by the student in terms*

of his or her particular circumstances" (paper 2, p. 4, emphasis added). This places the overall control of the learning event in the hands of the learner. It also acknowledges that there may well be times when the learner, recognising his or limitations, asks for direct guidance or input. In such situations, it would be inappropriate for the adult educator or other agent to withhold direct assistance and instead to adopt a non-directive, counselling stance. The great difficulty for the educator is to be able to tell the difference between a genuine request for guidance by an autonomous learner, and the submissive plea for assistance by a helpless and dependent one.

b. Implications for institutions and organizations

When considering the implications of autodidaxy for institutions and organisations, it seems that there are two alternative ways in which organizations can respond: one way is by becoming more flexible and attempting to serve the learning needs of adult independent learners *as they occur in the community*, and the second is by trying to attract some of the vast army of independent learners into various programmed activities. Cross (1978) summarizes the issue neatly:

> Some analysts . . . distinguish between adult education and adult learning (Tough, 1971, Ziegler, 1977). To oversimplify a bit, adult education has given relatively greater attention to teaching, that is, to developing programs, courses, and instruction to meet the special needs of adults, whereas those concerned with adult learning place the emphasis on finding new ways to facilitate learning for adults. Following this distinction, the supporters of adult education would enter the learning society working toward equal opportunity and improved access for adults . . . Their emphasis would be on getting adults into an educational system consisting largely of group instruction that might, however, be credit or non-credit, offered by industry, churches and community agencies as well as by schools and colleges.

> The advocates of adult learning, on the other hand, would bend

their efforts toward facilitating individual learning on any topic of
interest to the learner, by providing mentors, learning contracts,
educational brokerage services and so on. They would give relatively
more attention to helping people plan their own learning programs. (p. 1)

According to Tough, society is in a transition from adult education towards adult

learning. Writing in 1978, he claimed; "In both research and practice in adult

education, there is some evidence of a shift in focus. The traditional focus:

providing education or instruction. The emerging focus: facilitating relevant

learning" (Tough, 1978, p. 251).

The forces massed on the side of adult education are formidable, however,

and Ziegler (1977) has observed exactly the opposite tendency; "a strong trend

towards getting more and more citizens to conduct their learning activities within

the organizational arrangements of the formal educational system" (pp. 15-16).

This worries Ziegler who, like other commentators such as Ohliger (1974) and

Wilenius (1979), is sufficiently concerned about the "threat of an over-credentialed

society . . . to warrant a radical conservative stance towards public policy

formation oriented towards the so-called interests of the adult learner." Ziegler's

(1977) recommendation, accordingly, is to "leave adult learners alone to conduct

their learning in ways and about concerns which meet their own criteria and

standards" (p. 17).

There have been attempts to assist adults to pursue their own learning

tasks. Ohliger cites "learning exchanges, learning networks, free universities [and]

independent scholarship round tables" (1983, p. 172); Heffernan (1977) writes of

the potential offered by educational brokering services; J. Rogers (1979) draws

attention to learning-by-appointment schemes, where "all a potential student needs

to do is to telephone for an appointment" (p. 135); Gross (1979) has unearthed

a veritable smorgasbord of self-educational opportunities; and public libraries have also been involved in a variety of innovative outreach activities (Conroy, 1980; Mavor et al., 1976; Penland, 1976).

Yet even among those who ostensibly support the notion of lifelong education, and who endorse the principle that human beings, particularly adults, are "capable of self-determination . . . and self-development" (Wilenius, 1979, p. 25), there are some, paradoxically, who seek the formalisation of 'learning-to-learn' programs. This represents a curious and inexplicable conundrum; that someone can believe that adults are capable of undertaking their own learning, but not of undertaking their own 'learning-to-learn'.

It must be emphasised that the 'adult education' versus 'adult learning' distinction is not simply a difference of opinion about methodology, but a profound difference of opinion about ideology. Those favouring institutionalized 'adult education' would tend to prefer a more structured type of society, while those advocating an 'adult learning' approach may well be making idealistic assumptions about the willingness and ability of people to conduct their own learning.

c. Implications for society at large

Although autodidaxy itself may be a relatively unspectacular process, the dream of its becoming more widespread—even universal—has moved people to extol it as a centrepiece of an educational Utopia, the Learning Society (Husén, 1974; Knowles, 1983b).

As early as 1936, Bryson claimed simply that; "Ultimately, the goal of all adult education is the independent pursuit of learning" (p. 98). Gardner

(1963), in his wide-ranging social analysis, offered the view that the ultimate aim of instruction is "to shift to the individual the burden of his own education" (p. 12), and Combs (1972) claims that "the goals of modern education cannot be achieved without self-direction . . . The world we live in demands self-starting, self-directing citizens capable of independent action. The world is changing so fast we cannot hope to teach each person what he will need to know in twenty years" (pp. 58-59). Kidd (1973), one of the leading figures in adult education, wrote in his book *How adults learn*; "it has often been said that the purpose of adult education, or of any kind of education, is to make of the subject a continuing 'inner-directed' self-operating learner," and Dressel and Thompson (1973), who surveyed independent study in American higher education write that it "comes close to being, if it is not indeed, the major goal of all education" (p. vii).

These comments have been echoed and reiterated down the years by all manner of influential thinkers; the Commission on Non-traditional study, the Club of Rome, the Unesco Institute of Education, and numberless educators, futurists and scholars. Repeatedly, the ability to pursue one's own education after the end of formal schooling, and to broaden one's own social and cultural participation through self-initiated learning endeavours, has been endorsed not only as the true purpose of education, but also the path to social equality and participative democracy. However, despite the potentially central role of autodidaxy in making a better future for humanity, there has been surprisingly little scholarly attention to the broader issues surrounding it, including the atomistic and depoliticised notion of individualism upon which it is based (Buss, 1979; Lukes, 1973; Sullivan, 1984; Wexler, 1983).

3. Reservations concerning the concept of autodidaxy

In his 1984 summary and critical review of research into autodidaxy, Brookfield comments on "the lack of attention devoted by researchers in this field to the considerable social and political implications raised by their studies" (p. 68). Brockett (1985a) concurs; "With regard to the political dimension of self-directed learning, Brookfield's comments are most insightful, for they force us to ponder the *real* consequences of situations where learners are *truly* in control of their learning" (p. 58).

It would seem, then, that there is another similarity between the constructs of autodidaxy and lifelong education. Writing of the latter, Rodriguez (1972) comments that "the still highly abstract nature of the idea facilitates the emergence of an almost universal consensus in its favour . . . Only a very few discordant voices are raised to warn against the danger of totalitarianism" (p. 27). Cross (1978) makes a similar point, in slightly different terms; "It is quite possible that lifelong learning now outranks motherhood, apple pie, and the flag as a universal good. Almost everyone is in favor of lifelong learning despite mounting confusion among experts over the meaning of the term" (p. 1).

It appears that this comment is also true of autodidactic or self-directed learning; it is a construct to which people from widely differing ideological positions can equally subscribe (e.g., Dill et al., 1965; Raiskii, 1979, p. 76). The few, the very few, who have considered autodidaxy critically have drawn attention to: (1) its excessive emphasis on individualism and individuality (Brookfield, 1985d; Hargreaves, 1980; Welton, 1986); (2) attempts to formalise and institutionalise the practice (Bock, 1976; Ziegler, 1977); and (3) its potential for aggravating, rather than ameliorating, inequality (Borgström, 1985; McClintock,

1982; Rubenson & Borgström, 1981). Each of these concerns will be dealt with in turn.

a. Emphasis on individualism

One recurrent criticism is that autodidaxy tends to overemphasise the individual with respect to the societal context. In a brief, but powerful critique of individualism in education, Hargreaves (1980) traces the triumph of individualism, represented most often by egoism and anomie (Durkheim, 1925), over organic solidarity. He writes:

> The working vocabulary of teaching reflects the cult of individualism. When teachers talk about their aims, the rhetoric is replete with concepts such as 'individual development,' 'personal growth,' and a whole host of concepts—independence, autonomy, self-reliance, initiative—which can all be prefaced with the word 'individual'. Collective or corporate concepts which were once much more popular—*esprit de corps*, 'team spirit' etc . . . —are fast vanishing. (pp. 193-194)

Adult educators are not exempt from this trend. As Welton (1986) laments of the situation in Canada (and the situation is probably similar in other major English-speaking nations such as England, Australia, New Zealand and the United States) "adult educators seem to have forgotten our movement tradition (mobilizing groups to make the social order more responsive to their interests). Now the intellectual dike is riddled with holes and the seas of humanistic, individualistic psychology have flooded in, engulfing us all" (pp. 11-12).

This criticism is not directed at autodidaxy alone, but at any perspective which tends to emphasise individual over collective effort. Not unexpectedly, approaches to formal education which emphasise 'independent study' are criticised for the same reason: they are socially divisive and tend to emphasise certain

cultural values in preference to others. Brookfield, for instance, laments both the middle-class bias of most studies of autodidaxy and their failure to deal adequately with the social setting and support mechanisms, particularly of working class learners, and those of low educational attainment. Walker (1984) is critical of the emphasis on 'self-directed learning' because of its gender bias towards males and Halverson (1979) in an essay on 'Individual and cultural determinants of self-directed learning ability,' points out that "women are socialized into accepting a set of values associated with responsible behavior, friendliness, co-operativeness and acceptance of authority . . . " and that "those of a non-Western cultural background, such as Mexican Americans, blacks and Native Americans, tend to have a value orientation based on communal values and holistic thought processes" (p. 63). She goes on to ask:

> Should we design self-directed learning environments to foster learning styles and characteristics of independence, aggressiveness, and analytic thought which are rewarded in the dominant society? Should women and racial/ethnic minorities consider their cultural heritage of field sensitivity in terms of cognitive style and interpersonal relationships a barrier to achievement and self-directed learning? If not, how can women and racial/ethnic minorities gain access to society's rewards? We need to consider the costs to individuals and to society of following this path. (1979, p.63)

The ideology of individualism is deeply rooted in western capitalist democracies (B. Gibbs, 1979; Spence, 1985) and is accordingly embodied in socially approved ideals which guide education. In 1961, for instance, a Joint Policy Commission of the National Education Association and American Association of School Administrators stated that: "That basic American value, respect for the individual, has led to one of the major charges which the American people have placed on their schools: to foster that development of individual capacities which

will enable each human being to become the person he is capable of becoming"
(quoted by Dittman, 1976, p.463). This kind of ideological commitment has led to
the more or less uncritical acceptance of individualism in learning as a universal
good, yet, as Keddie (1980) observes, individualism is not valued equally by all
groups in society:

> The force of the research which has attempted to distinguish between
> middle and working class cultures has stressed that while the middle
> class . . . are oriented towards the value of individual achievement,
> working class culture places emphasis on collective values . . . (pp. 54-55)

With few exceptions, little scholarly attention has been focussed on the
sociological aspects of autodidaxy, including whether or not some forms of
autodidactic endeavour either lead to, or else result from, social alienation. It is
clear that this educational domain demands further critical analysis from a
sociological, as well as the more common psychological perspective. This point is
discussed further, in chapter eight, when considering the major paradigms
underlying educational research.

b. The excessive formalisation of the concept

Two separate issues are raised under this heading. The first is the fear
expressed by authors such as Bock (1976) and Zeigler (1977) that autodidaxy
will be co-opted by the formal education system, and that many of its distinctive
attributes will be lost. Already in many parts of the Third World, there are
Ministries of Non-formal Education; it is only a short step to the
institutionalisation of autonomous learning.

Although this scenario may seem unlikely, a Charter of Rights for
independent learners has already been proposed, and one could imagine a

situation in which autonomous learners could obtain some sort of certification for their competence at this mode of learning. Objectors such as Ohliger (1974) and Ziegler (1977) argue not so much against the need for expanded educational opportunities throughout one's lifetime, as against the excessive formalisation of the system; against the "technocrats, politicians and educationists of a commercial and efficient society [who] gang up together to expand schooling to a lifetime in order to equip people better for the demands of the economy and thus the demands of productivity."

The other fear, ironically, is almost the antithesis of the first, namely the suggestion that autodidaxy might one day supplant formal schooling, education and training, as the dominant (and perhaps even the only) mode of learning in society. In their more euphoric moments, various authors have implicitly or explicitly suggested that the formal education system will be, or should be, disestablished, dismantled or discarded in favour of networks of learning resources to serve the needs of autodidacts.

A more balanced and parsimonious assessment, however, is offered by Jankovic et al. (1979) in their report on the European meeting of experts on autodidaxy:

> . . . the affirmation of the interest which the development of autodidaxy represents is not tantamount to a condemnation of the formal educational institutions.
>
> On the contrary, the specific contribution of school and university structures appears irreplaceable, both in terms of teaching services and the corpus of established knowledge they can provide. Autodidaxy should not be used as an excuse to cut funding to regular

formal institutions.

> Briefly, autodidaxy, far from being an insurrection against the school, can only be implemented within a global strategy of educational development, and with the support and assistance of the school system, whatever the reticence and resistance it now encounters. (p. 29)

V. N. Campbell observed this over twenty years ago: "If self direction were to begin early in school and increase in scope as the student demonstrated his competence at it and saw that his reward was greater freedom and responsibility, by the time he was an adult, the cumulative effect on his problem-solving, decision-making, and creativeness might be impressive" (1964, p. 358).

Autodidaxy and formal instruction have always co-existed and, as McClintock (1982) notes, there is no reason to suppose that either one will entirely eclipse the other. There will always be a demand for instruction in forms of discipline-based knowledge, just as there will always be room for the independent pursuit of learning. The challenge for policy makers and theorists is to envisage an educational system in which these activities can both continue, each performing its legitimate share in the provision of learning opportunities.

c. Autodidaxy and social inequality

A third criticism concerns autodidaxy and the persistence of social, cultural and educational inequality. The propensity of the formal educational system to 'sort' and 'allocate' people to various societal roles is a phenomenon which has been extensively documented in recent years (Bowles & Gintis, 1976; Connell et al., 1982; Karabel & Halsey, 1977) The formal system of schooling also

reinforces and legitimises these inequalities, through the subtle messages, or 'hidden curriculum' (Snyder, 1971), embodied in both the content and process of education. It is also apparent that a vicious cycle is operating at the societal level as well, for those who have more education tend to partake of more still, while those without education fall further and further behind. Moreover, the children of the well-educated, having access to an enriched home environment and often to a privileged system of schooling, are more or less assured of the opportunity for higher education, better paid jobs, and more social and cultural stimulation, and thus the inequalities tend to be perpetuated, or even accentuated, generation after generation.

It is a professed intention of lifelong education as a policy goal to eradicate these invidious inequalities, and to break the cycle whereby such inequalitites are perpetuated, and even exacerbated, by formal education. Some have considered the possibilities which adult education (Höghielm & Rubenson, 1980; Thompson, 1980), particularly the non-formal (Stalker-Costin, 1985, 1986) and autodidactic (Borgström, 1985; Gelpi, 1979; Rubenson & Borgström, 1981) forms of adult education, might offer in this process. Gelpi (1979), for instance, writes that self-directed learning by individuals and groups is a danger to repressive forces and powerful élites, because it challenges their control: "Radical change in social, moral, æsthetic and political affairs is often the outcome of a process of self-directed learning in opposition to the educational message imposed from without" (p. 2). According to this perspective, if only autodidaxy could be encouraged, there would be a progressive overturning and reversal of the reproduction of inequalities via formal education.

The problem with this line of reasoning is that, as has been discussed

elsewhere in this chapter, the incidence of autodidaxy already seems to be reasonably evenly distributed throughout the adult population. Even those groups conventionally classified as 'hard-to-reach' or 'disadvantaged' seem to undertake various forms of learning efforts, yet there has not been any appreciable improvement in their status, or ability to transform their lives. Thus, as Rubenson and Borgström (1981) note, "the link which has been presumed to exist between self-directed learning and progressive social change is more complicated than the literature on the subject usually suggests" (p. 118). They state that in Sweden:

> the socially transformative goal of redistributing educational resources with a view to achieving greater equality was given top priority during the 1970s. Previously in the educational debate, greater equality was often viewed in terms of economic equality. In the adult educational policy of the 1970s, however, the goals of adult education can be taken to refer to the creation of resources in a broader sense . . . contributing towards a further development of democracy by increasing the social and cultural awareness of citizens, and their active contribution towards social change (p. 121).

In line with this policy objective, attempts have been made to study the effects of participation in various forms of adult education on the creation of personal resources, not just economic, but social, cultural and political as well (Johansson, 1970, p. 25). Rubenson and Borgström (1981), noting the apparent failure of autodidaxy to yield improved economic resources, ask:

> . . . what kind of resources are really created by this activity? Do people mainly participate in activities which only create resources in the areas where they are already strong? If this should be the case, the redistribution effects will be quite small. (p. 125)

By 1985, Borgström was in a position to be able to answer this question. In an extensive study of the living conditions of the Swedish people, conducted

by the Central Bureau of Statistics, she was able to include some questions about the leisure time pursuits, and adult education (including autodidactic) activities of some 6,700 adults in Sweden aged between 16 and 74 years. She established that "the group 'self-directed learners' seem to be a group that has stronger resources in cultural, political and social matters [generally]." She goes on to observe:

> These results seem to give poor support to the hopes that have been attached to the function of self-directed learning to increase democracy. Different knowledge and competence is created or reinforced in different groups. In contrast to statements in the literature, this study found that self-directed learning rather contributes to the reproduction of inequalities in society. This occurs through a tracking process by which the self-directed learners from the upper classes pursue activities with the best 'pay-off' in the form of cultural enrichment, occupational and political efficiency. (pp. 13-14)

It appears, then, that autodidaxy may not hold the key to improved social equality, as commonly claimed, and that it is not simply the number, but the type of autodidactic activities which are engaged in, that makes a difference to people's quality of life.

Even in those situations where an autodidact is pursuing topics which appear to have the potential for increasing their personal resources, some learners could be at a disadvantage. Because they are incapable of understanding fully the 'logic of the subject,' they might be restricted to superficial or reproductive strategies, and material which is only superficially understood has comparatively little power to transform people's lives or equip them with enhanced 'resources'.

It might be argued (Häyrynen, 1980) that people from an impoverished socio-cultural environment (i.e., 'disadvantaged' or 'hard-to-reach' adults) may

experience a qualitatively different level of learning when they undertake their own projects, and they may be unable to undertake 'deep-level' learning of a subject. As McClintock (1982) writes: "perhaps self-set study is an education designed to perpetuate privilege and to create élites. By this means, the rich may get richer, the powerful more powerful, the cultured more cultured, while the common man gets more common yet . . . " (p. 51).

Although it is perhaps tempting to assume that people who are self-taught are the 'orphans of culture' (Jankovic et al, 1979, p. 3), and that those from economically underprivileged situations are unable to learn as well as those who have had more advantages in life, one should be careful in following this line of reasoning too far. The the assumption is simplistic, and the correspondence is far from absolute. Häyrynen (1980) argues that there are forms of æsthetic awareness which allow people to follow quite complex philosophical arguments, "even though they were not able to understand everything conceptually . . . A task involving a challenge often leads to a discovery of new abilities in oneself" (p. 12). Tough (1979) also comments on the same aspect when he writes of his experiences interviewing people about their learning projects; "Several times, during an exploratory interview with a family member or friend whom I thought I knew very well, I have discovered an attractive, but unsuspected side of the person. Sometimes this impressive new aspect is a goal or interest, sometimes an earnestness or thoughtfulness, and sometimes an intelligent, aggressive striving to become a better person" (p. 19).

It is beyond the scope of this dissertation to undertake a full-scale sociological analysis of autodidaxy. However, the comments by Häyrynen and Tough above serve to underscore the fact that people are not always victims of

their biographies, and that self-education can allow them to reconstrue their realities, as well as to change their concepts of themselves. This theme is discussed again in chapters eight and nine.

E. SUMMARY

This chapter has reviewed literature pertaining to 'self-directed learning' which occurs outside formal instructional settings. The term autodidaxy has been used to label this phenomenon. The chapter began with a review of the many descriptive and verification studies which have now established beyond doubt the extent of non-institutional learning. However, a number of methodological and substantive criticisms have been directed at these studies. These criticisms include: (1) the fact that many autodidactic projects are of very short duration and probably involve low-level or rote learning rather than meaningful learning; (2) questions of external validity and the dangers of generalising to the whole adult population on the basis of samples studied; and (3) the use of inadequate research designs and of inappropriate research instruments. Overall, perhaps the most telling criticism is "that they have reached the point of dullness" (Caffarella & O'Donnell, 1985, p. 3). Many researchers in adult education seem to have confused the replication of the same basic study using different target populations, with the concept of a research tradition.

The chapter next considers attempts to identify the autodidactic 'method' itself. Some approaches have rested on the concept of autodidaxy as a method of organising education, some as a technique of teaching, and some as a model of learning. It is argued here that it is none of these things exclusively, but is best studied 'on its own terms.' Furthermore, because of the complexity of the

settings in which it occurs, naturalistic modes of inquiry seem to be most appropriate to gaining a full understanding of the phenomenon.

Studies of the autodidactic process reveal it to be a complex, unpredictable and multifaceted activity. It has been likened to a program of problem solving, often arising from some 'triggering event,' and usually taking an erratic course, where the outcome of one phase of the inquiry creates the circumstances for the next part (Mocker & Spear, 1981). Researchers have repeatedly commented on the apparent randomness of events which shape any given project, and the inability of a learner to know where his or her inquiries will end. One promising line of inquiry is that suggested by Feldman (1980). He argues that the attainment of autonomy with respect to any particular subject of inquiry is likely to pass through identifiable stages or phases, but this proposition has been tested only in a quasi-experimental setting of the classroom assignment, not a naturalistic learning environment.

Research into sources of information used and assistance obtained, has been inconclusive. With respect to learning resources, research has been dominated by typologies which classify resources according to their external characteristics, rather than their perceived meaning or usefulness to learners. Likewise, comparatively little is known about the quality of the relationship which autodidacts enjoy with their helpers. It was suggested that there are four parallel relationships which might inform research in this area, namely: the protégé/mentor relationship, graduate student/supervisor, client/counsellor, and library user/librarian.

The following points emerged from a study of these four analogous situations: (1) the assistant adopts a non-directive stance with respect to the

autodidactic project; (2) the success of the assistance depends in part on the existence of a genuine, interpersonally satisfying relationship between the learner and the helper, and this relationship cannot be reduced to a simple formula; (3) the relationship will go through developmental phases and will terminate when the learner has achieved his or her purposes; (4) the helper should avoid giving the impression of taking 'ownership' away from the learner, who needs to have the sense of being in 'command' of the project; (5) individual learners may give the impression of being confident or timid with respect to a learning endeavour, and this will influence the nature of assistance offered by the helper; and (6) the helper's acceptability to the learner is based on the learner's subjective criteria, rather than any external authority.

It was argued, overall, that, research into this relationship has failed to deal adequately, if at all, with the perceptions of participants, especially those of the autodidact with respect to the assistance sought and obtained. Thomas' (1967) distinction between membership and studentship was discussed and it was pointed out that qualitatively different learning outcomes ensue when learners see themselves as either members or students. Accordingly, it is important for researchers to be able to distinguish these situations from one another, but this entails entering into the meanings of the individual learner.

The chapter also considered theoretical, conceptual and policy studies. It was stated that most studies of this type are accumulative rather than integrative, and that research has been hampered by the lack of a clear and internally-consistent epistemological position. Attempts to incorporate autodidaxy within the framework of lifelong education were reviewed. It was shown that, since autodidaxy relates to both the horizontal and vertical dimensions of lifelong

education, it is commonly viewed as both a means and an end of lifelong education. Development of the ability to pursue learning autonomously has implications for the conduct of all education, not just adult education.

Finally, three reservations concerning autodidaxy were discussed: (1) over-emphasis on individualism; (2) the excessive formalization of the concept; and (3) autodidaxy and social inequality. It appears that there has been very little research into these, and other socio-cultural issues.

In the next chapter, research concerning the nature of the autodidact, his or her skills or competencies, and the relationship of the learner to the world of knowledge will be considered.

V. THE AUTODIDACT

A. INTRODUCTION

It is the purpose of this chapter to review literature pertaining to the self-directed learner, or autodidact, who undertakes learning projects on his or her own initiative, without any formal institutional structures or support. As discussed in the last chapter, this phenomenon is widespread, with estimates ranging as high as 70% to 100% of the adult population being involved. If these estimates are correct, then one could expect to find an enormous diversity amongst autodidacts, in fact as wide a diversity as amongst the adult population as a whole.

It is widely—almost universally—assumed that adults are involved in some sort of quest for self improvement, and perhaps even for self-actualisation. But autodidaxy differs from this; it is distinguished by the *intentional* pursuit of some *definite knowledge or skill*. Even though this may also be characteristic of the adult population in general, it is clear that some people are more competent, more dedicated, more experienced, and indeed more successful at this activity than others.

This chapter will review the research concerning the autodidact, the skills and competencies which have been identified with this activity, attempts which have been made to measure or assess people's predisposition towards autodidactic learning, and practices (particularly educational) which have been linked with its attainment. It will be argued that authors commonly assume that autodidactic competence is context-free. In this dissertation, however, people's willingness and ability to direct their own education is seen to have a situation-specific

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(commonly a subject-specific) dimension.

B. SKILLS AND COMPETENCIES OF THE AUTODIDACT

In 1964, Verner wrote; "For all practical purposes, self-education is beyond the range of responsibility of adult education, since it is an individual activity and affords no opportunity for an adult educator to exert influence on the learning process" (p. 31). This assertion, however, has not deterred an increasing number of investigators from researching autodidaxy. As discussed in the last chapter, researchers have investigated the number and type of learning projects undertaken; the sources of help sought; resources utilized; and the steps commonly involved; as well as a number of conceptual and theoretical issues concerning autodidaxy. They have also attempted to develop profiles of the autodidact.

In accordance with the time-honoured practice of collecting certain biographical and demographic data about respondents, and in conformity with an established tradition of research into participation patterns in adult education, there is an expanding body of findings concerning the self-educational activities of many groups of adults. These findings reveal that a large proportion of the adult population, including those traditionally classified as 'hard to reach' (unemployed, rural, elderly, ethnic minorities and those of low formal educational attainment) undertake various forms of learning project each year. A summary of these results appears in chapter four.

A second, more recent strand in research involves identifying the skills and competencies found to be appropriate to the practice of autodidaxy. Some of the profiles produced are based on empirical research, others are more speculative

and normative. Related to this attempt to identify skills and competencies, is the collection and analysis of data concerning such variables as learning styles, locus of control, psychological well-being, life satisfaction and readiness to undertake 'self-directed learning.'

1. Towards a profile of the autodidact

After an extensive review of pertinent literature, Skager (1979) proposed seven types of personal attributes possessed by the 'self-directed learner.' These are: (1) *self acceptance* or positive views about the self as learner, based on prior experience; (2) *planfulness* which comprises the capacity to (a) diagnose one's own learning needs, (b) set appropriate goals, and (c) select or devise effective learning strategies; (3) *intrinsic motivation* or willingness to persist in learning in the absence of immediate external rewards or punishments; (4) *internalised evaluation* or the ability to apply evidence to the qualitative regulation of one's own learning activity; (5) *openness to experience* and a willingness to engage in new activities because of curiosity or similar motives; (6) *flexibility* or willingness to explore new avenues of learning; and (7) *autonomy* or the ability to choose learning goals and means that may seem unimportant or even undesirable in the immediate social context (p. 519).

As mentioned earlier in the dissertation, some researchers have identified autodidaxy as a matter of learning, and made their studies and recommendations on the basis of the skills and competencies required of a learner. Others have emphasised the teaching dimension of autodidaxy, and have accordingly listed competencies associated with program planning or instruction. It is under the heading of Skills and Competencies that the dualistic nature of autodidaxy is

perhaps most accentuated.

A review of the work of twenty different sets of authors[12], resulted in an inductively derived list of attributes and competencies which are either possessed by or desirable in independent learners. According to these various studies (see Appendix A), the learner capable of exercising control over the tasks to be mastered, and of working independently will characteristically;

- be methodical and disciplined;

- be logical and analytical;

- be reflective and self-aware;

- demonstrate curiosity, openness and motivation;

- be flexible;

- be interdependent and interpersonally competent;

- be persistent and responsible;

- be venturesome and creative;

- show confidence and have a positive self-concept;

- be independent and self-sufficient;

- have developed information-seeking and retrieval skills;

- have knowledge about, and skill at, 'learning'; and

- develop and use criteria for evaluating.

2. Criticisms of this approach

Several observations about this list seem called for. They concern class and gender bias, the misleading nature of such a composite profile, failure to deal adequately with the concept of autonomy with respect to learning, and perhaps most significantly the tendency to ignore situational variability in learning

contexts.

a. Class and gender bias

A first observation concerns the class and gender bias inherent in many conceptualisations of independent learning. In chapter four, it was noted that the concept of self-directedness in learning tends to be dominated by upper-middle class, white male stereotypes. Walker (1984) makes the comment even more plainly:

> Knowles's (1975) definitive book *Self-directed learning: A guide for learners and teachers* contains a section on the characteristics of the self-directed learner, which is actually a collection of passages on the 'ideal man' (sic), written by a number of humanist and existentialist philosophers. All the authors are male, and each of their descriptions reads like a stereotype of an ideal member of the upper-middle class. The same kind of criticism has been made of Maslow, whose 'hierarchy of needs' and assumptions concerning the motivation to achieve 'self-actualisation' are influential in adult education and self-directed learning circles. Maslow posits two types of people, the 'growth motivated' and the 'deficiency motivated.' Membership in either group is a matter of personal good or ill fortune. A reading of his descriptions of both, however, reveals the 'growth motivated' person to be the prototype rational, instrumental, independent, executive, middle-class male, and the 'deficiency motivated' to be practically anyone else, particularly anyone who must depend on a relationship with others for their well-being and survival. Class, race and sex are not considered to be variables affecting that good or ill fortune which determines human motivation. (pp. 14-15)

Research into the skills of autodidacts needs to avoid any bias in favour of either sex, or any cultural or class grouping. This is particularly so when lists such as the above form the basis of programs designed to develop specific clusters of competencies. It is necessary to avoid endorsing any single 'ideal' of the competent autonomous learner.

b. Misleading composite profiles

A second observation is that a composite list such as the above can be

misleading because it obscures and submerges differences between theorists. Take,

for instance, Flanagan's 1970 Presidential address to the Division of Educational

Psychology of the American Psychology Association, in which he outlined the

characteristics of a self-directed individual:

> . . . a reasonable degree of skill and decision-making in planning.
> This should include skills in analyzing and defining problems, and in
> using various types of evaluation procedures . . . It also includes the
> ability to prepare a sequential plan using a clear statement of desired
> outcomes and working back to obtain a definite schedule and a set of
> procedures for determining the required progress at each point in the
> plan is to be realized . . . (cited in Geis, 1976, p. 269)

Such a vision can be contrasted with Mezirow's (1981) specification:

> A self-directed learner must be understood as one who is aware of
> the constraints on his efforts to learn, including the psycho-cultural
> assumptions involving reified power relationships embedded in
> institutionalized ideologies which influence one's habits of perception,
> thought and behavior as one attempts to learn. A self-directed learner
> has access to alternative perspectives for understanding his or her
> situation and for giving meaning and direction to his or her life, has
> acquired sensitivity and competence in social interaction and has the
> skills and competencies required to master the productive tasks
> associated with controlling and manipulating the environment. (p. 21)

Some of the differences between these two quotes are a matter of level of

abstraction, and of language. But this itself is likely to be symptomatic of some

other, more far-reaching difference between these two perspectives.

The point is that the concept of autodidaxy has been claimed by

representatives of different basic orientations with respect both to learning, and

the nature of the subject matter to be learned. It is a recurring theme

throughout this dissertation that autodidaxy (and the desirability of autonomy

more generally) is claimed as a rallying point by representatives of radically different philosophical and ideological perspectives. In reviewing psychological positions relevant to the development of self-direction, Skager (1979) writes:

> The perspectives overlap to some extent. However, they differ sharply in their conceptions of the motivational basis of human learning as well as in their assumptions about the degree to which the behaviour of learners should be shaped by a controlled environment as compared to an environment which encourages spontaneous, individualised personal growth" (p. 520)

This implies that the use of the same terminology can be misleading, because it masks profound and ultimately irreconcilable differences in the intentions of the authors.

c. Inadequate treatment of autonomy in learning

A third criticism can be levelled at many of the conventional profiles of the autonomous learner which emphasise 'independence' (especially independence from teacher and institutional constraints) but ignore autonomy in the sense of critical judgement or discernment. One question which writers on autodidaxy rarely address is: What does it really mean to learn autonomously? There are two approaches to this question. The first (and most common) is to start with a profile of a learner, and then to ask what an autonomous one might be like. The second is to start with a profile of an autonomous person, and to ask what such a person might be like as a learner. This latter approach yields new insights into the distinction between an autonomous and a non-autonomous

learner. Based on the definition given in chapter two, therefore, an autonomous

learner would be characterised by:

1. taking the initiative, with or without the help of others, in diagnosing or assessing one's own learning needs;

2. selecting appropriate sources of help with learning and, where necessary, temporarily surrendering some measure of independence for the sake of expediency in learning;

3. developing, through a process of enquiry and reflection, an appreciation for the criteria by which to evaluate the particular domain of learning being undertaken;

4. asking what is the justification for rules, procedures, principles and assumptions which it might otherwise be natural to take for granted;

5. refusing agreement or compliance with what others state or demand where this seems critically unacceptable;

6. being aware of alternative choices, both as to learning strategies and to interpretations or value positions being expressed, and making reasoned choices about the route to follow in accordance with personally significant ideas and purposes;

7. continually reviewing the process of learning (as both a cognitive and a social phenomenon), and making strategic and tactical adjustments to one's approach in order to optimise learning potential;

8. conceiving of goals, policies and plans independently of pressures from others to do so, or not to do so;

9. developing an understanding of phenomena in such a way, and to such an extent, as to be able to explain the phenomena to others in words and under circumstances substantially unlike those in which they were first encountered;

10. independently forming opinions and clarifying beliefs, yet being willing to relinquish beliefs or to alter opinions when relevant contrary evidence is presented, and to do so irrespective of the presence or absence of extraneous rewards or pressures;

11. being able to pursue a learning goal with equal vigour and determination without being adversely affected by external factors including the increase or decrease of rewards for pursuing or attaining the goal;

12. determining what is really of personal value or in one's interests, as distinct from what may be expedient, or what may be conveniently so regarded; and

13. being willing and able to accept alternative points of view as legitimate and being able to deal with objections, obstacles and criticisms of one's goals without becoming incapacitated, threatened or angry [13].

Although a person may have an overall predisposition toward acting

autonomously, it is clear that, with respect to any given domain of learning, he

or she may not have mastered "the logic with which bodies of beliefs are

criticized and developed; and the methodology which specifies the degree of

support given to theory by observation" (Quinton, 1971, p. 208). In other words, he or she may not be autonomous with respect to the subject being learned. This gives rise to the fourth observation about composite profiles of the autonomous learner, which is the failure to account for situational differences in autonomy.

d. Ignoring situational differences

A fourth observation about profiles of the 'typical' autonomous learner is that they have a tendency to portray autonomy as a context-free disposition, rather than a context-bound one. In particular, many profiles of the autonomous learner (such as those on which the composite list in this dissertation was based) are grounded neither in autodidaxy nor in independent study within formal instructional settings, but an amalgam of the two.

The proposition that learner-control and autodidaxy are linked, indeed interchangeable, is widespread. For instance, Victor Marbeau, a former Inspector-General of Public Instruction for France, and member of the prestigious Council of Europe Committee for General and Technical Education, writes, "the pupil's potential aptitude for successful self-education [as an adult] will depend upon the extent to which he [sic] has been exposed to situations of responsibility and autonomy in his school years" (1976, p. 15). As Skager (1979) comments, "This is a plausible assertion, but little more than that. No evidence links the kind of school learning conditions referred to by Marbeau with participation in education later in life" (p. 520).

Many of the competencies mentioned in the list do not apply particularly to the autodidact, but have been found to relate to successful learning generally

(R. M. Smith, 1984; Della-Dora & Blanchard, 1979, p. 4). This is the position explicitly adopted by Oddi (1985), when she "focused on the personality characteristics of individuals whose learning behaviour is characterized by initiative and persistence in learning *through a variety of modes . . .* " (p. 230, emphasis added).

Intuitively, it seems likely that autonomy would manifest itself across a range of learning situations. However, autonomy in learning involves, in addition to generic skills, a certain knowledge of the subject matter being learned; some familiarity with its rules of discourse. Accordingly, as Strong (1977) states:

> . . . an adult learner will not always be at the same point along the continuum of autonomous learning. *It is dangerous to assume that because someone has exhibited an ability to learn autonomously, that the same situation will apply with regard to an area completely different to all previous learning.* It was noted of several people in this study that whilst their basic ability to plan, to organise their learning, was well established, having been involved in, say, pure science, that when tackling a practical DIY project, there was a considerable need for assistance . . . (p. 139, emphasis added)

Admittedly, there are some people who seem able to apply themselves autonomously across a range of disparate content areas. However, one person can vary markedly in the degree of independence he or she exhibits from one situation to another. In this dissertation it is suggested that *there may exist, with respect to autonomy, a generic or trans-situational component, as well as a situation-specific dimension.* This latter dimension would help to explain why some learners may be judged or thought-of as 'independent' or autonomous by their peers or their instructors in one domain, yet still lack autonomy with respect to some other aspect or area of study.

3. Self-confidence versus learned helplessness

It will be recalled from chapter three that Dearden (1972) claims; "A person could not be, to any marked degree, autonomous, without this being an important part of his self-concept" (p. 460) Just how central is a self-concept of autonomy to the practice of autodidaxy? J. C. Smith (1986) asked public librarians about their perceptions of autodidacts and how to assist them:

> . . . there was an apparent reluctance on the part of librarians to describe a 'typical' or 'composite' learner, [but] despite this reluctance, a classification did emerge . . . which reflected two perceived categories of learners. One category might be called the 'confident learners.' . . . The other category that emerged from the words of the librarians might be called 'timid learners.' (p. 251)

The confident learners seemed to "have had some success in school." They were described as "eating up" their learning, "soaking it up," being people who could "really deal with this material". They were also seen as "very, very skilled," "capable," "competent," with a "strong sense of purpose". As Smith (1986) observes, "Many of these adjectives are reminiscent of the characteristics that emerged from the biographies and autobiographies of self-taught individuals studied by Gibbons et al. (1980)" (p. 251). The timid learners, on the other hand, were described as "fragile," "fearful," "weak," "a little lost," "reluctant to ask," "inarticulate" and "wandering" (p. 251). Smith goes on to add:

> Despite the perceived differences, one librarian proposed an overriding characteristic of both confident and timid learners: "They have in common their willingness to ask. Sure, there are a lot of people who want to learn things, [but] who just cannot take that first step. *I guess that's basically it: that they're willing to take a chance to get our attention, and ask for help.*" (p. 251, emphasis added)

Admittedly, the way people appear to librarians or to other agents who might

assist them is not an infallible guide to their *self*-confidence, but it seems reasonable to assume that there are differing *levels* of confidence within the overall notion of an autonomous learner. But there are also those who, although they may want to learn things, in Smith's words, "just cannot take that first step" (p. 251), and who accordingly would not be classed as autonomous learners at all. This phenomenon is often blamed on 'learned helplessness,' which is frequently invoked to explain why adults might prefer to be 'taught' rather than to take responsibility for their own learning. The argument is that the more people have things done for them, the more 'institutionalised' they become, and the more institutionalised they are (in both a figurative and a literal sense), the more dependent, helpless and passive they are. It is argued that years of passivity in educational settings deprive many people of the confidence to take charge of their own learning.

One problem with the notion of learned helplessness is that it implies that the learner is a victim who is perhaps too helpless even to do anything about the helplessness!

There is however another, potentially more useful, way of thinking about 'learned helplessness.' If the learner is considered to have developed a belief about himself or herself (or about learning, or about the subject to be learned), then it might be possible to change that belief: as Even (1984) points out; "if such human conditions are learned, they can be unlearned" (p. 280). Thomas and Harri-Augstein (1983) refer to this alternative view as a 'personal learning myth,' which they explain as follows:

> Most people have arrived at convictions about their own learning; their models of themselves as learners. Often this has been achieved on less than adequate evidence. They have either been 'brainwashed' by someone else's assessment of them, for example parents, teachers and

peers or, in having been offered less than optimal conditions to learn, they have generalised their experience as a commentary on their <u>own</u> methods. Such assumptions can very easily be self-validating . . . (p. 4)

Personal myths, like societal myths, might well be demonstrably untrue, but that does not stop them from being treated as if they were true, and such beliefs accordingly influence behaviour. Thomas & Harri-Augstein (1985) give some insight into the sort of tacitly held views of 'self-as-learner' which can keep people imprisoned, and prevent them from achieving their potential. Sometimes, such myths concern:

> what students felt to be necessary physical or social conditions of learning. Many described how they must have coffee or snacks to hand all the time, but others saw even regular meals as interruptions which disturbed their efforts to learn. Some students knew that they had to sit up 'properly' at a desk if they were to read something and really remember it, whilst others were generally convinced that they could only really concentrate if they were comfortably stretched out on the carpet. There were those who had to have complete silence if they were studying. Others 'knew' that they could not work without a background of radio or recorded music. (p. 11)

Even more bizarre are the beliefs that people hold about their own learning abilities. For instance:

> Towards the end of the third session in a series of four interviews . . . one psychology honours student revealed the following view of his own learning. Thinking himself to be mature (26 years old) he was convinced that his memory had reached its limits. He had, therefore, to be very careful not to learn anything which was not crucially important because when he now learned anything, he inevitably forgot something else. (p. 11)

Learners also hold deep implicit views of their own innate capabilities, they have "negative myths about their bodies, their inability to think logically, the bluntness

of their æsthetic sensibilities, their lack of inventiveness or their incapacity to empathise with others" (Thomas & Harri-Augstein, 1985, p. 12).

Personal learning myths represent a more constructive way of understanding variability in autodidactic activity than the idea of learned helplessness. Since the focus of this dissertation is on reframing research into 'self-direction,' it is proposed that people who refrain entirely from autodidactic activities or seem 'timid' and apprehensive with respect to a particular learning task, should be interviewed to ascertain what beliefs thay hold which may inhibit their learning. Instead of thinking in terms of learned helplessness, and of the need to break the "passive set" for learning (Campbell, 1964, p. 357), it is suggested that researchers should conceive of learners as active construers of their circumstances, making choices on the basis of their constructions. They should make an attempt to understand and portray reality as it is viewed by the person himself or herself. This theme will be elaborated later in the dissertation.

4. Scales purporting to assess 'self-directedness'

As part of the overall attempt to identify autodidacts, several researchers have introduced instruments which purport to measure aspects of learner autonomy. Two of these are Guglielmino's Self-Directed Learning Readiness Scale (SDLRS) (1977), and Oddi's Continuing Learning Inventory (OCLI) (1984).

The SDLRS consists of a 58-item Likert scale, designed to assess the degree to which individuals perceive themselves as possessing the skills and attitudes conventionally associated with 'self-directed learning.' The original instrument was developed through a three round Delphi survey of fourteen

persons considered to be experts in the area of 'self-directed learning,'[14] before being pilot tested and refined. Factor analysis of results obtained disclosed the presence of eight factors which Guglielmino labelled as follows: openness to learning opportunities; self-concept as an effective learner; initiative and independence in learning; informed acceptance of responsibility for one's own learning; love of learning; creativity; future orientation; and ability to use basic study and problem solving skills.

The SDLRS has been investigated, and evidence adduced as to its reliability (Guglielmino, 1977); validity (Long & Agyekum, 1983, 1984); internal validity (Hassan, 1981); and construct validity. However, investigators have reported only low to moderate correlations between self-directed learning readiness and self-esteem (Sabbaghian, 1979); creativity, originality and right brain style of thinking (Torrance & Mourad, 1978); life satisfaction (Brockett, 1983); internal locus of control (Skaggs, 1981); and Field Independence (Tzuk, 1985).

Because adult education, as a field of study, has relatively few 'home grown' research instruments, anything which has even a hint of statistical validity and reliability tends to be seized upon, and used in a range of research studies. Accordingly, since its first appearance, the SDLRS has been utilized in several research projects (Bayha, 1983; Box, 1982; Brockett, 1983; Caffarella & Caffarella, 1984; Curry, 1983; Hassan, 1981; Leean, 1981; Leeb, 1983; Sabbaghian, 1979; Savoie, 1979; Skaggs, 1981; Tzuk, 1985; Wiley, 1981, 1982). It has also attracted a good deal of scholarly attention (Brockett, 1985; Kasworm, 1982; Long & Agyekum, 1983, 1984; Torrance & Mourad, 1978) since it first appeared in 1977. There are, however, unexplained anomalies, and biases which call into question its continued use.

In particular, Long and Agyekum (1983, 1984) point to the fact that they found no significant relationship between SDLRS scores and a rating by faculty members as to each respondent's 'self-directedness.' Although they have developed several alternative explanations for this, Long and Agyekum do admit the possibility "that the SDLRS does not measure self-direction in learning" or that "SDLRS is inadequate for one group [i.e., the less well educated]" (1983, p. 85).

Brockett, in an analysis of both methodological and substantive issues in the measurement of self-directed learning readiness, identifies "problems related to the construction and layout of the instrument and, perhaps more important, the assumptions underlying the way in which the instrument defines self-directed readiness . . . from a highly school- and book-oriented perspective . . . , thus [it] may not be as appropriate for adults with relatively few years of formal schooling" (Brockett, 1985, p. 22).

In addition to these relatively specific criticisms, there are other reservations concerning this instrument and its appropriateness. The first is the supposed general nature of 'self-directed learning readiness.' While it may be true that there are some generic or transferable components of 'self-directed learning readiness,' it also seems probable that there is a substantial 'subject specific' component. Thus, people who may be perfectly capable of self-managed learning in one domain might be paralysed when confronted with another area to master. The research of the Göteborg Group in Sweden and of the Institute for Research in Post Compulsory Education at Lancaster University in England[15], for instance, confirms the situation-specific or context-bound nature of learning competence, and it seems likely that this extends to autodidactic learning as well.

The second general comment concerns the alleged distribution of these

"aptitudes and proficiencies" in the adult population. According to the instructions circulated with the self-scoring version of the SDLRS, the lowest possible score is 58 (i.e., a one on each of the 58 items, and the highest possible score would be 290, or five on each of the 58 items). These same instructions claim that readiness for 'self-directed learning' is normally distributed in the adult population. Percentile rankings are given which show 141 as the lowest actual score and 285 the highest, with a mean of 214 and standard deviation of 25.59. Thus, the entire distribution is sharply skewed to the top end of the range in any case. Moreover, if this propensity is normally distributed around a mean, then for every respondent with a high rating, there must be another respondent with a correspondingly low one. The instructions seek to alleviate anxiety about a low score; "Some people have a low level of readiness because they have consistently been exposed to other-directed instruction. The most important thing to remember about your score is that it can be improved. Most persons with low or average levels of self-directed learning readiness can increase their skills with practice." However, if people with low and average scores *did* increase their ratings, there would be a general upward drift in the mean score, and they would probably still be low or average. Which raises the question: "How much self-directed learning readiness is enough?"

Third, and finally, there appears to be some confusion as to precisely what it is that is being measured. For a start, the phenomenon being measured is variously referred to, within the instrument itself, as an 'attitude,' a 'preference,' a 'learning style,' 'readiness,' 'skills,' 'abilities' and 'characteristics.' Moreover, it is argued in this dissertation that autodidaxy is not the same thing as independent study within formal settings. Yet, the SDLRS, which purports to

"identify individuals within organizations who are high, average or low in readiness for independent learning" (Guglielmino & Associates, undated descriptive leaflet), has been used in studies of graduate students (Caffarella & Caffarella, in press; Tzuk, 1985); undergraduate students (Savoie, 1979; Sabbaghian, 1979; Tzuk, 1985; Wiley, 1981, 1982); undereducated adults (Leean, 1981); and randomly selected members of the adult population (Hassan, 1981).

Overall, there seem to be serious questions about the SDLRS and, needless to say, these reservations must extend to the research work based on it. In particular, although the scale has been discussed under the general heading of autodidaxy, there is little evidence to support the notion that it does, or can, accurately measure people's readiness to conduct their own education free from institutional affiliation or support.

The second instrument, the Oddi Continuing Learning Inventory or OCLI, attempts to identify clusters of personality characteristics found to relate to "initiative and persistence in learning over time through a variety of learning modes" (Oddi, 1985, p. 230). Through a process of refinement, an original bank of 100 items was reduced to a final instrument containing 24 items, with a reported internal validity of .87 and a test/retest reliability of .89. According to the author, factor analysis of the results yielded three factors accounting for 45.7% of the total variance, of which the first factor alone, comprising 15 salient items, accounted for 30.9% of the variance. This general factor contains "elements of self-confidence, ability to work independently, and learning through involvement with others. Two subsidiary factors, Reading Avidity and Ability to be Self-regulating, also emerged" (p. 229). It should be noted that, even given the author's own figures, these three major factors only accounted for 45%, or

less than half, of the total variance in the scores.

Although this study appears to have been well-controlled, and the resulting instrument is both parsimonious and elegant, nonetheless there are still certain unanswered questions and issues. Like the SDLRS, the OCLI assumes generalizability of competence as an autonomous learner and, like the SDLRS, it appears to mix together 'independent' continuing professional education within institutional settings (such as graduate schools) with 'self-directed' continuing education outside formal contexts. While there may well be personality characteristics which apply in both situations, it seems that this is an untested assumption. As with the SDLRS, the Continuing Learning Inventory will require further refinement and testing, but it seems, on the face of it, to be more appropriate to the domain of independent study than to autodidaxy, and perhaps more relevant to instrumental types of learning than expressive and æsthetic projects.

In either case, the primary purpose of these instruments is diagnosis and remediation. Oddi writes that; "The development of a valid and reliable tool to identify self-directed continuing learners has implications for practice . . . such as a screening tool to aid in the selection of various academic and continuing education programs" (1986, p. 105). And according to Guglielmino; "Major uses of the SDLRS . . . are in the areas of prediction and diagnosis. For example, it can be used as a screening tool for programs involving self-directed study, such as correspondence courses, programs for the gifted, and independent study" (1982). Both these points of view are predicated on the dubious assumption that 'self-directed learning readiness' is a context-free personal attribute, instead of being subject and context specific, as argued here, and on the equally

questionable medical metaphor that 'deficiencies' can be 'remedied.'

In this dissertation, it is contended that people's willingness to participate in autodidactic activity is shaped not by some abstract attribute such as 'self-directed learning readiness' as by their construction of the particular situation and circumstances.

5. The development of competence as an autodidact

While many, and perhaps most, authors in this field can envisage people who are more or less skilled as autodidacts, little research has been carried out concerning the developmental nature of autodidaxy, or the stages through which a person might pass—even in relation to a particular subject area—in attaining such competence. Accordingly, in this section, an attempt will be made to review literature about the development of autodidactic competence, and to establish whether educational interventions have any noticeable impact on people's propensity, or ability to engage in autodidaxy.

The first point to make is that it is clearly possible for people to attain competence as an autodidact without instruction of any kind. The work of Brookfield (1982); Craik (1866); Gibbons et al. (1980); Houle (1961, 1984); McClintock (1982); Newman (1852) and others amply attests to the fact that many adults become competent autodidacts without ever being taught "how to learn" (R. M. Smith, 1982, 1983).

It seems appropriate, therefore, to begin by questioning whether the capacity to undertake autodidactic activity is, even in theory, capable of development through educational interventions. If the development of competence as an autodidact were a developmental process, (see 1971), then the best that

educational interventions could hope to achieve would be to 'speed-up' movement through an inevitable sequence, a preoccupation which Piaget has referred to derisively as 'the American question'!

One author who has attempted to identify a developmental sequence in the acquisition of autodidactic competence is After discussing briefly two alternative approaches to understanding how people come to be 'self-directed,' she turns her attention to a developmental perspective. Kasworm (1983b) begins by stating that competence as a 'self-directed learner' has three components:

(a)   level of skill/behavior for engagement in learning enquiry;

(b)   cognitive capacities and competencies; and

(c)   affective and value orientations focused upon both the nature of the learning inquiry and perceptual meaning of knowledge.

She posits that these three dimensions are like three sides of a triangle and she asks the reader to envisage a sort of three-sided pyramid made up of 'slices,' where each slice represents a higher level of development in each of the three domains (see Figure 4).

Kasworm (1983) writes that "The progression of development from one level to the next must incorporate qualitative differences of all three elements of a level for a fundamental movement to the next more complex level" (p. 33). She does not explain exactly what triggers the movement from one level to the next, although she invokes Kuhn's (1970) notion of paradigm shift, without specifying what sort of "accumulation of anomalies" might precipitate each paradigm shift. However, in discussing the "formative evolution of self-directed learning from one stage to the next" (p. 33), Kasworm identifies six conditions which "profoundly influence" the transition;
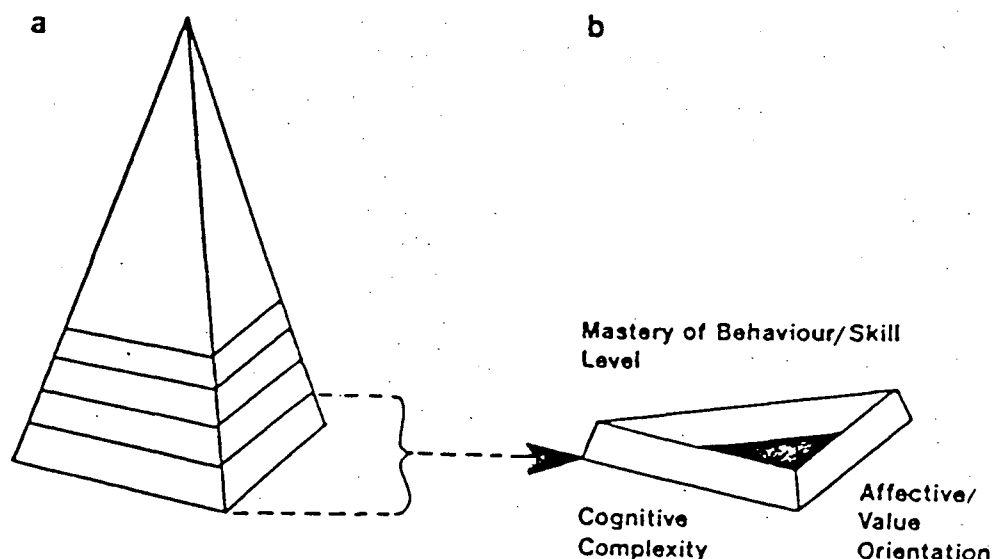
Figure 4: Framework of the development of self-directed learning capacity
(reproduced from Kasworm, 1983b, p34)

(a) learner awareness of self and values;

(b) competence in language and numerical symbol knowledge and skill application;

(c) problem definition, clarification and resolution perspectives and skills;

(d) initial and subsequent development of cognitive information processing patterns;

(e) historical and cultural context of individual in defining utilitarian value and use of knowledge in relation to self-mastery; and

(f) *systematically designed learning experience to explore and facilitate learner developed self-directed learning capacity.* (p. 34, emphasis added)

This last is particularly revealing, because it implies that competence as an autodidact is susceptible to educational interventions. The balance of her paper is devoted to explicating, and attempting to intermesh Perry's (1970) scheme of intellectual development and Mezirow's (1981) formulation of perspective transformation. The author finishes by challenging the "linear set of assumed single-unit actions" which underlie and animate most models of the development of autodidactic competence, and drawing attention to 'self-direction' as "an

evolutionary series of developmental actions that incorporates qualitative and quantitative differences in knowledge, value, skill and belief" (p. 45).

What sort of "systematically designed learning experience" might lead to the enhancement of autodidactic activities? (The issue of whether certain approaches to education will lead to an enhanced capacity for 'self-direction' or learner-control *within formal instructional settings* is dealt with in chapter six). Schools and other agencies of formal education have been widely criticised for emphasizing external rather than internal motivation, for encouraging memorization and rote learning in preference to meaningful learning, for substituting external for internal evaluation, and for imposing rigid curricula rather than encouraging voluntary pursuit of interests (Hargreaves, 1974). Such criticism is based on the notion that poor educational practices can have a deleterious impact on learners. If schools are as potent an influence on learners as their critics claim, presumably they could also help to develop in people both the ability and the willingness to guide their own learning processes.

The literature suggests that there are two broad approaches to the development of these abilities and competencies. The first might be referred to as "direct instructional intervention" (Wang, 1983, p. 218) which implies teaching such things as data gathering, critical thinking, organising information, systematic goal setting and self-management. These components would be taught as direct curricular content, and the exercise of such skills would be enhanced through planned practice exercises. The second approach to the development of these competencies is ancillary or concomitant. Dittman (1976) writes:

> Autonomous behavior is not taught or learned as ordinary content in the curriculum. One can teach *about* autonomy, independence and responsibility, but this is not *becoming* autonomous in one's thoughts and actions. One learns responsibility and self-direction through

experiences in which one is given the opportunity to be self-directed
and responsible for one's actions . . . Autonomy thus evolves
indirectly as a concomitant to a student's total school experience (p. 467)

This latter perspective has manifested itself in a variety of educational approaches and interventions, ranging from collaborative planning and contract learning through to various approaches to independent study and 'self-directed' learning assignments.

a. Direct development of autodidactic competence

Despite extensive literature on the direct development of learning competence, no research has been found which explicitly deals with programs designed to increase autodidactic activity. Almost all programs which purport to increase people's skills as learners implicitly endorse the notion of autodidaxy as an ultimate goal, but none has been found which reports directly increased confidence or ability to learn alone (Wang, 1983, p. 218). As Skager (1979) notes, although it would be difficult, what is required are "long term studies of learners of different types who have been exposed to various school environment. This kind of longitudinal research . . . may be the only way to establish a firm link between schooling and self-directed learning in adult life" (p. 539).

b. Concomitant development of autodidactic competence

Turning now to the concomitant development of competence as an autodidact, again there is little research evidence explicitly on this point, and it is necessary to rely on inference. Two types of studies are reviewed: those that seek to link particular *forms* of educational provision with autodidaxy, and those

which posit a link between participation in formal adult education and autodidactic activity.

In the early 1960s, there was some experimental work carried out in the United States, which lends support to the notion that adult education interventions might lead to increased autodidactic behaviour. In 1963, for instance, Hovey, Gruber and Terrell reported on an experimental course in which self-directed students were compared with teacher-directed students in an educational psychology course at the University of Colorado. Findings were "that self-directed study produced a small but persistent superiority in question-raising behavior and in other indices of curiosity" (p. 351). The authors comment that "curiosity may be said to have a 'gate-keeper' function in the educational system . . . and may set off a process which is self-sustaining and which may, in large part, determine the whole character and direction of the individual's future life," and they venture the tentative conclusion that; "The technique of placing a major responsibility on the student for his own education suggests interesting possibilities for developing attitudes towards learning which will result in the student's continuing a search for knowledge after the formal classroom experience is over" (p. 351).

Another early piece of research is reported by Campbell and Chapman (1967). Using fourth and fifth grade students in what they called 'learner-controlled' and 'program-controlled' situations, they concluded that; "giving learners more control gave them a taste for more control, as well as greater interest in the topic," and hence "that learner-control might in the long-run enhance learning by better maintaining motivation to learn." However, they caution, "projecting into the future the gradual gain in test performance of the

learner-control group relative to the program-control group, it would be years before there was an important difference[16], [and] perhaps it requires a more variable set of learning resources and conditions such as might be provided by learner-control of the whole curriculum for many years rather than by a single course . . ." (p. 130).

Recently, Caffarella (1983, 1984) has reported two studies, the object of which was to investigate whether the use of learning contracts in programs of higher education increases competence in autodidaxy. In the 1984 study, she reports that "a large number of these students are presently using the competencies they learned through using the Learning Contract Format in their . . . personal learning experiences both at work and at home . . . The competencies most noted by students . . . are related to goal and objective setting, using a variety of methods for learning, and having a better perspective on time management of learning" (p. 36).

These results are modest, and have to be treated with circumspection because they are based solely on self-report data. They do, however, lend some support to the idea that "certain competencies for self-directedness in learning . . . can be fostered in part of a formal learning situation" (Caffarella & Caffarella, 1984, p. 36), however caution is required, because "other [competencies] . . . may be blocked by the same situation" (p. 36).

In his review of 'Self-directed learning and schooling,' Skager (1979) considers four "modes of learning or ways of structuring educational environments" which "appear to have desirable potential" because "they have been explicitly linked with self-direction." These four modes are experiential learning, discovery learning, open education and structured individualisation. As

Skager himself observes, it is plausible to expect such approaches to contribute to the development of autodidactic competence, but the links have yet to be reliably established through research.

While the above studies focus on the linkages, if any, between certain approaches to teaching and the development of an orientation favorable to autodidaxy, some researchers have been interested in the broader question of whether participation in structured adult education activities increases the likelihood that people will engage in autodidactic activities. One longitudinal study undertaken in Sweden (Borgström & Olofsson, 1983), concerns the extent to which participation in one form of adult education (i.e., study circles) helped individuals to develop 'personal resources,' where resources are defined as "money, possessions, knowledge, skills, physical and psychological energy, social relations, confidence etc., with the help of which, the individual can control and consciously command his life situation" (Johansson, 1970, p. 25).

Essentially, the research consisted of examining data from 3300 adults who had been questioned about their adult education activities in each of 1968, 1974 and 1981, and comparing what they said about participation in formal adult education with what they said about the extent of their social, political and cultural activities. The results "show that the groups beginning to take part in study circle activities consistently strengthen their resources more than those who do not take part" (p. 6). Unfortunately, this particular research project did not collect data about autodidactic activities *per se*, although a subsequent study by one of the authors (Borgström, 1985) does lend support to the notion than a strengthening of political, social and cultural resources would probably imply also a strengthening of participation in autodidaxy.

Although these results are highly suggestive, they do not indicate in what ways participation in study circles might have equipped people to undertake autodidactic activities and indeed, as the investigators themselves are quick to point out; "Can we be sure that it is participation in study circle activities that leads to a change in the resources of the individual, or is there some underlying variable which may account for both participation and the change in resources?" (Borgström & Olofsson, 1983, p. 15).

A study by Pipke (1983) set out to establish if there is any relationship between people's motives for participation in 'formal' adult education, and their involvement in autodidactic activities. Pipke reasoned that the choice to participate in autodidactic activities (which she subdivided into 'self-planned' and 'self-taught') was always at the expense of other pursuits which people might engage in for entertainment, relaxation or to pass time. Consequently, her Activities Preference Inventory consisted of a series of forced-choice items, where respondents were instructed to select from between competing alternative activites. An original item bank of 144 pairs was reduced to 47 final items, made up of some active and some passive distractor activities, and some self-taught and some self-planned autodidactic activities. Respondents were also requested to complete Boshier's (1982) Education Participation Scale, which measures six motivational orientations underlying participation in adult education activities, and Wilson's (1973) Conservatism Scale.

The results were somewhat equivocal, but they suggest that autodidacts are not significantly different psychologically from other adults participating in formal instructional settings, and that if anything "persons with the highest A.P.I. scores were older, more conservative, and more likely to be enrolled in

formal instructional settings for Community Service reasons than those with a lesser penchant for self-directed learning" (Pipke, 1983 p. 186). It is appropriate to echo Borgström and Olofsson's *caveat* that there is no definitive way of knowing whether participation in formal adult education leads to increased autodidactic activity, or if the tendency to be involved in both is indicative of some other factor.

Overall, despite the assertion that the development of learners capable of pursuing their own education is a major function of adult education, evidence that it has done so is remarkably meagre. It is argued in this dissertation that this is at least in part because autonomy in learning has two dimensions— a generic or trans-situational dimension, and a situation-specific or context-bound dimension. Most research into the topic (and most programs for the development of autonomy in learning) have focussed on the former component, ignoring the latter. In the remainder of this chapter, attention will be devoted to the situation-specific dimension of autonomy in learning. This in turn has two main components: (1) the learner's purposes and intentions, and (2) the attainment of autonomy with respect to the subject matter to be learned.

C. THE LEARNER'S PURPOSES AND INTENTIONS

The study of autodidaxy has tended to ignore the purposes and intentions which learners bring to bear in undertaking their learning activities. However, it is reasonable to expect that a project which has pervasive and far-reaching implications for a learner's life would be regarded and approached differently from one with a lower level of personal significance. In his critical analysis of research into autodidaxy, Brookfield (1984a) questions the tendency "to treat all

learning projects as possessing equal significance to the learner" (p. 66). He goes on to add:

> To compare dealing with bereavement or divorce with learning how to repair a car or wire a basement, is methodologically unsound. Similarly, organising an anti-nuclear advocacy group is an activity of a very different order from becoming expert in Armenian cuisine. The danger of emphasising mechanical aspects of learning projects such as the number of hours spent in learning, the number of assistants used, or the non-human resources most frequently adopted, is that of coming to regard all self-directed learning as exhibiting some kind of conceptual or substantive unity. (pp. 66-67)

It is important to avoid simplistically equating the level of learning with its emotional impact or significance for a learner, but Brookfield is hinting at the need to discover the affective connotations a learning effort has for the learner - a perspective not commonly encountered in the literature on autodidaxy. One useful way of looking at this question might be to ascertain the purpose to which a new piece of learning is to be put.

As early as 1964, Havighurst distinguished between *instrumental* and *expressive* education, which he described as follows:

> Instrumental education means education for a goal which lies outside and beyond the act of education. In this form, education is an instrument for changing the learner's situation. For example, the learner studies arithmetic so as to be able to exchange money and buy and sell things and to become a competent scientist or teacher. Or the learner . . . studies in his vocational field so as to get a promotion, or studies cooking so as to become a better housewife. Instrumental education is thus a kind of investment of time and energy in the expectation of future gain.
>
> Expressive education means education for a goal which lies within the act of learning, or is so closely related to it that the act of learning appears to be the goal. For example, the learner studies arithmetic for the pleasure of learning about numbers and quantities. The learning of arithmetic is its own reward. Or the learner . . . studies the latest dances so as to enjoy the dances he and his friends go to. He learns to dance 'for fun,' and not to become a teacher of dancing or even to make new friends. Expressive education is a kind

of consumption of time and energy for present gain[17]. (pp 17-18)

Since then, this distinction has proved useful in studies of participation and non-participation in various forms of adult education (Aaltonen, 1979; Ordos, 1980), but no published reference has been found to its application in studies of autodidaxy. However, it seems that, according to the purposes described by learners themselves, many projects could be described as instrumental while others are more æsthetic and expressive. This distinction is important because it affects the strategy employed by the learner, which in turn has been shown to influence the learning outcome.

One potentially fruitful avenue of enquiry in attempting to understand better this phenomenon of learning something completely new, may be found in the work of Häyrynen and associates in Finland. For the past decade or longer, they have been engaged in an attempt to understand the mechanisms by which adults learn things from their environment. According to Häyrynen (1980), "in the first stages of learning and thinking, a person **orients himself** to a new task. Actually, the first stage includes the perception of a new task, and its formulation as a problem. In new situations, a person makes a preliminary synthesis, that is, recollects all his knowledge, analysing the task on that basis. At the same time, he has to decide whether the task involves development of a new idea, a tool or maybe a new emotion" (Häyrynen & Häyrynen, 1980, p. 8).

Clearly such an orientation involves an attempt to construe, or make sense of, a skill or task on the basis of past experience, and as Häyrynen (1980) states, "thinking does not actually start until previous abilities prove insufficient. Thinking, thus, is a total process in which a person formulates his

situation and creates conditions for oriented learning" (p. 8). Following on the work of the Göteborg Group in Sweden (Gibbs et al., 1982; Marton, 1975, 1978, 1981; Marton & Säljö, 1976; Säljö, 1979, 1982), Häyrynen distinguishes between a surface level and a deep or tranformational approach to learning tasks. A deep orientation involves an analytical approach, a personal search for relevance and meaning, and the active use of critical questions relating to the object of study. On the other hand, a surface or reproductive approach results simply in repetition and even 'mastery' of the subject matter, but without critical understanding. Häyrynen (1980) comments; "In new tasks, a person decides in a way whether to penetrate deeper into the subject context, or reproduce the task in mastery. The latter involves passive thinking, which seldom orientates learning to other than recollecting tasks" (p. 10).

It is in the early stages of a learning project that a person makes a decision about how much he or she wants to learn or, in other words, about whether to adopt a deep level or reproductive approach. Research into higher education has shown that learners' construing of contextual clues is often vital in their decision to adopt one approach rather than another. Particularly in examination-oriented situations, learners often opt for the surface learning strategy, preferring simply to reproduce the content without necessarily understanding it (Ramsden et al., in press).

The autodidact may not be confronted with exams, but there may still be environmental or contextual factors which will influence the decision about strategy. The learner's construction of these factors is the primary consideration, and among the most compelling determinants of those constructions is likely to be the learner's own past educational experiences. Such background experiences

can influence the learner's approach in two ways. Firstly, past learning experiences may have caused the learner to construe his or her learning capabilities in certain ways (see earlier discussion on personal learning myths), and this in turn may influence their willingness to attempt certain learning tasks.

Secondly, past educational experiences might serve to deny them access to the deeper levels of meaning, which determine what counts as knowledge in their culture (Bernard & Papagiannis, 1983; Bernstein, 1977; Stalker-Costin, 1986). This causes Häyrynen and Härynen (1980) to observe:

> . . . we have tried to prove that the limitations in their learning abilities are mainly social by nature and often relate to social inequality . . . (p. 5)

> *Defective conceptual frameworks prohibit advances in theoretical problems. We cannot emphasise too much the importance of a comprehensive basic education . . . adult education works in situations in which individuals and social classes are victims of repressive circumstances.* They [the learners] have not always been able to develop language or conceptualised thinking, perhaps not even good æsthetic taste, to a stage fulfilling the norms of good education. (p. 8)

Thus it appears that the type of learning project, the level of learning and the learner's purposes all interact in complex ways which affect the learning outcome. It has been argued here that autodidaxy, and particularly the ability to master the basic 'codes' of a task or subject, is dependent in part on the learner's exisiting intellectual capabilities, in part on past education, and in part on his or her intentions and purposes. Since this combination will vary from situation to situation, a learner's autonomy is likely to vary from one context to another. It also seems likely that a learner's intentions, understanding and expectations are at least partly determined by sociological factors. Thus a full study of autodidaxy

would necessitate the consideration of sociological variables which lie outside the scope of this present study (see chapter eight).

D. AUTONOMY WITH RESPECT TO KNOWLEDGE

As discussed earlier in this chapter, it seems reasonable to assume that competence as an autodidact has at least two major dimensions. The first is being independent of others in the learning process; finding resources, asking questions, making notes and keeping records, setting realistic goals, breaking down complex tasks into smaller components and so on. These 'self-management skills' are thought to be developable, and commonly form the focus of programs which seek to develop the capacity for autonomous learning.

The second major dimension of this situational component of autonomy in learning relates to the learner's ability to become autonomous with respect to the subject matter being learned. All autodidactic projects concern some substantive content or other. While many researchers have classified learning projects according to the subject matter, few have considered the process whereby a learner actually becomes autonomous with respect to the material itself. This involves acquiring the basic 'vocabulary' of concepts in the subject being learned. Since each subject has its own rules of discourse, and a person cannot properly be said to have learned a subject until he or she is familiar, at least at some minimal level, with the rules of that domain, it seems that autonomy has this epistemological or knowledgebased component.

In the case of discipline-based knowledge, the rules are public and the autodidact's learning can be publicly tested and acknowledged. But there is also another kind of learning which autodidacts engage in: learning about themselves.

Sometimes this is the ostensible purpose of their project. They read philosophy, join an encounter group, attend Church, or keep a diary, with the intention of learning more about themselves. At other times, this learning is incidental, and occurs more or less fortuitously alongside their pursuit of some other content. Often, this incidental learning concerns insights into themselves as learners; how they prefer to learn new material, their motives, their level of tolerance for ambiguity or how they interact with other people. In either case, the knowledge they acquire is self-knowledge, and it is typically less orderly than conventional discipline-based knowledge.

It is the purpose of this section to examine this issue of autonomy with respect to subject matter, and to do so, a distinction will be made between 'public' and 'private' knowledge.

1. Autonomy and public knowledge

Autodidactic activities span an enormous range of content areas, of which only a few lack any intersubjective criteria or points of reference outside the individual learner. More often than not, the autodidact must accept and acknowledge the existence of norms or standards against which to judge, and on which to base, his or her learning. Chené (1983) has said:

> Whether the learners are currently in relation to a teacher or not, the mediation of another person is necessary for them to assert the value of what they are aware or, of what they know. . . .
>
> Similarly, skill performance is evaluated according to a standard which, at least at the beginning of the learning process, is outside the self. Embroidering, using a computer, meditating or jogging, to be recognized as such, have to conform to a set of criteria which have been communicated by somebody else, or taken from somebody else . . . . Epistemologically, the relation to others is fundamental to knowledge and the psychological independence from the teacher conceals the problem of the norm in learning. In fact, the teacher cannot

disappear without reappearing in another form, since learners have to test their knowledge against somebody else. (p. 43)

When a person confronts an entirely new area of knowledge or skill, one with which she or he has no familiarity, there is the problem of where to begin. In a sense, it is not even possible to know what constitutes a legitimate or sensible question, much less a convincing answer.

Gradually, however, through a process of enquiry and personal experimentation, the autodidact comes to learn the boundaries of the subject or skill, and to internalise the 'rules' or 'codes' which inhere within it. As Chené has pointed out, it is not logically possible for a person to be fully autonomous with respect to disciplinary knowledge (although as Schön (1983) and others argue, there may be an epistemology of practice which does not demand intersubjective validation), but given this general proviso, it still makes sense to speak and write of someone becoming sufficiently familiar with the subject of their study that they can judge between expert opinions and perhaps, in some situations, even contribute to boundary or standard setting for the field (Brookfield, 1981; Gross & Gross, 1983; T. S. Kuhn, 1970). As Quinton (1971) writes; "Cognitive autonomy is achieved when the capacity for the criticism of authorities and of personally-formed beliefs . . . has become an operative skill . . . " (p. 214).

Many researchers into autodidaxy have identified the phenomenon of subject-specific autonomy. Tremblay and Danis (1984) cite the growing feelings of personal confidence and self-assurance which seem to accompany the self-teachers' mastery of their subject area. Feldman (1980), in his ingenious 'metahobby' project already referred to, notes the existence of "developmental levels and

transitions within the variety of discipline-based domains," and observes that the recognition of these transitions "seems to make a profound difference to these students as they reflect on their experiences . . . " (p. 18). C. Brown (1983) in her 'Confessions of an autodidact' gives a glimpse of how the feelings of inadequacy, lack of confidence, or even shame, referred to earlier, can be turned around into pride, enthusiasm and determination as the autodidact encounters success in his or her project. Brookfield (1984) writes of the learning experience of self-taught experts who develop what he calls 'critical confidence'; that is, "the growing belief that one's knowledge was such that one could call into question the pronouncements of experts in the learner's field of interest" (p. 56). In the report of his study, Brookfield (1981) gives a number of illustrative quotes which reveal the feelings and attitudes of learners who know their subject:

> "The world's top ichthyologist is H.A. I don't keep his books any more, because I disagree with a lot of his theories on tropical fish keeping. I didn't at first. I don't suppose I read anything else but A., and another American W. But after a few years, you start to realise that their idea of fish-keeping clashes with your own. Anybody who's a thinking person, anyway." (Self-taught expert on tropical fish)

> "I think I've developed my own philosophy. I'm able to assess other people's philosophy from a definite standpoint. I've read a few people's philosophies and so assessed them." (Self-taught expert on Philosophy)

> "I think I know enough about my subject to be able to spot a lot of mistakes in the books I read. When I buy a new book, I find I'm making alterations all the time, while I'm reading it. Things I know to be wrong are printed in there. If you look at any new books of mine, you'll find the margins are full of comments I've made about it." (Self-taught expert on Railway management and modelling) (p. 23)

Despite the fact that the attainment of autonomy in a subject area is clearly an experience shared by many autodidacts, it is not clear at which

precise point, if it is a precise point, an autodidact begins to find the confidence of this sort to question, or even to contradict, 'the authorities.' How is it that these people, who at one time knew little or nothing about the fields which they now claim as their own, manage not only to acquire the subject matter, but to go beyond conventional wisdom, to achieve expertise themselves? What are the steps or stages which a learner goes through in attaining proficiency in a new subject area?

Several researchers have explored adult learning of a second or subsequent language in an attempt to explain the process. Curran (1976), for instance, postulates that in all learning situations—formal and nonformal—adult learners struggle to maintain a sense of autonomy, even when the subject matter is unfamiliar, or the teaching method is a dependent one. On the basis of extended observations of second-language learners in various settings, Curran (1976) hypothesised that learners move through a five stage process with respect to any particular content (see Figure 5)

I	II	III	IV	V
Total dependency	Learner attempts to move ahead independently	Learner functions independently in the language	Learner becomes open to correction	Positive self-concept; fully autonomous learning
Embryonic Stage	*Self assertion Stage*	*Separation or birth Stage*	*Reversal Stage*	*'Adult' Stage*

Figure 5: The development of autonomy in adult second language learning
(Curran, 1976, p. 105)

Nolan (1981a, 1981b) set out to test the generalizability of Curran's scheme.

Nolan distinguished learners in the beginning phase of their language learning project from those in an advanced stage, and asked learners to describe their perceptions and feelings about themselves as second language learners at each phase. In the beggining period:

> they described themselves as learners in both positive and negative terms. They described themselves as frustrated, childish, insecure, foolish, embarrassed, belittled, humiliated. They also described themselves as enthusiastic, confident, comfortable . . .

> . . . the first stage or period was described in cognitive terms as one of intense work—sheer drudgery, as one subject put it—in which the learner, although highly motivated, frequently felt frustrated and foolish in the learning situation . . . (1981b, p. 144)

In terms of the conceptual scheme developed in this dissertation, these learners would be described as situationally autonomous (i.e., free of direction by others), but not yet epistemologically autonomous. It is interesting that those with higher levels of education were not at an advantage, in fact they reported experiencing the most frustration and loss of self-esteem at this stage:

> A subject who holds a Ph.D. degree described the early stages of his second language learning experience as an "assault on his self-image". A Roman Catholic clergyman reported his early learning period as a torturous time when he felt like "a child or an idiot". (1981b, p. 145)

Thus, in terms of the earlier discussion about basic education and the ability to enter into the 'code' of new subjects, it can be seen that previous educational attainment may not necessarily be an advantage, and may even become an impediment in terms of emotional adjustment to the learning situation. Fortunately, however, these feelings of helplessness and despair did not persist, as Nolan (1981) explains:

There then seemed to occur a breakthrough period reported most often by those whose learning had occurred in an intense, monolingual setting. This breakthrough experience accompanied the adult leaner's arrival at a threshold level of linguistic competency, where the learner found it relatively easy to communicate. As one ex-Peace Corps Volunteer put it, "It is the sudden realization that you are keeping up with the conversation without trying." Others described it as a liberating moment . . . Not all subjects interviewed reported this experience. Those who did, [however], described it as a very dramatic event which they had no trouble remembering . . . (p. 144)

If the attainment of autonomy with respect to the subject matter is indeed an important aspect og 'self-directed learning', then it would seem that further study of the developmental stages or phases a learner passes through would be of general interest and value. This could also be linked with research which examines the mechanisms that successful autodidacts seem to utilize in mastering their subject.

a. 'Sorting out' in the attainment of autonomy

There has been little research into the mechanism whereby people attain autonomy with respect to learning tasks, but a promising direction is suggested by several reports which, although they refer to separate phenomena, corroborate each other. In conventional teaching/learning situations, whether face-to-face or at a distance, learners are customarily presented with pre-packaged ideas. More often than not, the ideas are presented in a sequence which seems logical to the trainer or instructor, and the learner has to accommodate to the conventions of the field of study in order to master it. The learner usually does not have to 'grapple' with the essence of the subject, and accordingly is often pushed in the direction of reproductive rather than deep level or tranformational learning.

If it is the case that grappling with the complexities of a subject is an

important part of deep-level or transformational learning, then it may be that one advantage which the autodidact has over the 'student' is the experience of 'sorting out' relevant from extraneous concepts and ideas. Eraut et al. (1975) reporting on a course at Sussex University, comment on their initial disappointment when students failed to grasp the significance of certain basic economic concepts in a teaching package over which they had laboured. They write:

> Whilst students appeared to get very little out of the Demand Theory Package, the members of faculty who prepared it felt that they had learnt a lot from having to sort out their ideas: and it occurred to them that the 'sorting out' process might be more important than the subsequent learning. Perhaps the students could also be involved in formulating the problems, clarifying the assumptions about the situation to be studied, choosing the analytic techniques, and disentangling value judgements and empirical judgements. (p. 24)

Interestingly, Farnes (1975) makes almost the same comment about the experience of course teams at the Open University:

> In the Open University, it seems paradoxical to me that the people who experience exciting and immensely demanding learning tasks are the course teams; they are acquiring and organizing knowledge, evaluating and selecting materials, designing and presenting programmes and activities. The student receives what appears to be a polished product from this process; he has to learn from material that has been agonized over by authors, course team members and many others . . .
>
> If it is in the course teams that there are genuine learning experiences, should we not allow the student to participate in these learning experiences by delegating more of the job to him? . . . A major effort is necessary to get students to change their passive approach to learning and to encourage them to take responsibility. (p. 3)

In a neatly conceived study, D. Kuhn of Harvard University has produced experimental evidence which supports the importance of 'sorting out' in

self-directed learning. Her work will be discussed in chapter six, under the heading of 'Greater meaningfulness.'

As far as could be determined, only one study of autodidacts has identified this dimension as important to the attainment of autonomy. In their study of major recurrent tasks in self-teaching, Danis and Tremblay (1985b) identified 26 tasks which they found to be common to the experience of many adult self-teachers. These tasks were grouped into five major dimensions, which Tremblay (1981) had identified in her earlier research, namely:

Management of the learning process: tasks related to the planning, conducting and evaluating of the learning activities;

Acquisition of knowledge or skills: tasks related to the learning of specific contents;

Acquisition of resources: tasks related to the locating of the various human resources (peers, experts, friends, parents, etc.) and material resources (books, official documents, films, pamphlets, etc.);

Use of didactic abilities: tasks related to self-instruction; and

Use of support: tasks related to getting and maintaining a satisfying emotional support with regard to the learning behaviour (Danis & Tremblay, 1985, p. 286).

One task within the cluster labelled "Use of didactic abilities" is "Sort out contradictory information or differing ways of proceeding" (p. 291). This was rated, by learners, as one of the most frequently recurring, as well as one of the most difficult tasks they have to perform (p. 297). This is something which may be done well or poorly. When it is done poorly, there is the opportunity for an educational intervention to improve the skills to perform this activity (for

instance instruction in critical thinking or assumption finding). For the most part, however, the intellectual skills of learning any particular knowledge are not independent of that knowledge and cannot be mastered in a content-free course on 'study skills.' There is no substitute for this aspect of the learning process, and this may well constitute one of the criteria which demarcates guided autodidaxy from independent study: not so much the quantity of assistance, but the quality and timing of assistance.

The attainment of autonomy with respect to discipline-based knowledge is a complex issue, which seems to have a developmental component to it. As will be discussed later in the dissertation, it is only possible for learners to achieve full independence when they come to view knowledge in relative rather than absolute terms. Accordingly, one direction for research into autodidaxy would be to ascertain learners' views of knowledge using, for instance, Perry's (1970) developmental continuum. As early as 1970, Perry identified a developmental continuum along which university students were found to be arrayed. He begins his book about intellectual development with the following scenarios about different types of students:

> Student A has always taken it for granted that knowledge consists of correct answers, that there is one right answer per problem, and that teachers explain these answers for students to learn. He therefore listens for the lecturer to state which theory to learn.
>
> Student B makes the same general assumptions, but with an elaboration to the effect that teachers sometimes present problems and procedures rather than answers, "so that we can learn to find the right answer on our own." He therefore perceives the lecture as a kind of guessing game in which he is to "figure out" which theory is correct, a game that is fair enough if the lecturer does not carry it so far as to hide things too obscurely.
>
> Student C assumes that an answer can be called 'right' only in the light of its context, and that contexts or 'frames of reference' differ. Although he feels a little uneasy in such a kaleidoscopic world,

he nonetheless supposes that the lecturer may be about to present three legitimate theories which can be examined for their internal coherence, their scope, their fit with various data, their predictive power, etc. (pp. 1-2)

These three hypothetical students represent different positions in Perry's scheme of intellectual development. According to Perry, not all students in university reach the ninth and ultimate stage of commitment to a personal view, alongside a tolerance for alternative perspectives. Although Perry's (1970) developmental continuum was derived from a study of 'students' (and a rarefied and privileged group of students at that), he points to its wider applicability:

> Can this scheme be considered a relatively enduring outline of major vicissitudes in human experience from adolescence into adulthood in a pluralistic culture? Does it help us to understand the way that 'modern man' [or woman] finds to address his [her] predicament in a relativistic world? (p. x)

Cameron (1983) certainly argues that adults generally are arranged along such a developmental spectrum and, since autodidaxy is such a widespread phenomenon, it is also reasonable to suppose that autodidacts would exhibit the same range of development with respect to their beliefs about knowledge. Thus, some self-teachers would be seeking the one 'right' or 'true' answer, especially if, as Peters, Johnson, and Lazzara (1981) state, most learning projects are triggered by problem situations. Others would be seeking a better understanding of the issues involved, and possible alternative solutions to their problem.

2. Autonomy and private knowledge

Turning now from the acquisition of subject matter in the form of public knowledge, the second major area of interest is that of private knowledge, with respect to which the autodidact is commonly assumed to be autonomous already; after all, one's personal understandings, insights and (as discussed in chapter three, rules of behaviour) are just that— personal.

Some people maintain that it is this form of 'personal knowing' which distinguishes adult from other forms of education. In his 1941 book, *The future of education*, Sir Richard Livingstone argues that "adults should have recurring opportunitites to think over their occupations in later life and to study new developments and knowledge," and that there are certain subjects—"politics, economics, religion and the conduct of life"—which should be studied "after the age of thirty" because people are better equipped to study them then, than "as a schoolchild or undergraduate."

Fifteen years earlier than this, Eduard Lindeman (1926) had written a monograph for the Workers' Education Bureau of America, claiming that:

> Adult education differs from other forms of education in three particulars: (a) its aim is to provide for an exchange of vital experience; (b) its method is founded upon the assumption that real education must not have its roots in external authorities but in personal experiences with reality; and (c) it therefore proceeds by means of a technique of discussion in which the teacher or leader performs the function of guide and stimulator, but never of law-giver . . . (p. 11)

In another essay entitled "What is adult education?," Lindeman (1925) emphasised that adult education needs to be grounded in people's experience; "I am conceiving adult education in terms of new techniques for learning . . . It represents a process by which the adult learns to become aware of and to

evaluate his experience . . . giving attention to situations in which he finds himself, to problems which include obstacles to his self-fulfilment" (p. 3).

This strand of critical self-reflectivity is still strong in contemporary adult education. It is central to Freire's notion of critical consciousness, growing out of people's awareness of their existential reality, and it undergirds Mezirow's (1985) 'Critical theory of self-directed learning.' In this, his most recent essay on the subject, Mezirow (1985) argues that "Self-reflective learning focuses on gaining a clearer understanding of oneself by identifying dependency-producing psychological assumptions acquired earlier in life that have become dysfunctional in adulthood. They have come to impede the kind of life that the learner wishes to live as an adult . . . " (p. 20).

On the surface of it, this kind of self-awareness is an adult form of education and, because of its highly personalistic focus, is ideally suited to autodidaxy as well. There is, however, the paradox that "received ideas are not simply the objects of thought, but also the means or instruments of thought" (Strike, 1982, p. 19). In other words, it is difficult for a person to be fully autonomous, even with respect to his or her own 'private knowledge,' for the lack of an alternative perspective from which to judge.

Although it has been acknowledged in counselling for more than a decade, one of the less suspected, but nonetheless critical, roles for a person seeking to help an autodidact, therefore, might be to confront him or her with contradictions, and to offer alternative meaning perspectives, when this seems called-for. As Mezirow (1981) states:

> I see no serious ethical issues involved in education for perspective transformation. Helping adults construe experience in a way in which they may more clearly understand the reasons for their problems and understand the options open to them so that they may assume

responsibility for decision making is the essence of education. Bringing psycho-cultural assumptions into critical consciousness to help a person understand how he or she has come into possession of conceptual categories, rules, tactics, and criteria for judging implicit in habits of perception, thought and behavior involves perhaps the most significant kind of learning. To help a learner become aware of alternative meaning perspectives relevant to his situation, to become acquainted with them, to become open to them and to make use of them to more clearly understand does not prescribe the correct action to be taken. The meaning perspective does not tell the learner what to do; it presents a set of rules, tactics and criteria for judging. The decision to assume a new meaning perspective clearly implies action, but the behavior that results will depend upon situational factors, the knowledge and skills for taking effective action and [certain] personality variables . . . (p. 20)

The purpose of this section has been to introduce a neglected, but nonethless vital, aspect—the epistemological foundation of autodidaxy. Almost all the existing literature, to the extent that it considers contextual variables at all, confines itself to what might be called 'situational autonomy,' or independence from outside direction. However, learning inevitably raises questions of the relationship between the learner and the thing learned, and how this relationship passes through stages from apprehension (in both senses of the word!) to comprehension (Stanage, 1986). This phenomenon—'epistemological autonomy'—is critical to an understanding of what it means to be an autonomous learner. A model showing the relationship between situational autonomy and epistemological autonomy appears as Figure 17 in chapter eleven.

E. SUMMARY

This chapter began by reviewing literature on the skills and competencies which various researchers have linked with autodidaxy. There are many profiles of the autodidactic learner, but most of them exhibit some, or all, of the

following defects: (1) Class and gender bias, usually in favour of white, middle-class males; (2) tacit bias towards a particular ideological position (often difficult to discern author's or reseacher's inclinations because of use of 'humanistic' language); (3) failure to ground descriptions in comprehensive and internally consistent definitions of autonomy; and (4) implicit assumption that autodidactic competence is transposable from one learning situation to another.

The topic of self-confidence was dealt with, and it was shown that some autodidacts seem confident, others seem timid. Although confidence does have a generic component (some learners appear confident in a range of learning situations) it was shown that most learners are not defeated by lack of confidence in general, but by a specific lack of confidence or disabling personal beliefs, concerning a particular situation. This was referred to as a 'personal learning myth,' and it was shown that research into such personal myths would do much to increase understanding about why some learners are unwilling or unable to engage in autodidactic learning.

Attempts to measure or assess learners' self-directedness were discussed, and it was shown that, in addition to significant conceptual and operational flaws, such instruments are predicated on the questionable assumption that 'self-directedness' is generic, rather than situation-specific or context-bound.

As to the development of competence as an autodidact, clearly many people have achieved a high level of skill as learners without the need of formal instruction. Nonetheless, many theorists believe education can play a part in this otherwise naturally occurring process. A number of educational interventions have been linked with the development of autodidactic competence. Some of these interventions take the form of direct instruction. Others involve concomitant

learning through various educational strategies or approaches such as learning contracts, experiential learning, discovery learning, open education and structured individualisation. Whether direct or concomitant, the focus is usually on the generic or context-free domain of learning autonomy. However, in both cases, there is relatively little empirical evidence of a direct link between education and the pursuit of autodidactic activity, and further research on such links, if any, seems called for.

Finally, attention was focussed on the context-specific aspect of autonomy in learning. It was argued that this has two components: namely the learner's personal purposes and intentions, and the attainment of autonomy with respect to the subject-matter. One approach to researching these two dimensions is by reference to the personal understandings, intentions, and meaning structures of the individual learner. This is not a common perspective in the literature on autodidaxy, and hence it was argued that research into the autodidact has often failed to take adequate account of the personal constructions which the learner places on individual situations.

Before leaving the issue of autodidaxy, it seems appropriate to comment on the question of research methodology. If ever there were a topic which lent itself to, or even demanded, an idiographic or case-study approach, it must be the phenomenon of autodidaxy. The practice of individuals voluntarily undertaking self-planned and self-managed learning projects, where the entire initiative and responsibility for the activity rests with the learners, is surely the epitome of individualistic educational endeavour. Hudson (1966) puts it well in *Contrary imaginations*:

> There is . . . little merit (and no point) in proposing general ideas
> about human beings if these are largely or completely mistaken. Nor

is there any virtue in claiming that an idea is 'basically right' although obscured by the welter of people's individuality. It is the welter that we must observe and measure . . . (p. 17)

Despite this, the number of reported studies which deal adequately with the rich and varied experiences of individual autodidacts is remarkably small. Instead, many (and perhaps most) researchers ignore or diminish the importance of individual differences. Since the framing of research, and the assumptions underlying different approaches, is so central to the purposes of this dissertation, the issue of alternative research paradigms is dealt with in chapter eight. Moreover, because the issue of research methodology is so intertwined with the reframing of research generally, and thus some comments on this topic are included at Appendix B.

The next chapter contains an overview of learner-control, its various degrees and dimensions, and the question of situational variability is again taken up. A number of the arguments commonly advanced in favour of increasing learner-control in adult education are critically analysed.

VI. LEARNER CONTROL IN ADULT EDUCATION

A. AUTONOMY AND THE ADULT STUDENT

In chapters three and four, the phenomenon of autodidaxy (or self-teaching) was examined. It was shown that learners undertaking autodidactic activities demonstrate ingenuity in their use of learning resources, and commitment and diligence in their learning endeavours, particularly those where deep level or transformational learning is concerned. It was also argued that competence as an autodidact has both a generic or trans-situational component, as well as a context-specific dimension, and that the latter is related largely to the subject matter being learned. The sort of assistance that autodidacts seek and obtain was assessed, and it was argued that the ideal relationship between an autodidact and his or her assistants is characterised by:

. warmth, empathy and understanding;

. a genuine responsiveness to the needs of the learner;

. a degree of subject-matter expertise, and knowledge about useful resources;

. authenticity and interpersonal contact;

. time required to develop the relationship;

. a supportive, but non-interventionist position which leaves ownership of the project with the learner; and

. a winding-down as the learner achieves increased autonomy with respect to the topic.

Finally, it was stated that "the admission of another person introduces significant, dynamic variables into the learning situation, and this potentially

threatens the freedom, the independence of thought, and ultimately the autonomy of the autodidact . . . It is in this domain of 'guided' or 'assisted' autodidaxy that the educative activities of the autodidact most closely resemble those of the independent learner, and accordingly where the potential for confusion, or mistaking the one mode for the other, is greatest."

In this chapter, attention will be turned to learner-control within formal instructional settings, and to the need for an examination of the topic from the perspective of learners. Under the guise of 'self-direction' and a number of other terms including open learning, participatory learning and student-centred instruction, the issue of learner-control has become a major focus for adult education in recent years. Learner control is often portrayed as a sort of antidote to another educational model, which in turn is labelled, amongst other things, the 'banking approach,' 'teacher-directed,' or simply the 'traditional model.' Since it frequently occurs after, and always occurs outside, people's formal education, adult education is often presented, with its ostensible concern for learner-control, as challenging formal education, and "helping to correct some of its adverse effects" (Abercrombie, 1981, p. 41).

Admittedly, adult education does have a long and proud tradition of encouraging personal empowerment and social emancipation; however it is a gross oversimplification and distortion to pretend that all forms of formal education are equally pernicious and reprehensible or, for that matter, that adult education is distinctively different from the rest of the educational system. As Keddie argues; "within a sociological frame of reference, it becomes apparent that adult education is more like the rest of the education system than unlike it, both its curriculum and its pedagogy, and I shall treat the claim to distinctiveness as an ideological

claim which requires explanation" (Keddie, 1980, p. 45). One of the purposes of this chapter, therefore, is to examine evidence concerning whether or not adult education can, or does, do anything different from the rest of the educational system, through its emphasis on learner-control.

At the 1970 Adult Education Research Conference, Landvogt observed that, "although early literature of adult education emphasized and seemed committed to guided learning[18], present literature appears to be negating learners' responsibilities in making decisions in the curriculum development process and gives little attention to procedures for securing active involvement" (Landvogt, 1970, p. 4). This is ironic, because Knowles' first major work which included the now-familiar term 'andragogy' in its title, and which stressed the construct of self-directedness, appeared in 1970[19], just one year after Rogers' landmark work on student-centred teaching[20]. According to Jarvis (1984), this was a propitious time for the emergence of andragogy, for "the structures of society were stretched and changed" (p. 35), and there was a generalized manifestation of an 'expressive revolution' in the arts, youth culture and music.

As part of this general movement, self-expression and personal development were in vogue, and thus andragogy, which Jarvis (1984) describes as "best understood in curriculum terms as an expression of the romantic curriculum" (p. 35), was launched "into a philosophy that was similar to it and, therefore, quite receptive to it . . . Andragogy emerged at a time when the structures of society were conducive to the philosophy underlying the theory, and . . . its own structures reflected the structures of wider society" (p. 37).

However, the romantic curriculum was no invention of the 1960s or 1970s but, like an educational Halley's Comet, had made periodical reappearances in the

educational galaxy. Jarvis traces Knowles' own intellectual heritage back through Lindeman to Dewey, and ultimately to Rousseau. But even Rousseau was not the first to concentrate on humankind's natural propensity for learning.

McClintock (1982) argues that, in classical antiquity, it had been the true purpose of education to prepare learners for a world of self-directed inquiry or, as he terms it, 'study':

> Bluntly put, in the world of study that existed until modern times, teaching was trivial; that is, teaching was trivial in the rigorous sense: it pertained primarily to the trivium, to regulating a student's elementary exercise in grammar, logic, and rhetoric.
>
> Trivial teachers had the self-effacing mission of making themselves unnecessary. The young needed help and discipline in working their way through the first steps of study, in acquiring the basic tools without which all else would be arcane. The teacher, the master of exercises, gave indispensible aid in making that acquisition; but as soon as it was made the student would give up studying the elementary arts and go on to more important matters. Reliance on the brute discipline doled out by the master of exercises was demeaning, and numerous sources show how men believed it to be important to get done with the arts, to end dependence on magisterial instruction so that one could begin to study freely, as curiosity dictated, and so that one could do it with dignity, without the humiliating discipline of the master of exercises. (p. 57)

Although such a vision of teaching has a surprisingly contemporary ring to it, at some point this ancient notion of 'self-culture' with a form of "schooling that respects the autonomy of study" gave way to 'instruction,' a "system of injecting knowledge into inert and empty spirits": "schooling keyed to the self-active student" was replaced by "the delusion that the teacher, on his own initiative, can shape plastic pupils and unilaterally fill their vacant slates with the wisdom of ages" (McClintock, 1982, p. 54). McClintock goes on to explain the lamentable process of this transformation:

. . . As passionate causes wracked human affairs, as they have done from the Reformation onward, men found it hard to maintain restraint; they ceased to be willing merely to help in the self-development of their fellows; they discovered themselves burdened, alas, with paternal responsibility for ensuring that their wards would not falter and miss the mark. . . . Pressures—religious, political, social, economic, humanitarian pressures—began to mount upon the schools, and it soon became a matter of time before schools would be held accountable for the people they produced . . . (p. 60)

McClintock (1982) declares that one inevitable consequence of this shift in responsibility is:

initiative has everywhere been thouroughly shifted from the student to the teacher; a world of instruction has completely displaced the bygone world of study. Rarely does one hear that study is the *raison d'être* of an educational institution; teaching and learning is now what it is all about, and with this change, has come a change in the meaning of the venerable word "learning". Once it described what a man acquired as a result of serious study, but now it signifies what one receives as a result of good teaching. The psychology of learning is an important topic in educational research, not because it will help students improve their habits of study, but because it enables instructors to devise better strategies of teaching.

. . . Furthermore, in the same way that the meaning of "learning" has changed, so has that of "study". It has ceased to be a self-directed motivating force, which to be sure may have needed a master of exercise to help sustain it through the dull preliminaries. No longer the source, study itself has become a consequence of instruction . . . (McClintock, 1982 p. 62)

Thus adult education finds itself, in its espousal not just of learner-centredness, but of learner-control, to be "reaffirming a great tradition" advocating a return to the pattern of education which historically predominated.

B. LEARNER-CONTROL VERSUS TEACHER-DIRECTION

Today, the model of education most common in schools, colleges and universities, and indeed in adult education, is teacher-directed. To a greater or lesser extent, the objectives, content, pacing, sequence, methodology and evaluation are all in the hands of the teacher, to whom learners must submit themselves in order to be 'taught.'

However, many educationists maintain that this is an unwieldy, undemocratic and unsound way of conducting education and that (especially with respect to the education of adults) it ought to be abandoned in favour of a greater degree of learner-control. Accordingly, this chapter will examine the notion of learner-control and the reasons that have been advanced for increasing learner-control. It will be argued that, despite its alleged learner-centredness, much of the research and writing on this subject is from a teacher-dominant perspective, and that comparatively little research has been conducted into the issue of learner-control from the perspective of learners themselves. In the next chapter, attention will be focussed on the implications of the movement from one paradigm to another, and in particular the difficulties experienced by teachers and learners alike in making the transition.

1. Differing levels of learner-control

There are different levels of commitment to the construct of learner-control. For some people, increased learner-control is achieved through various forms of individualized instruction. For others, learner-control involves a significant and profound shift in the locus of responsibility for critical and valued instructional functions. In terms of the conceptual scheme developed in this

dissertation, individualization of instruction is not synonymous with, but simply one step along, a continuum of learner-control.

Over a decade ago, Clark (1973) wrote: "For some time, educational literature has reflected an increasing interest in individualizing the processes of instruction. Consequently, frequent reference is made to individual study, independent study, and self-directed learning. While most of the learning occurring under these various terms does accommodate individual needs and self-pacing, they are still very much under the direction and supervision of an instructor or educational agent" (pp. 10-11). In this dissertation, it is argued that simply individualizing or, for that matter, even personalizing a program of instruction does little if anything to increase the learner's control over the instructional situation. In the United Kingdom, during the 1970's, for instance, there were many experiments in higher education designed to increase the independence of students. But, as Percy and Ramsden (1980) state:

> The 'independence' involved was [often] conceived as a means of promoting student motivation, of adjusting the pace of academic work to take account of student differences and of developing better specific problem-solving techniques. In real senses the students were not independent of their teachers at all. A teacher does not have to be physically present for learning to be teacher-dependent. Project work, distance learning, resource-based learning, Keller Plan, programmed learning, essay writing, seminar preparation, background reading: all of these may or may not incorporate elements of student control over learning, but by no means do they imply independence. (p. 5)

This dissertation is not concerned with educational approaches which, simply granting some degree of flexibility in pacing, sequencing or even methodology, still retain for the instructor the major prerogatives of determining objectives and assessing learning outcomes. While such approaches may indeed make for more flexible and responsive educational programs, they do not in any

significant way shift the locus of control from the teacher to the learner, and bear only a superficial resemblance to the situation of autodidaxy discussed in chapters three and four. There are, however, many initiatives and educational innovations which do seek to devolve to learners decisive control over significant elements in the instructional situation.

2. Dimensions of learner-control

Earlier in this dissertation (see Figure 2) a sliding scale or Tannenbaum and Schmidt type continuum was used to express the changing balance of authority on the part of the teacher and responsibility on the part of the learner. Such a diagram has several useful purposes: (1) it helps to visualise what is otherwise an abstract relationship; (2) it expresses the notion of reciprocity and equilibrium in the teaching/learning situation; (3) it implies the idea of gradual or progressive change from one model (teacher-directed) to another (learner-controlled); (4) it shows that, even in highly teacher-directed situations there is still some residue of learner-control; and (5) perhaps most important, it implies the reverse, namely that even in the most liberal of learner-controlled situations, the teacher may still, in the eyes of the learner, have some residual authority to make decisions binding on the learner.

It is important to stress this last part for those who initially believe that it is possible for a trainer or instructor to become both invisible and redundant. This matter will be discussed again in chapter ten under the heading 'Distinguishing autodidaxy from learner-control of instruction.' However, despite all these advantages, it must be remembered that the diagram is a greatly oversimplified representation of reality. Perhaps its greatest drawback is that it

implies that control is a uni-dimensional construct. However, if one attempts to answer the question: "Learner-control of what?," it soon becomes apparent that learner-control is a multi-dimensional entity. Many authors have attempted to specify what these various dimensions are.

In 1974, for instance, Boud and Bridge identified four linked dimensions to learner-control. These are: PACE (i.e., times and places at which the learner finds it most convenient and appropriate to learn); CHOICE (by which they mean the overall choice of which course, or part of a course, to study, including the selection of minor and major options); METHOD (selecting between modes, individualised study packages, lectures and traditionally organised courses, selection of texts etc.); and CONTENT (i.e., choosing precisely what to learn according to one's personal goals and interests).

In their 1979 study *Moving toward self-directed learning*, Della-Dora and Blanchard write:

> . . . There are differing degrees of teacher directedness as there are of self-directedness and so a range of possibilities is described to illustrate the two modes as points between them . . . in areas of:
> 1. deciding what is to be learned,
> 2. selecting methods and materials for learning
> 3. communicating with others about what is being learned, and
> 4. evaluating achievement of goals.
> (p. 5)

And in the European meeting of experts (Jankovic et al., 1979) on various forms of autonomy in learning, five components were also identified:

> 1. the setting of objectives,
> 2. the duration and pacing of learning,
> 3. pedagogical methods,
> 4. learning aids and media, and
> 5. evaluation of achievements,
> the autonomy of the learner varying in relation to each of these elements. (pp. 12-14)

Cottingham (1977) proposed a six-part 'Classification scheme for independent learning.' The purpose of his study was; "to construct a classification system that delineates major classes and sub-classes of independent learning". According to Cottingham (1977):

> . . . an independent learner is one who comes to control his own learning through the acquisition and mastery of instructional principles, techniques, and methodologies enabling the student to plan and arrange conditions for successful learning . . .

> The following list of categories constitutes the classes and sub-classes of the classification system for independent learning as identified by this dissertation;

> 1.0   Learner-control of the instructional event
>   1.1   Maintaining contact with the instructional event
>   1.2   Using indirect learning guidance
>   1.3   Using direct learning guidance
>   1.4   Responding to the instructional event
>   1.5   Controlling feedback
> 2.0   Learner-control of evaluation
>   2.1   Evaluating achievement
>   2.2   Evaluating progress
> 3.0   Learner clarification of goals
>   3.1   Specifying behaviors
>   3.2   Developing standards of performance
> 4.0   Learner-control of diagnosis
>   4.1   Diagnosing performance levels
>   4.2   Diagnosing performance problems
> 5.0   Learner-control of prescriptive decisions
>   5.1   Managing instruction
>   5.2   Selecting and developing instructional events
> 6.0   Learner-control of motivation
>   6.1   Clarifying consequences
>   6.2   Controlling the contingencies of reinforcement (p. ii)

Yet another scheme, and one which helps to capture the idea of a continuum, is that offered by Moore (1973):

> The 'powers of learning' are manifested in three sets of events, which we will call establishment events, executive events, and evaluative events[21]. *Establishment events* are those in which the learner decides the long-range goals of his learning. He identifies a need in the form of a problem to be solved, a skill to be acquired, or information to

be obtained. He also establishes short-term objectives, and criteria by which to test their achievement and the achievement also of his general goals.

Executive events are those in which the learner gathers the information he desires, collects ideas, practices skills as he works to solve his problem and achieve his goals. These events include reading books, attending lectures, consulting specialists, and performing experiments.

Evaluative events are those by which the learner judges the appropriateness of newly learned skills, the adequacy of his problem solutions, the quality of ideas and knowledge acquired in the executive stage. He reaches conclusions, accepting or rejecting the material and eventually deciding that the goals have been achieved or abandoning them. (pp. 667-668, emphasis added)

With respect to any given program, course or teaching/learning situation, Moore (1973) proposes a series of questions to identify the relationship between learners and teachers, and to ascertain where control of each instructional process lies:

- Is learning self-initiated and self-motivated?
- Who identifies goals and objectives, and selects problems for study?
- Who determines the pace, the sequence and the methods of information gathering?
- What provision is there for the development of learner' ideas and for creative solutions to problems?
- Is emphasis on gathering information external to the learner? How flexible is each instructional process to the requirements of the learner?
- How is the usefulness and quality of learning judged? (p. 672)

By this subjective, inductive method, Moore and his colleagues put together a typology whereby programs (numbered 1 to 8) are classified either as Autonomous or Non-Autonomous on each of the three heads - Establishment, Execution and Evaluation. This procedure yields a matrix where the learner is said to be Autonomous (A) or Non-autonomous (N) with respect to each domain (see Figure 6).

	Establishment	Executive	Evaluative
1	A	A	A
2	A	A	N
3	A	N	A
4	A	N	N
5	N	A	A
6	N	N	A
7	N	A	N
8	N	N	N

Figure 6: Typology of programs classified by the degree of learner autonomy
(adapted from Moore, 1972, p. 82)

The paradigmatic case of autonomy (Krimerman, 1972, p. 336) obtains where the learner has complete control over all three dimensions (AAA) however Moore (1973) is careful to point out that; "like AAA, NNN cannot exist in reality, since no learner is entirely free of others' influence or entirely dependent on others" (1972, p. 673).

Moore's scheme raises an important question: To what extent are the three domains independent of one another? In chapter two, the point was made that there is a high degree of interdependence amongst the various components of personal autonomy, and that any attempt to develop one or two parts in isolation is unlikely to succeed. In that case, the reference was to the personal aspects of autonomy in learning, but as Boud (1981) points out, the same is also true of the situational dimension:

The exercise of autonomy cannot be realistically limited to any one part of the learning process: for example, in course content but not assessment or in choosing one's own pace but not one's objectives. Autonomous learning, as all learning, involves the whole person, not just the intellect; what is to be learned should not be seen separately from the motives and desires of students. Postponement of the opportunity to exercise responsibility for learning actively discourages the development of the capacity to do so. (p. 25)

The implication of this is that learner-control, in the full sense of the term, is not a minor adjustment to the educator's approach, nor simply one item in a repertoire of teaching strategies. It represents a fundamental shift in the balance of power and the locus of control. If it is successfully implemented, it leads inevitably and inescapably towards a radically altered role for both the learner and the teacher. Skager (1979) makes the point that "if self-direction is significantly influenced by one kind of schooling or another, the presumption is that this occurs because there is some sort of consistency—irrespective of content and level—in how learners are expected to go about the learning process." (p. 539)

Moreover, in this dissertation, the notion is questioned that educational programs can be classified meaningfully according to their degree of autonomy. Although it may be that programs can *permit* differing levels of learner-control, learners may not feel competent to *exercise* such control. The major determinant of learner-control would seem to be the learner's subjective understandings, not the objective (teacher-centred) aspects of the situation.

C. ARGUMENTS FOR INCREASING LEARNER-CONTROL

Although the development of personal autonomy in the wider sense (see chapter two) is commonly cited as the reason for increasing learner-control in adult education, other rationales are also advanced. These may be classified as: increased learner motivation; increased meaningfulness of the learning experience; enhanced learning outcomes (which can be subdivided into learning of content and acquisition of attitudes and competencies); and various ideologically inspired claims.

1. Increased motivation

One of the most commonly advanced justifications for increasing learner-control is that it leads to increased satisfaction (Southern, 1971) and to heightened motivation to learn (J. K. Johnson, 1974; Patton, 1955). In their early experimental work on learner-control, Mager and McCann (1961) began with the tentative hypothesis "that learner motivation in an instructional situation is a direct function of the amount of apparent control the learner can exert over the situation" (p. 5).

Some people argue that increased learner-control can only act to increase motivation *once learners have made a decision to participate*: "If the student will not try to learn, more freedom probably not only will not help, it may even detract . . . But if a student wants to learn, he would surely want also to direct his own study effectively, given the chance. For many students, greater freedom and responsibility in itself may increase motivation to learn" (Campbell, 1964, p. 350).

Others, however, adopt the point of view that, even if the subject of inquiry is not one in which the learner is inherently interested, the 'method of

work' can create the necessary orientation. Elton (1973) writes:

> To motivate a student to study is not in itself an ultimate educational aim, but rather an interim one and a means towards ultimate ones, a kind of needle's eye through which a student must pass before he is likely to achieve really worthwhile objectives. Much discussion in educational circles centres on how to get the student through this eye, and three specific means are generally distinguished:
> a)   intrinsically, through interest in the subject;
> b)   extrinsically, through examination pressure;
> c)   extrinsically, through rewards.
> However, there is another one, which is far less frequently recognized
> d)   intrinsically, through interest in the method of work.
> By this I mean that one devises learning situations, in which the student feels himself involved and in which he is active, perhaps through some form of self-study. The hope is that these situations, which in general appear to be designed in the main to achieve cognitive aims, lead to such student involvement, that he is carried over into the affective domain . . . (pp. 75-76)

On the surface of it, this seems to be a plausible argument but, with respect to adult learners in particular, it is rather simplistic. Clearly, most people would prefer a learning situation in which they experience enjoyment and pleasure, but if this is at the expense of substantive content, they may choose the less 'motivating' alternative because of their desire to learn. As early as 1951, Wispe made this valuable distinction with respect to 'directive' as opposed to 'permissive' teaching strategies:

> . . . When asked which kinds of sections were of most help in preparing for exams, or when asked which sections were the best organized, or when asked where the agenda were most clearly stated, the students came out strongly in favor of the directive-type sections. Thus, so far as the students were concerned, the virtues of the directive sections were that they structured an ambiguous situation, and that they advanced a great deal of course-related information.
>
>   In view of the fact that the permissive sections were characterized by more humor, more interest, more active participation, and more commending, one is surprised by the fact that the permissive sections were not preferred. However, they were not. While the students did report that they enjoyed permissive sections more, the analysis of a Guttman type scale for attitudes-towards-sections, and of

the individual items, indicates that they did not consider them as valuable; and in a sense, in an objective-examination-oriented atmosphere, they were right . . .

. . . both instruments confirmed the facts that directive sections were preferred but that permissive sections were more pleasant. (pp. 169-170)

This finding was not universal, however. Wispe noted a significant difference between so-called 'better' and 'poorer' students. The latter clearly performed better in a more directive teaching situation. A similar finding was also reported by Snow (1980) who suggests; "that learner-control over task performance conditions is not best for everyone, [and] . . . that the collective aptitude of the *group* one finds oneself in, and perceived contrasts with other groups, partly determine the effects of *individual* learner-control" (p. 155). The question of individual differences will be dealt with later in this chapter.

2. Greater meaningfulness

Closely related to motivation is meaningfulness: it is frequently argued that the only learning worthy of the name is that held to be meaningful by the learner. This view is particularly associated with Carl Rogers, who argues that "the only learning which significantly influences behavior is self-directed, self-appropriated learning" (C. R. Rogers, 1969). Since meaningfulness does not inhere in the learning itself, but in the meanings which the learner attributes to it, the person best able to assess the meaningfulness of new learning is the learner (V. N. Campbell, 1964, p. 349). Likewise, Mager and McCann (1961) found that the order or sequence of presentation which seemed satisfying and meaningful to the learner "is not at all the same sequence that is imposed upon

the learner by the instructor" (p. 5).

An alternative interpretation by D. Z. Phillips (1973), however, disputes the idea that learning tasks need to be meaningful for them to be important:

> When a student argues that a curriculum should cater to his own interests or preferences, he is advocating a policy of weakness, and an anti-intellectual one. The business of intellectual enquiry is to introduce one to subjects which are important to study and to further and deepen those studies. But this notion of "importance" is inseparable from the subject concerned; it cannot be explained in terms of the personal biographies of those who study them. The study of a subject is not meant to cater to the pre-existing interests of the students, but rather to create interests which the students would not have had apart from such study. (p. 143)

How are such positions to be reconciled? The answer is that they cannot be, for they rest on different views of knowledge and of learning. In one view, the learner is an active maker of meaning, a person who contributes to his or her understanding by attributing significance differentially to various items of information, and by taking a route through the material which seems appropriate to him or her. Meanings are personally constructed. In the other situation, the knowledge is viewed as an impenetrable and static monolithic mystery, over and around which the learner must clamber in an attempt to acquire meanings from it. While still 'active,' the learner is merely attempting to 'acquire' or 'master' some body of knowledge. Cornwall (1981) explains the difference like this:

> [Some claim] that learning is akin to building a house; first we must have the foundations (prescribed basic knowledge) and then we can build on this brick by brick (*quanta* of knowledge), each neatly fitting within the existing structure. Clearly, with such a model of learning, it is nonsense to attempt to build the second floor until the foundations and first floor are complete; that is to expect students to fit in blocks of advanced knowledge before they have consolidated the lower levels . . .
>
> A second, and more appropriate metaphor for learning if we are to remain in the field of construction, is that of building a

steel-framed structure in outer space—an interconnected network of potentially infinite extent, to which it is possible to add pieces in almost any order as long as they interconnect in some way, and form a pattern which makes sense to the builder. In this model, there is nothing to prevent us completing the whole structure in outline before filling in the finer detail, or indeed starting at one place rather than another. (p. 201)

When the problem of meaningfulness is viewed in this way, it becomes apparent that there are many domains of knowledge in which people can, and do, construct individual and idiosyncratic patterns of understanding, and where it is perfectly reasonable to expect them to exercise control over the functions of both teacher and learner. In other domains, however, there are forms of knowledge (predominantly discipline-based) which a learner is expected to master in a prescribed sequence and to be able to explain using the conventions of that field. In such a case, 'meaning' may only be possible after a certain amount of information has been acquired in a rote or non-meaningful way. As Quinton (1971) expresses it, "We cannot acquire knowledge or justified belief . . . until we have acquired a good many beliefs without justification" (p. 207). Thus asking the neophyte in such circumstances to select specific objectives, or even to determine the relative importance of various topics is, at worst dangerous, at best questionable.

Even in such situations, learners do not suspend their attempts to 'make meaning' out of the phenomena to which they are exposed. For instance, in his paper on changing students' approaches to study through classroom exercises, G. Gibbs (1983) uses the example of a diagram consisting of apparently disconnected dots and blobs.
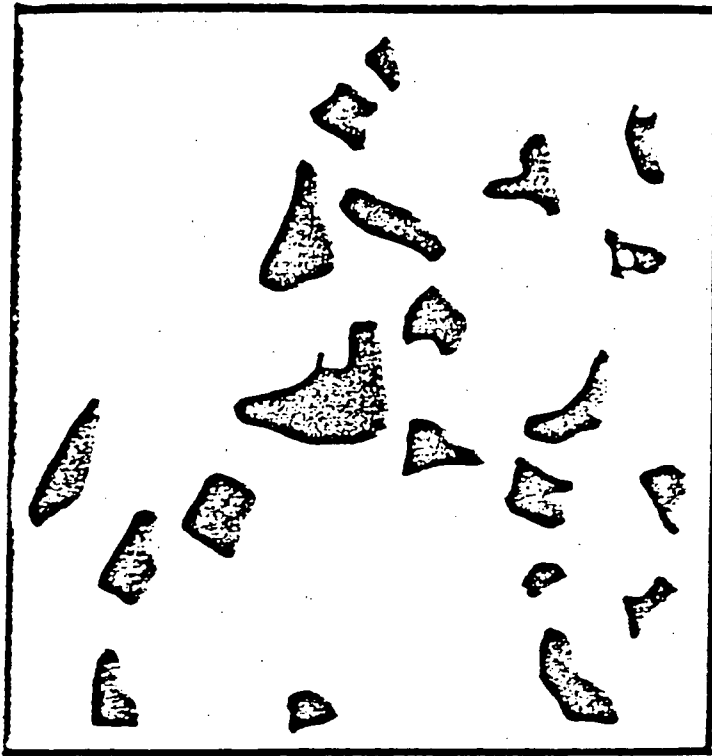
Figure 7: Image used for test of perception
(reproduced from G. Gibbs, 1983, p. 91

If, as he states, "the image is attempted to be memorized as a meaningless array of dots, then the task is very nearly impossible" (p. 91). If, however, the viewer manages to see the dots as a dappled and incomplete picture of a rider on a horse, then ability both to recall the information and to convey it to others, is substantially enhanced. Of course, Gibbs is only restating what a succession of cognitive psychologists has been saying for the past four decades or

more. In his experiments in 1940, for instance, Katona gave his subjects a series of numbers to learn:

581215192226

The task could be dealt with by rote memorization, by some pattern of grouping, or by attempting to discover an underlying 'meaning' or structure:

5   8   12   15   19   22   26
  3   4   3   4   3   4

Figure 8: Learning task involving a series of numbers
(adapted from Katona, 1940, p. 17)

In this case, the structure consists of a regular pattern of differences between successive numbers, which enables the reconstruction, rather than mere recollection, of the learning task. As Marton (1984) comments:

> Some conclusions that can be drawn from this experiment (and from many others as well) are the following. The qualitatively different ways in which a certain material is understood correspond to qualitatively different ways in which the material is subjectively organised by the learners. Secondly, changes in meaning originate from acts of structuring; on the other hand, acts of structuring presuppose changes in meaning, the two aspects of the learner's activity thus being intertwined in a dialectical interplay. Thirdly, in order to establish a structure, i.e. relations between components, these components have to be seen in relation to each other, they have to be seen as parts of the same whole. (p. 3)

How does this finding relate to learner-control? The answer is that, in situations of learner-control, learners have the opportunity to 'sort things out,' and to impose meaning or structure on learning tasks for themselves, to a greater extent than those under a teacher's direction. It is argued that the imposition of structure—even when there is not one—is a basic human drive (Watzlawick,

1984, p. 14) which is best accomodated by learner-controlled methods of instruction.

a. 'Sorting-out' as basic to the meaningfulness of learning tasks

All learning involves 'sorting things out', in the sense of placing events, objects or ideas into some sort of conceptual categories. The question is, what are the origins of conceptual categories, and is it preferable for the learner to discover or develop them, or to be given them? The central importance of 'sorting out' was mentioned in chapter five under the heading 'Autonomy and public knowledge,' and the significance of 'sorting out' has been tested experimentally. D. Kuhn (1981), in a paper entitled 'The Role of Self-directed Activity in Cognitive Development,' reports on an experiment designed to focus on the role of 'sorting out' in the development of reasoning strategies:

> Our intent was to examine critically this alleged role by designing two identical intervention situations with the exception that in one, subjects selected the particular information-seeking activities they would engage in, while in the other, they did not. This was accomplished by pairing each experimental subject with a yoked control subject, who engaged in exactly the same activities as had been chosen by his or her experimental partner. Thus, each subject of the pair was 'active,' each carried out an identical set of activities and hence was exposed to identical information stemming from those activities, but only the experimental subject selected the activities to engage in. (p. 354)

Subjects were exposed to a series of problem-solving tasks of increasing complexity, and the experimenters were interested in; "(1) a comparison of the highest problem in the intervention sequence mastered by subjects in the two conditions; and (2) a comparison of the posttest performances of subjects in the two conditions, as well as the simple control condition" (p. 355).

All the subjects improved their problem-solving capacities, thus

substantiating earlier findings that people generally make "significant progress in the construction of new thinking strategies when they are simply exposed to a rich problem-solving environment over a period of months" (p. 356). However, the experimental subjects made greater progress than their yoked controls, and Kuhn (1981) offers the following explanation of this phenomenon:

> The experience of experimental subjects in the present study differed from that of their yoked controls in that the experimental subjects were required to 'direct' their own activity in the sense of planning the specific activities they would carry out. Both groups were physically active (in manipulating the materials) to an equal extent, and experimental subjects did not overall appear more 'interested' or 'motivated' because of their additional role in designing the experiments.
>
> The critical difference, in our view, is rather that the experimental subjects were encouraged to develop an *anticipatory scheme* with respect to possible experimental outcomes, simply because of the fact that they had to design the set of experiments that would yield one of these outcomes . . . It is our hypothesis that experimental subjects, because of these anticipatory schemes, were better able to 'make use of' in the cognitive sense—in other words, assimilate into a theoretical framework—the data yielded by the experiments, and thus they gained more from the experience. (p. 357)

Thus it seems that meaningfulness is indeed a critical aspect in the domain of learner-control, perhaps even more than early experimenters realized, and that providing opportunities to select the direction of learning and to choose appropriate means for testing personal hypotheses is implied. This has important implications not only for the extent to which learners are given, but the extent to which they believe themselves to have, control in the instructional setting.

3. Enhanced learning outcomes

Of those who argue in favour of increased learner-control, many are less concerned with *why* it works, than the fact *that* it works. In other words, they assert that giving learners control over certain instructional functions leads to demonstrably superior learning outcomes. These outcomes are expressed in terms of; (1) better subject-matter acquisition; or (2) more global or non-cognitive gains such as "student interest and involvement, breadth of understanding, application of what is learned to the solution of real-life problems, self-confidence and self-esteem, ability to work effectively with others, understanding of goals and direction, and self-motivated continued learning" (Wight, 1970, p. 246).

a. Learning of subject matter

Despite the extravagant claims made for increased learner-control, there is little 'hard data' concerning its superiority over other methods of instruction. What little there is, seems to date mainly from the 1960s. One of the reported studies from this period was carried out by Mager and associates in an industrial training setting. A group of newly appointed trainee engineers was given responsibility for arranging their own induction course, including orientation sessions, input on specific processes, and work placements. The trainees were provided with "24 pages of detailed course objectives which specified the desired terminal behavior. The net effect was that the students had to decide what they needed to learn, in addition to what they already knew, in order to reach the objectives" (Mager & Clark, 1963, p. 73).

According to the experimenters, the results were impressive compared with their traditional training and induction courses: training time was reduced 65%;

the graduates of the program appeared better equipped than previously; less time was needed by instructors, administrators, or technical experts; both the content and sequence varied markedly from student to student and, in the case of the sequence, the order in which learners undertook learning tasks differed sharply from that which had been previously used by the instructor.

Two points need to be made about this, however. The first is that the provision of detailed behavioral objectives probably renders the learner to some extent dependent on the person or agency that established the detailed objectives, and thus removes this approach from the realm of autonomous learning as defined here (Kotaska, 1973; Kotaska & Dickinson, 1975). Secondly, even the experimenters were conservative in appraising their success: "[These results] suggest that the success of auto instructional programs may say less about their effectiveness than about the ineffectiveness of traditional procedures" (Mager & McCann, 1961, p. 20).

In fact, over the past 25 years, research has consistently failed to establish the superiority of learning outcomes in learner-controlled situations. For instance, during a protracted investigation of student-centered teaching methods which included self-directed study, McKeachie (1960) was forced to conclude that such methods are 'no panacæa' for the problems of higher education. Further, his review of research on instructional techniques (1962) stresses the predominant theme of 'no significant differences' between educational methods.

Similarly, after a three-year investigation of self-directed study in many different university courses, Gruber and Weitman (1962) were forced to the rather weak conclusion that, as far as learning of conventional course content is concerned, "a reduction in attendance at formal classes to one-third the usual

number resulted in either small losses or small gains, the gains being somewhat more common than the losses."

In 1964, V. N. Campbell carried out a well-controlled experiment into learner-control, but the best he was able to claim was that; "in no experiment did self-direction have an adverse effect on learning" (Campbell, 1964, p. 358). Dubin and Taveggia (1968) reviewed the available literature comparing the effectiveness of various college teaching techniques, and they conclude; "in the foregoing paragraphs we have reported the results of a reanalysis of the data from 91 comparative studies of college teaching technologies conducted between 1924 and 1965. These data demonstrate clearly and unequivocally that there is *no measurable difference* among truly distinctive methods of college instruction when evaluated by student performance on final examinations" (p. 35, emphasis added).

More recently, Rosenblum and Darkenwald (1983) carried out a neatly conceived study to test whether adult students who participated in planning their course of studies performed better than those not consulted. Although this is not strictly self-direction in the full sense, such involvement in program planning is also a common methodology in adult education and tends to draw its support from much the same values and beliefs about adults as learners. Their study involved a yoked control group. The experimental subjects participated in planning the course which they subsequently took. The control subjects took the course as designed by the experimental group. Their findings were, if anything, contrary to expectations (i.e., the group who were *not consulted* actually performed marginally better than those who did participate, though the difference favoring the control group was not statistically significant [p. 151]). As the authors themselves point

out, despite these unexpected results, the study did not "discredit the proposition that participation in planning results in a better designed or more relevant course and therefore greater achievement and satisfaction" (p. 152).

Within the framework of the argument being advanced in this dissertation, it seems likely that the inconclusive and equivocal results obtained are explicable, at least in part, because the research approach conventionally adopted in evaluating 'learning' generally focuses on *quanta* of knowledge. Säljö (1975) explains the point neatly:

> Within the psychology of learning, the underlying conception of learning has in most cases been rather simple. The dominating interest has been focussed upon how many stimuli can be reproduced under various conditions. There are few studies where there have been attempts to study what is learned when people are exposed to oral or written discourse. In most learning experiments, a criterion test is used and the effect of treatments, if any, is read from the sum value that a subject or a group of subjects obtain. There is thus, basically, a definition of learning which is .founded on a quantitative or atomistic conception of knowledge and learning . . .
>
> . . . it seems a worthwhile end in itself to study what is learned as revealed through what subjects say in a situation where they themselves have to produce answers and interpretations. Study of what is learned is one of the major features of non-verbatim, as opposed to verbatim, learning . . . (p. 14)

It is argued here that if, in situations of learner-control, experimenters had studied *what is learned* rather than *how much is learned* (Säljö, 1975, p. 9), the findings may well have been somewhat different, and have vindicated the optimism of the many psychologists and educators who, according to Gruber (1965) "cling to the hope that a convincing demonstration of the efficacy of self-directed study is 'just around the corner'" (p. 2).

b. Non-cognitive gains

Despite the generally lacklustre and inconclusive findings concerning learning of subject matter, many adult educators persist in espousing the need for increased learner control (sometimes even in the face of learners' reluctance to accept it). Frequently, this is as a result of some ideological commitment (a factor which will be discussed later in this chapter), and frequently, too, it reflects a belief that learner-control results in other, non-quantifiable gains and "that the individual develops beneficial competencies through the exercise of autonomy and freedom" (Mocker & Spear, 1982, p. 9).

The beneficial competencies most commonly referred to are either the ability to behave autonomously in the wider arena of one's life (Aroskar, 1976; Dittman, 1974; Hausdorff, 1973; Rubenson & Borgström, 1981), or the narrower and more modest goal of increased capability to undertake autonomous learning, under different circumstances (R. K. Brown, 1966; Kratz, 1978; Langford, 1974; Schleiderer, 1979) There is little evidence to suggest a direct link between learner-control and the development of personal autonomy. As discussed in chapter three, the mere provision of freedom is not enough to ensure the development of complex skills, competencies and attitudes required to exercise personal autonomy. The linkages between learner-control and the development of competence as an autonomous learner are more credible.

The connection between learner-control and the development of competence as an autodidact was dealt with in chapter five. Although the link is plausible, the evidence is tenuous (Skager, 1979). It was, however, suggested that "giving learners more control gave them a taste for more control, as well as greater interest in the topic" (Campbell & Chapman, 1967, p. 130) and it was stated

overall that "certain competencies for self-directedness in learning . . . can be fostered in part of a formal learning situation" (p. 123).

With respect to the connection between learner-control and the willingness and capacity to undertake autonomous learning generally, the evidence is stronger and more direct. For instance, Gruber and Weitman (1962) demonstrate that increased learner-control resulted in increased curiosity about the subject matter, "as measured by the rise in questioning behaviors" (p. 23). In turn, "curiosity may be said to have a 'gatekeeper' function in the educational system" (Hovey, Gruber & Terrell, 1963, p. 351).

Caffarella (1983) reported respondents' satisfaction with the use of learning contracts in a graduate course in adult education, and concluded "that using a learning contract is both valuable and worthwhile and that its use should be continued in graduate level courses," and furthermore "these students did agree that they had increased their competencies as self-directed learners as a result of using the learning contract" (pp. 13, 25). Almost twenty years earlier, Gruber (1965) had reported a similar finding with respect to increased learner-control:

> Perhaps the most uniform finding of research in this area is that students initially *dislike* greater responsibility but come to accept it in the course of a semester, and that their brief experience with self-directed study does produce a more favorable attitude toward independent intellectual work. This result was stressed by Gruber and Weitman (1962), and similar findings are summarized by McKeachie (1962). Of course, there is little reason to believe that a single brief experience with self-directed study in an educational atmosphere fundamentally hostile to intellectual independence (cf. Gruber & Weitman, 1962) will produce attitudinal changes of great longevity. (p. 5)

Gruber and Weitman (1962) also noted that there was an increase in emphasis placed on the value of doing independent intellectual work by students. They

comment that this finding is all the more striking because this more favorable attitude towards academic independence occurred in a group of courses "in which the students' evaluations of the experimental courses were unfavorable, and in which their final examination performance was inferior to the control group" (p. 23-5). This is a valuable insight which relates to the earlier reported study of Wispe's (1951), which revealed that enjoyment was not necessarily synonymous with value in the students' evaluations.

Probably the most comprehensive empirical study into the development of competence as an autonomous learner is the work of Wang and her associates at the Learning Research and Development Center at the University of Pittsburgh. After more than a decade of carefully controlled experimental work, regarding both the direct and concomitant development of competence as an independent learner, Wang (1983) writes:

> To summarize, if students function in carefully structured learning environments where opportunities are provided for skills acquisition, and where continuous emphasis is placed on self-direction, self-initiative and self-evaluative behaviors, it is postulated that students should gain an increased sense of self-efficacy and personal control. Furthermore, it is assumed that academic successes are more likely to increase students' perceptions of personal control if the successes are achieved without a huge degree of dependence on external agents such as teachers. (p. 221)

Two notions are central to this claim. The first is the idea of students' 'sense of personal control,' which is dealt with in chapter eleven, the second is the notion of 'carefully structured learning environments.' There is no evidence to suggest a strong link between disorganised or haphazard programs involving intermittent or partial learner-control, and the sustained development of competence to function in this mode.

Another form of collateral learning, even more nebulous than these, is the broadening of the intellect. Geis (1976) argues that, in university at least, the combined effect of widening choices and giving increased learner-control is "to help to develop a repertoire of choosing—[and] to develop the capacity for intelligent decision-making" (pp. 252-253). He indicates that there is a certain paradox in insisting that students experience things (p. 253), and he also deals with the issue of *intelligent* decision-making:

> It has become fashionable of late to speak of the student as a consumer of education . . . Applied to education, the interest in consumerism is reflected in the pressure for teacher accountability and specification of the educational 'product.' But, paradoxically, in education the other side has been somewhat neglected—the education of student as consumer. Thus, in the literature on student choice almost nothing is said about *intelligent* choice, although a continuing argument advanced by those antagonistic to increased student participation in the educational effort is that the student is unable to choose wisely.

> Freedom is not merely lack of constraints. It occurs when the individual has developed several alternate repertoires which allow him to operate successfully in a variety of environments so that he increases his knowledge and skills, develops new attitudes, and generally promotes his own well-being while contributing to those around him. Educational freedom, then, becomes something more than the elimination of the boundaries and narrow pathways of traditional education.

> Is it not a major goal of higher education to produce an informed consumer, one who can make intelligent choices about a great many things in his or her life? The educational challenge lies not only in developing these "consumerism skills" but also in providing the student with them early enough so that he or she can intelligently manage a system of education which itself is open and provides—requires—choices. (pp. 267-268)

This comment deserves serious consideration. Increasing learner-control, especially in areas where there is a discipline-based body of knowledge to master, does not consist solely of relinquishing responsibility to the learners. Instead, it involves inducting the learners into the criteria which they need to apply in making

informed choices about what to learn and possibly also about how to learn.

Some adult educators subscribe to Olson's (1945) or Skruber's (1982) neo-Darwinian position that when a person is given a choice in learning, he or she will select what is individually best. However, this is a position which has an ethical dimension to it; is the 'positive conception of the teacher' (Lawson, 1979) to fade out entirely in favour of an anthropologist who stands by to observe and record the choices made by learners, or possibly a gardener who "merely co-operates with an automatic process of growth" (Hostler, 1981, p. 27)?

Taking this need for instruction in intelligent choosing with Gruber's observation that "attitudinal changes develop rather slowly, [yet] they are a necessary prerequisite to stable changes in intellectual work habits" (Gruber, 1965, p. 5), it seems that "the student may need specific training to develop new patterns of active intellectual work" (p. 6). Gruber (1965) outlines the phases in such a program, extending over the entire duration of a student's time at university. The protracted nature of such a program of developing self-reliance in learning has important implications for what may, or may not, be reasonably achieved in adult education, where the contact is typically much briefer and more discontinuous.

In his paper on 'Educating towards shared-purpose, self-direction and quality work,' Torbert (1978) deals specifically with the difficulties students encounter in fully internalising such a radically different model of education which learner-control in the full sense entails, especially as he himself "required seven years of very intense and diverse existential learning experiences with remarkable teachers and colleagues, as well as the previous two terms experimenting with the particular conditions of the S.M.U. business school before I could take a role

in enacting the well-defined liberating structure reported here" (Torbert, 1978, p. 129).

Overall, there seems to be some evidence that exposure to techniques of instruction which emphasise high degrees of learner-control, over extended periods of time, can increase people's competence at, and preference for, independent inquiry. The question to which advocates must address themselves is: "Why bother"? As Gruber (1965) observes, "it is plain to see that maximal independence is only an *intermediate* goal. . . . Our aim is not independence for its own sake. For this reason, in improving our methods of developing intellectual self-reliance, we must give deeper thought to the kind of human relationships our educational methods foster" (p. 9). Thus, those whose advocacy of learner-control rests on the desirability of increasing people's competence as independent learners must go beyond this achievement to answer questions such as; "What outcomes do we expect from such programs? What ideal person do we envision? What community? What world?" (Gibbons & Phillips, 1982, p. 84).

4. Individual differences among learners

If education in the 1970s could be typified in a single phrase, it would probably be 'individual differences.' During this period, much research effort was directed towards identifying significant, stable dimensions along which learners were found to differ from one another (Kolb, 1976; Messick & Associates, 1976; Wang, 1980). Obviously, physical characteristics, personality, family background, intellectual ability, life experiences, and personal goals form, for each individual, a unique pattern which in turn influences the way in which the individual interacts with the larger environment and obtains information from it. Against this

background, researchers have sought to discover underlying dimensions of how people learn. Cropley (1977) has said:

> Just as it is possible to discover differences in the ways in which different people deploy their intelligence, it is possible to observe systematic and idiosyncratic qualitative differences between individual people in the way in which they carry out the organising process referred to . . . as 'cognition.' (p. 84)

One corollary of recognising individual differences in learning styles is the individualisation (Keller, 1968) or even personalisation (Hill, 1971; Nunney, 1975; Wallace, 1977) of teaching methods and systems. Accordingly, research into individual differences in learning has given rise to literature on matching teaching and learning styles (Anderson & Bruce, 1979; Cronbach & Snow, 1977; Cross, 1976; Hunt, 1971; Meyer, 1978; Washburne, 1925; Witkin et al., 1977). The purposes of this sort of matching are generally said to be twofold. On the philosophical side, matching was touted as an answer to the age-old problem of 'treating unequals equally.' On a more practical note, it was assumed that engineering a closer match between teachers and learners would reduce 'slippage,' and accordingly enhance learning outcomes.

a. A more democratic form of education

One of the driving forces behind the move towards increased learner-control is the democratic ideal, and its close relative, the concept of egalitarianism. This has a long history which extends back to the Græco-Roman conception of the informed citizen making reasoned choices on the basis of the perceived common good. According to B. Gibbs (1979), "autonomy . . . is part of an individualistic, anti-authoritarian ideology which is very deep-rooted in Western

capitalist democracies . . . and it is naturally the conception usually proposed and expounded by our philosophers" (p. 121).

The democratic ideal has long influenced education—both its content and processes. An analysis of the relationship between democracy and education, even adult education, lies well beyond the scope of this dissertation, concerned as it is with issues of equity (fairness and justice) as well as equality—of opportunity, of participation and of outcomes (Stalker-Costin, 1985). However, one of the factors which impedes the realisation of a democratic educational system is the existence of significant and enduring differences between learners.

Attempts to circumvent or nullify the effects of individual differences have taken many forms over the years, including such innovations as the Dalton and Winnetka plans of the 1920s, programmed instruction, Headstart, Follow Through, Individualised Instruction, PLAN, performance contracting, aptitude treatment interaction, computer managed learning, Individually Guided Instruction, the Keller Plan and so on (Snow, 1980, p. 152; Wang, 1980 p. 22). Each of these approaches is based, in some way or other, on an attempt to individually tailor a course of instruction to each student.

In conformity with this model, it has frequently been assumed that, especially with regard to adult education, increasing learner-control would lead to a more egalitarian educational system. This is based on the tacit assumption that adult learners would automatically select educational experiences and approaches best suited to their individual needs. In answer to the implicit question as to whether learner-control of instruction can accommodate individual differences in this way, Snow (1980) writes:

> If the question concerns whether learner-control *makes room for, exists in the face of,* or *serves the expression of* individual differences, then

an affirmative answer derives by definition. But the proponent is usually asking whether learner-control *compensates for the effects of* individual differences. Stated this way, the only justifiable answer at present is 'No!'

> [This is because] 'accommodating individual differences' really means just this: producing zero correlation between aptitude and learning outcome, either by designing instruction to compensate for the effects of aptitude differences, or by directly training away such differences in the process of instruction . . . *No known training program has been shown consistently to erase the individual differences in aptitude . . . [and] learner-control cannot be expected to overcome the persistent fact that individual characteristics will determine to a significant extent what and how much that individual will learn in a given instructional setting.* (pp. 151-152, emphasis added)

Research evidence has consistently demonstrated that not all learners necessarily benefit from learner-control, and that some—especially the less able academically—are actually disadvantaged by it. It appears that increasing learner-control, although it might *allow for* individual differences, does not *compensate for* them. Thus, in terms of educational outcomes, it does not result in a more egalitarian educational system. This point is also made, in somewhat different terms, in chapter four, where the alleged connection between (in that case) autodidaxy and social equality was questioned: the claim that increasing learner-control will lead to a more egalitarian society must be treated as an ideological claim.

b. Reducing 'slippage' in the instructional setting

It is widely acknowledged that only a small proportion of any teacher's instructional performance at any one time is directly appropriate to the needs, interests and understandings of a particular learner. A great deal of research in both teaching and learning has accordingly been aimed at increasing the

productiveness of learners' 'engaged time' on learning tasks, and one major avenue of endeavour has been the individualisation of instruction.

Individualisation rests on two pillars. One is a view of individual differences as reasonably stable and enduring personal qualities, capable of being measured or assessed in some way. The other is the ability of the educational agency, usually the teacher or instructor, to respond to the variety of differences encountered. Thus, research has tended to pursue, on the one hand, ways of increasing teachers' repertoires of responses and, on the other hand, better ways of discriminating different learning styles from one another.

At least part of the difficulty with this latter line of enquiry has been the situational variability in people's learning styles (Cross, 1976, p. 111), and the comparative crudity of instruments designed to assess learning style preferences. As a result, many people have argued that the best way of dealing with individual differences among learners is to give them control over valued instructional functions. In this way, those who prefer structure can demand it, while those who prefer an informal, collaborative climate, can demand that, too.

The evidence concerning what happens when learners are not matched with their preferred style is persuasive. One of the most compelling findings is that reported by Pask and his associates (Pask, 1976; Pask & Scott, 1972; Pask, Scott & Kallikourdis, 1973). Pask identified two groups of learners; 'serialists' or step-by-step learners, and 'holists' or global learners. In a subsequent experiment, learners were selectively matched and mismatched according to their learning style preference. Daniel (1975) findings showed:

> Matched groups comprised serialists given the serialist programme, and holists given the holist programme, and the mismatched sample also contained two learner/programme groups—holist/serialist and serialist/holist. In all cases, students had to complete each frame of

their programme successfully before moving on to the next and were required to repeat the entire programme until they achieved an error-free run. A 30 item test designed to determine both factual knowledge (4/5) and ability to generalise (1/5) was then administered. The test results were unequivocal. All members of the matched groups scored between 28-30, whereas scores for mismatched students fell between 7-21 with an average of 14. Such a difference hardly needs a statistician to assess its significance. (p. 85)

Writing of the same experiment, the Open University course booklet on Cognitive Styles (1976) comments; "The results were very clear-cut. The matched students . . . performed much better when tested on their knowledge of the material than did the mismatched students - so much so that the least successful 'matched' student did better than the most successful mismatched one. Furthermore, the matched students showed significantly greater ability to generalise from their knowledge . . . " (Floyd, 1976, p. 31).

Given that the results of mismatching can be so dramatic, the question which next arises is whether or not preference for learner-control is an enduring characteristic, for which mismatching could have the same startling results. If so, people who are mismatched, may well feel hostile towards instructors who give them too much, or too little, control, and this could adversely affect their learning outcomes.

In 1962, Stern, in his review of research, reported that studies had shown that "students who placed high on personal independence not only preferred the student-centered classroom but were extremely critical of the subject-matter-centered section." He stated that "conversely, students who expressed the strongest need for direction and organization were also most intense in their dislike for the permissive teaching techniques" (Wight, 1970, p. 271).

This finding is totally consistent with Wispe's (1951) much earlier work on

the same point. In that experimental work, students were randomly assigned to different teaching sections, some of which were taught directively, while others were taught permissively, allowing plenty of room for freedom of choice and learner-control. Students were classified as either 'wanting-more-permissiveness' or 'wanting-more-direction.' Some of the 'permissive' students were in the 'directive' course, while some of the 'directive' students found themselves in the 'permissive' section of the course. Wispe goes on to describe the reactions of the various groups to the situations in which they found themselves:

> Realizing the importance of these student classroom needs, what must have been the effects of their frustrations? The want-more-direction students said on the questionnaires that instructors 'never lectured,' were 'poorly prepared' and 'couldn't even answer a question in a straight-forward manner.' To the want-more-permissiveness students, the instructors 'lectured too much,' 'discouraged viewpoints other than their own,' and 'identified with the head of the course.' Every indication is that the frustration in both groups was very intense, but it was especially so in the want-more-direction group. This group, particularly the sub-group wanting more direction but being permissively treated, held the lowest opinions of sections and instructors, had the most negative scores on the projective tests, and gave several indications of perceptual rigidity . . . (p. 174)

Judged on these facts alone, the argument in favour of deliberate matching seems convincing. However, an examination of the way in which this particular experiment was conducted might suggest otherwise. The students were not assessed as to their learning style preference *before* they were allocated to the different groups, but were only subsequently classified on the basis of their response to questionnaires, as either 'wanting-more-permissiveness' or 'wanting-more-direction.' The effect of doing things this way is that there were some respondents in the 'want-more-permissiveness' group, who were already *in* the permissive course, and conversely some 'want-more-direction' respondents who

were already *in* the directive group. As a result, it was possible to demonstrate that even a highly directive approach was not directive enough for some students, and that a very permissive approach was not permissive enough for others. This is an intriguing finding for, by approaching the question of learning style preferences *after* some matching had already occurred, it raises serious questions about the possibility of ever satisfactorily matching teaching strategies to learning style preferences.

It may be possible to argue that Wispe would have obtained different results had students been able to choose what they regarded as 'directive' or 'permissive' approaches, but there are further grounds for caution with the notion of matching. Snow (1980) points out that: "The idea that learner-control can accommodate individual differences rests on two assumptions. One is that all learners know what is best for themselves at any given moment in an instructional sequence; the other is that all are capable of acting on this knowledge" (p. 158). As it turns out, these assumptions have proven to be untenable, at least for many learners. In particular, as to the assumption that "all learners know what is best for themselves at any given moment," Cross (1976) has written:

> if we know that a field independent learns best and most pleasantly in independent study, are we necessarily serving him well if we offer him a steady diet of independent work? Maybe he needs to learn to work coöperatively with others. 'Matching' him to his own style or preference may push him toward further field independence, and that may be maladaptive in certain social situations. Maybe we should expose him to a 'challenge match'—that is, place him in an uncongenial or conflict setting, so that he is forced to develop an area of weakness or at least some flexibility in dealing with uncomfortable situations . . . (p. 111)

This situation may be likened to coaching someone to play tennis: if he or she

already has a strong forehand, then playing to this strength is unlikely to lead to an improvement in the backhand style. And if, indeed, he or she has never even been shown the backhand, this is a double disadvantage, for there is the chance of excelling at something of which he or she is presently unaware. In short, allowing increased control to learners may conceivably exaggerate, rather than diminish individual differences between them. This in turn may run counter to the democratic notions which inspired the move towards increased learner-control in the first place.

5. The moral preferability of learner-control

Of the several arguments commonly raised in favour of increasing learner-control, most are instrumental or pragmatic; that is, learner-control is believed to be related to certain demonstrable (and presumably valued) outcomes. An example might be that learner-control improves the quantity (or quality) of learning, or that it leads to greater motivation. To the extent that these ideas can be operationalised, such claims can be tested empirically. As has been shown; "when the criterion for evaluating self-directed study is the student's learning of subject matter, the results are indeterminate, producing no very powerful argument for or against self-directed study" (Gruber, 1965, p. 1). When the criterion is the acquisition of attitudinal changes, many experiments in learner-control have shown only modest results, and even then, only over prolonged periods. In either case, if achieving learning outcomes (as conventionally defined) were the primary criterion for the selection of instructional strategies; "there appears to be no strong case for encouraging learner responsibility through an informal mode of instruction within an institution-based program" (Mocker &

Spear, 1982, p. 8).

However, adult educators persist in their advocacy of, and experimentation with, various forms and degrees of learner control. Some of this may be explained by reference to the phenomenon of 'pseudo-autonomy,' or the tendency to appear to comply with what is seen to be the norm for the field. This is discussed in the next chapter. However, in the case of learner-control, the earnestness, persistence, and ingenuity with which adult educators have, since the 1950s at least, applied themselves to these attempts cannot all be explained simply as 'pseudo-autonomy.' Instead, many practitioners must be impelled by some other motivation, such as an ideological conviction, to share control with their learners.

Unfortunately, the term ideology has gathered around itself a cluster of connotations, including the notion of political bias, and of dogmatism. Thus, when a conviction is described as ideological, it is frequently assumed to mean politically motivated, and likely also to mean unreflectively held. In this present case, however, 'ideological' does not imply 'political,' and it most certainly does not imply 'unthinking.' In this dissertation, Ruddock's (1981) definition of ideology has been adopted: "The term ideology is taken to refer to a coherent and articulated view of the world and of the human situation. Typically, it is a total and exclusive system offering a way of perceiving and understanding the world, legitimating certain praxes in accordance with explicit values" (Ruddock, 1981, p. 2). A person's ideology is normative, in the sense that it defines what 'should be,' rather than what 'is.'

In a way, each of the justifications for increasing learner-control which has been discussed here might be described as an ideological justification. It is

an assertion, made by teachers, to explain why they behave as they do. Several of these statements, however, can be tested empirically by relating the claim to certain observable phenomena: thus, increased learner-control either does, or does not, enhance learning outcomes; it either improves meaningfulness or it does not. Such statements are not truly ideological, therefore, although they may rest ultimately on ideological convictions.

There are other claims, however, such as the assertion that learner-control is a morally preferable way of conducting educational relationships with adults, which cannot be tested empirically, and which are therefore treated as ideological. Although a claim might be considered ideological, this does not mean that it cannot be analysed and criticised. Implicit in all ideological claims are certain assumptions, and if the assumptions can be shown to be incorrect, or ill-founded, then the ideological claim can be judged on logical, instead of empirical, grounds. The moral preferability argument seems to rest on one (or a combination) of several major assumptions. These are: that all adults are self-directing; that adults are mature; and that adult educators and adult learners are equals.

a. Adults are self-directing

One form of the moral preferability argument holds that, by definition, adults are 'self-directing,' and accordingly all forms of adult education should allow for optimal learner-control. Mezirow, for instance, in his 'Critical theory of self-directed learning' (1985), opens with the words: "No concept is more central to what adult education is all about than self-directed learning" (p. 17).

Many authors, including Tough in his book *The Adult's Learning Projects* (2nd Ed, 1979), begin from the premise that adult education must adapt itself to

the 'natural' learning preferences and established learning styles of these self-directed adult learners. Such a recommendation seems intuitively appealing, but it rests upon the tenuous assumption that *all* adults are self-directing. Knowles, (1970) for instance, defines adulthood explicitly in terms of self-directedness:

> . . . something dramatic happens to his self-concept when an individual defines himself as an adult . . . His chief sources of self-fulfilment are now his performance as a worker, a spouse, a parent, a citizen. . . . His self-concept becomes that of a self-directing personality . . . In fact, the point at which a person becomes an adult is that point at which he perceives himself to be self-directing. At that point, he also experiences a deep need to be perceived by others as being self-directing. (p. 40)

There is a curious circularity in this definition of adulthood. As Collard (1985) observes, "the first thing one notes is that his argument is tautological: that is, the terms 'adult' and 'self-directing' are used to define each other. An abbreviated form of the above would read "adults are self-directing people therefore self-directing people are adults." Yet is this the case? Would it be possible for someone to perceive themselves as adult, and yet as other than self-directed?" (p. 4). Thus it appears that the concepts of adulthood and self-direction, both of which are central constructs in adult education, are not merely closely related but, at least in the way Knowles uses them, defined in terms of each other.

Embedded within the assumption that adults are self-directed is the view that all adults are necessarily self-directing with respect to their learning. In the literature, there is much to suggest that many adult learners feel far from self-directing. These many differences are dealt with in the next chapter in the section on individual differences in the acceptance of learner-control. Moreover,

even if the incidence of 'self-directed learning' outside formal instructional settings is as widespread as claimed, this does not necessarily mean that people want, or feel able, to exert control over the teaching situation (Tremblay & Danis, 1984; Taylor, 1980). As already discussed, the link between learner-control and autodidaxy is presumed, not proven. Linked to this is the point that, even if learners see themselves as autonomous and would like, ultimately, to take responsibility for directing their own enquiries, they may lack the necessary subject-matter knowledge to make a beginning. Thus, the autonomous person may intentionally make a 'strategic suspension' of his or her independence, in order to be taught. Just as many researchers on self-directed learning point out that adult learners may opt to undertake their learning projects specifically to avoid the constraints and restrictions imposed by formal providers, so those people who deliberately enquire into, seek out, enrol in and pay for planned programs of instruction may have very specific expectations about the type and degree of direction they are likely to receive. To ignore these legitimate expectations, and instead to force learners into a self-directed or learner-controlled mode for which they may feel unprepared seems every bit as unethical as denying freedom when it is demanded.

b. Adults are mature

A second basis of the 'moral preferability' argument is the view that adults are mature, and that any form of instruction other than learner-control represents a denial of the maturity or 'adultness' of the learner. Strike (1982) draws attention to the fact that it is important to distinguish maturity from being a beginner in some subject area:

Although a person can be more immature about some things than about others, immaturity generally characterizes a person's overall capacity for sound judgement. It is not necessary to describe an individual as immature about this or that. One may be simply immature. Being a novice, however, is not a general condition. It is a specific state in relation to a specific kind of knowledge or competence. One cannot be simply a novice. One must be a novice in chemistry or carpentry. To be a novice is to lack skills or undertanding of specific kinds of in specific areas . . .

Clearly, a person can be a novice about something and nevertheless be mature. The soundness of a person's judgement is not impaired by suggesting that he is ignorant of calculus . . . (p. 124)

In practice, therefore, there is no element of moral judgement involved simply because one person knows more than another about some particular subject. Moreover even direct techniques of instruction, such as lectures and demonstrations, do not necessarily imply that the learner is inferior to the teacher, simply that one is more knowledgeable than the other about some body of knowledge. Hence learner-control is not justified on the grounds of the maturity of the learner, but on the basis of his or her ability and willingness to exercise such control.

c. Equality of adult teachers and learners

A third version of the 'moral preferability' argument rests on the presumed equality of adult learners and adult educators. Many authors, especially in adult education, have an almost instinctive reaction against the notion that one adult might have, or be seen to have, power over another, and the inequality which such a situation implies is anathema. According to D. Z. Phillips (1973), such conceptions of equality are usually based on one or other of a number of analogies, and these do not stand up to critical scrutiny.

The first of these is the political analogy which claims that in a democracy there is the principle of "one person, one vote," and that this should likewise apply in education. Phillips (1973) explains the invalidity of this proposition as follows:

> If I am awaiting an operation, I shall express justifiable concern if I see a group which includes experienced surgeons, new doctors and students take a popular vote to determine who shall perform the operation. Similarly, if my car breaks down I should be worried if those who happen to be on the premises at the time hold a popular vote to determine who shall attempt to repair my car. Given that certain people were elected to perform the operation or to repair the car, I should protest on the grounds that they are not *qualified* to do so. If asked to expound what I mean by this, I should refer to the fact that the person elected is not a qualified surgeon or a qualified car mechanic respectively. What we mean by 'qualified' in these contexts will be elucidated in terms of the skills, knowledge, expertise and standards involved in the field of surgery and car mechanics respectively. It is extremely important to notice that the notion of being qualified in these fields can be understood quite independently of the popular vote. It does not derive its meaning from such a vote, but from the content and standards of the disciplines concerned . . . (p.136)

In adult education, the authority of the educator (Weber, 1985) does not (for the most part) derive from a show of hands, but from having subject expertise. Just as people would be dismayed if a surgeon or mechanic denied his or her special expertise in the name of a spurious democracy, so they would be justified in feeling cheated if, having enrolled in a course of instruction, the instructor suddenly denied that he or she had any special knowledge of the subject, and insisted instead that the learners had the ability (and indeed the responsibility) to discover things for themselves, to plan their own program of inquiry, and to identify their own learning goals.

This argument should not be construed as implying that teachers are superior to learners, for two reasons. The first is that even if a learner subjects

himself or herself to the 'discipline' of instruction this does not mean that he or she accepts the right of the adult educator to dictate in other areas of his or her life. The teacher and learner may well be equals in other domains, but a learner can recognize and acknowledge a lack of equality with respect to the subject matter being taught and learned without its detracting from his or her self-concept or autonomy overall.

Secondly, the fact that a learner submits to instruction does not exonerate the instructor from the need to adopt a 'hands-off' policy as far as possible. Nor does it prevent the instructor from deliberately inducting the learner into the inner workings of the subject or skill, or from collaborating in every way possible with the learner's interests and preferences. It means simply that there is "no analogy between the notion of democracy as used in the context of parliamentary representation, and talk of so-called democratisation in academic institutions" (Phillips, 1973, p. 137).

A second source of confusion, claims Phillips, rests on the notion of intellectual equality, and the moral right of people to be treated equally and to be listened to: "I have a right to have my say and my say should count, simply because I am a human being." Phillips states that although this proposition is far from nonsense in many realms of human affairs, it is most emphatically nonsense in the domain of education:

> . . . the advocates of democratization . . . speak as if the mere fact that someone is an individual makes what he says intellectually worthwhile. This is to deny the very meaning of intellectual enquiry. Where matters of the intellect are concerned, it is fatal to confuse the statement 'I can say something' with 'I have something to say.'
>
> Certainly, a teacher must think it worthwhile listening to what his pupils say, but the relationship between the teacher and what is said must be a critical one and it is in terms of intellectual criticism that a distinction appears between what is said and what is worth

saying. Without such a distinction, there can be no academic standards and hence no deep inquiry into any subject. (pp. 139-140)

There are some domains of adult education where the expertise of the adult educator is in his or her knowledge of group processes, for instance, or where the subject is one (such as philosophy, or religion), where each person is entitled to personal beliefs and there is no one 'right' or 'correct' answer. Yet even here it is reasonable to expect the adult educator to know (at least at the outset) more about the subject than the learners, and to accept a leadership role, rather than handing over control to the learners and expecting them to identify learning needs in an area of which, by definition, they are ignorant, or at least less competent than the instructor.

According to D. Z. Phillips (1973), a third mistaken proposition rests on the assertion that, because each adult learner is unique, each has the right to determine what is worth learning, and not to have any curriculum imposed. He describes this as "the confused view put forward by some advocates of democratization, namely, that the student should be the person who determines what subject should be taught or what parts of a subject he wants to study" (p. 141). As Phillips says, to the extent that learning involves developing a critical stance in relation to the subject being studied, then a learner can assert his or her essential intellectual autonomy with respect to the subject either by accepting it or rejecting it, but such a choice must be "determined by critical standards inherent in the subject itself" (p. 141). This is the point which has been made several times already with respect to the development of epistemological autonomy. That is, the learner comes to know enough about the subject to be able to discern a novice from an expert, or a defensible from an

indefensible knowledge claim.

6. The primacy of learning

Another major argument in favour of learner-control rests on the primacy of learning as a concept. Nearly all definitions of teaching embody the word learning, and accordingly, teaching is conceptually contingent (or, in Hirst's evocative phrase 'parasitic') on learning. Some even go so far as to claim that teaching is a deliberate or intentional interference in the ongoing process of learning or, in McClintock's (1982) term, study:

> Did the teacher make the choices that guide the learner? Sometimes, perhaps; but not always, and perhaps not usually: instead there seemed to be an inward, almost inborn power of judgment in every individual—as it directed the person would attend. To those who thus recognized each person's autonomy of judgment, education could only coincidentally be a process of teaching and learning; more essentially, it had to be a zig-zag process of trial and error, of studious, self-directed effort by which an inchoate, infantile power of judgment slowly gave itself form, character, perhaps even a transcendent purpose. This effort was study in its most general sense. (p. 52)

There is no doubt that teaching has, as its prime objective, the facilitation of learning in others. But learning is an elusive concept; "the comprehensive activity in which we come to know ourselves and the world around us" (Oakeshott, 1967, p. 156). As Säljö and others have argued, the word 'learning' is applied to all sorts of accomplishments, from acquiring language to riding a bicycle, and from philosophizing about the nature of the world, to gaining insight into oneself.

Sometimes learning occurs as a result of consciously focussing attention on understanding and being able to explain phenomena, but more frequently from unplanned encounters with the environment or with other people. "No doubt one may properly be said to learn from books, from gazing at the sky or from

listening to the waves . . . but to say that the book, the sky or the sea has taught us anything . . . is to speak in the language of unfortunate metaphor" (Oakeshott, 1967, p. 157).

Just as it is inappropriate to refer to all events, situations and people from which one might learn as a 'teacher,' so it is inappropriate to generalise all forms of learning as 'self-directed.' Even in adulthood, there is still room for the 'student,' the learner whose learning is the counterpoint of the teacher teaching. Although, as Brookfield and others observe, the 1970s and 1980s may well be the era of 'self-directed learning.' McClintock (1982) notes:

> instruction and 'study' at all times coexist; they will always be present in varying proportions in all educational phenomena. Consequently, to characterize a particular time and place as either a world of study [i.e., self-directed learning] or one of instruction, is to make a defensible judgement about the dominant tone in its educational practice, it is not to make an exclusive description that must hold absolutely. . . . (p. 55)

Elsewhere in this dissertation (see chapter four, the section on 'Excessive formalization of the concept of autodidaxy') the point has been made that self-instruction, in whatever form, will never entirely replace 'being taught.' There are certain skills and other bodies of knowledge which are best and most easily mastered under the tutelage of an expert.

D. SUMMARY

It was the purpose of this chapter to review literature on learner-control in adult education and to analyse critically various arguments commonly raised in its favour. It was stated at the beginning that learner-control is not so much a new idea, as the ancient vision of education in a new guise.

Learner-control was contrasted with teacher-direction and it was shown that learner-control is not, as commonly conceived, a single dimension, but is multi-dimensional, comprising varying degrees of control over at least the dimensions of objective setting, content, method, pace, sequence and evaluation of learning outcomes. Having distinguished these components, however, it was alleged that it is impractical to restrict control to one or several of these dimensions, and that, in practice, there is a single continuum of learner-control (made up of the several components interacting).

Six arguments, or classes of arguments, commonly raised in support of learner-control were discussed. They were: (1) increased motivation; (2) greater meaningfulness; (3) enhanced learning outcomes; (4) individual differences among learners; (5) the moral preferability of learner-control; and (6) the primacy of learning as a concept.

Many individual criticisms were raised, but the main ones may be summarised as follows: (1) there is no evidence that increased learner-control leads to increased motivation for all learners in all circumstances, in fact, in examination-oriented or other content-oriented areas, adults frequently prefer direction (Humphrey, 1974); (2) there is no evidence that increased learner-control leads to better subject matter acquisition when learning outcomes are measured quantitatively; (3) it seems to take a long time (several years) for learners to internalize the assumptions underlying learner-control and there is a strong tendency to 'backslide' once encouragement to be self-directed is removed in formal instructional settings; (4) there is no evidence that increased learner-control leads to a more democratic form of education, or that learners inevitably choose what is best for themselves in discipline-based domains; (5) recommendations to

increase learner-control on the basis of equality between teachers and learners are frequently misguided and are commonly based on inappropriate (e.g., political) notions of equality, or confusing inexpertness with immaturity; and (6) although the facilitation of learning is the principal goal of teaching, the term covers many different activities, and there is a form of learning which is the legitimate counterpart of teaching: not all learning is self-directed.

Positive findings included the following: (1) prolonged, consistent exposure to learner-controlled situations seems to lead to collateral gains such as increased curiosity, critical and in-depth thinking, self-management competencies and positive orientation towards independent work; (2) learning outcomes are probably enhanced under situations of learner-control, if learning is assessed qualitatively (i.e., what was learned) rather than quantitatively (i.e., how much was learned); (3) there seems to be evidence to suggest that the 'quality' and retention of understandings is enhanced under circumstances of learner-control because of the need to 'sort out' essential from inessential information.

In brief, many of the arguments raised in favour of learner-control in the adult education literature do not stand up to critical scrutiny, and yet the most compelling arguments in favour of learner-control are rarely raised in the literature. Arguments in favour depend on a significantly different understanding of the nature of knowledge and of the nature of learning, from that which is common in the adult education literature base. An alternate paradigm, constructivism is recommended. It is explicated in chapter nine and its implications for research are dealt with in chapter eleven.

VII. THE TRANSITION FROM TEACHER-DIRECTION TO LEARNER-CONTROL

A. INTRODUCTION

It is relatively easy to advocate a change from one instructional approach to another, but a different matter to see it through in practice. This is particularly so when the change involves, as the transition from teacher-direction to learner-control does, a reshaping of the foundations underpinning the teacher/learner relationship. At the minimum, the change from teacher-direction to learner-control has implications for teachers, students and the organisation; in the wider context, it frequently has an impact on others outside the immediate instructional setting, teachers or trainers, family, friends, colleagues, employers and perhaps even society at-large.

The transition towards increased learner-control, as mentioned in chapter six, is not so much "tinkering with accessories to the instructional machine," as it is "rebuilding the mechanical core" (Ainsworth, 1976, p. 276). For the teacher, trainer, coach or facilitator, it involves a significant shift in the locus of control, and a radical change from "providing instruction to a class, to facilitating learning for individual learners" (Wedemeyer, 1981, p. 78). Even a teacher or trainer intellectually committed to such an approach might find it difficult to adapt emotionally and behaviorally (Wight, 1970, p. 252), because, as Wedemeyer (1981) states:

> The prospect of having to guide and enrich the learning of students who learn at different rates, by different styles, who may be physically distant, and who exercise a degree of autonomy over their learning, can be frightening to teachers trained in traditional classroom norms, techniques and psychology. (p. 79)

For learners, too, the transition can be challenging and unsettling, perhaps even threatening. The learner might be accustomed to lapsing into a passive and uncritical mode; or at least appearing to do so in order to win the approval of the instructor. the student is suddenly called on to accept responsibility for, and give direction to, a transaction which hitherto was the responsibility of the teacher. Gibbons and Phillips (1978) personalize and dramatize the transition, from the point of view of a learner. After years of teacher-direction, the teacher suddenly adopts the role of a facilitator of learning:

> "My responsibility," she says, "is to teach you how to design and manage your own learning, to give you every assistance I can with basic skills, and to help you make contacts with other teachers and members of the community. The responsibility for learning is strictly yours!" Suddenly, after sitting and waiting for the lesson for so long, you are . . . to write up a contract on how much you will accomplish in the rest of the semester, how you plan to go about it, and how you will demonstrate your achievement in the next meeting. Then . . . you are left alone to confront the crises: "Can I do it on my own? Can I take the initiative? Can I overcome obstacles? What about all the risks? Will [people] laugh at me or get angry when I call? What if I don't make it? There's no-one else to blame. (pp. 296-297)

While this scenario is something of a caricature, for most people, the transition to learner-control does not occur *in vacuo*, but against a background of educational experiences and within the context of a complex pattern of mutual expectations. Accordingly it is not merely an administrative change, but a significant attitudinal one as well. Abercrombie and Terry (1978) write:

> Changes in teaching methods cannot . . . be fully effective without changes in attitude. The student's ability to adopt responsibility for his learning, and the teacher's ability to foster this process, require profound changes in their basic assumptions about the relationships between student and teacher. The authority-dependency relationship . . . cannot be changed without affecting, and being affected by, its old and deeply-rooted foundations in the rest of our social system. Confusions of feeling, as well as of thought, are muddled up with the issue to a greater extent than current educational practice seems to

take into account. (p. 82)

It is the purpose of this chapter to examine literature concerning the transition from teacher-direction to learner-control. Because the teaching/learning transaction has two sides to it, the issue will be considered from the perspective of the learner as well as that of the teacher or trainer. In this dissertation, no attempt will be made to examine the perspective of others 'stakeholders' such as other teachers, administrators, colleagues, or the family of the learner, even though such points of view would definitely yield researchable perspectives. Neither is it intended to base this review on the many case studies available in the literature, but rather to focus on difficulties in the transition which might be better understood, or even solved, through the adoption of new research perspectives.

B. TEACHERS AND INCREASED LEARNER-CONTROL

1. Goodbye teacher?

As discussed in chapter six, there are numerous arguments in support of increasing learner-control. However, such a transition is likely to be greeted by educators with mixed enthusiasm for, as Geis (1976) writes:

> Most innovative instructional systems produce major changes in the professor's role. The introduction of student choice, for example, is likely to require the professor to refashion himself as an instructional guide, manager, counsellor, and inventor instead of an academic know-it-all. The magnitude of the changeover should not be underestimated. The content expert who equates teaching students with telling them what he knows is not likely to have the skills of counsellor, guide, and evaluator. Depriving him of his traditional role and simultaneously requiring him to acquire sophisticated new roles will produce trauma. (p. 266)

Although this quote refers to higher education, many of those involved in adult education as instructors confront the same redefinition of roles. In 1968, in the heyday of euphoria over individualised instruction, Keller wrote an article entitled 'Goodbye teacher . . . ' As it turns out, he was merely signalling the passing of the teacher as "classroom entertainer, expositor, critic and debater" (p. 88). However, from time to time, educational innovations such as programmed learning, computer-managed instruction, and teaching machines have been hailed as marking the demise of teaching. Given this background, it is hardly surprising to find that at least some teachers feel threatened by learner-control, and the consequent redefinition of their role as a 'facilitator of learning.' Like learners, "teachers have self-concepts too, and they will tend to reject a role which seems to violate the concept of self-as-teacher built up over many years of preparation, modeling and experience . . . " (Wedemeyer, 1981, p. 78).

Concern over changes in teaching take two forms. On the one hand, many teachers feel that they personally might become redundant and, as Jankovic et al. (1979) point out; "There will be no evolution in the attitude of the teacher unless he is assured that autodidaxy is not seen as a rejection of his contribution, a negation of his specific role of teacher . . . " (p. 31). The other concern is more general, the belief that somehow learner-control will ultimately result in the disappearance of teaching itself. The question of personal threat, and the teacher's ability to deal with it, is dealt with later in this chapter. As to the concern that teaching, as conventionally defined, might be on the way out, it is easy to see how people could form such an impression. For instance, Gibbons and Phillips (1978) have portrayed the sort of roles which a teacher might be expected to fulfil in a learner-contol regime:

Teachers become involved much more often in small-group and one-to-one interaction with students. In these closer encounters, they find themselves more often dealing with process than content. Rather than teaching specific subject matter and skills, they will more commonly find themselves diagnosing students' abilities, advising them on programs for further development, negotiating individual contracts, arranging contacts in the community, and helping students solve personal and motivational problems related to their self-directed studies. When they are teaching in the traditional sense, the content tends to be such process skills as personal planning, organizing necessary resources and managing time. And when teachers go into the community to find experts who will teach and to negotiate new locations where students can study and work, it means they must learn entrepreneurial skills seldom required of educators in teacher-directed programs. (p. 299)

Here the notion of 'facilitator of learning' is given some substance. However, it will be noted that teaching itself has not entirely disappeared because "teachers go into the community to find experts who will teach." Presumably these experts do actually teach, rather than going into the community to find yet others to teach, and thus as Chené points out; "the teacher cannot disappear without reappearing in another form . . . " (1983, p. 43).

This statement embodies a particular view of knowledge, a view that it comprises some corpus of known 'facts' organised according to some inherent and invariant logic of the subject matter, and that the learner needs to be inducted into the knowledge by someone who is already knowledgeable. This can be seen by continuing the quote from Chené; "the teacher cannot disappear without reappearing in another form, since learners have to test their knowledge against somebody else" (Chené, 1983, p. 44). She goes on to elaborate on this view of teaching:

In adult education, we notice a shift of power to the learner and thus a modification of the traditional roles of teacher and learner. Knowles and Tough have demystified the power given to teachers by educational institutions and advocated that any adult could help

another in the learning process. This conceals the fact that the pedagogical relationship is a power relationship because, essentially, somebody is affected by somebody else's resources; someone who does not know learns from someone who (or something which) does. As Kaeppelin (1974) noticed, the image of hierarchical power does not automatically disappear from the learner's mind. It also happens that learners substitute themselves for the teacher or animator in taking over the management of their educational activity without having any autonomy—that is to say, without having any power over the norms they will agree to respect. We are then trapped in a pedagogical illusion. If learners manage their educational activity, they have to know how to do it and again, the question of norms arises. Existentially, the teacher and the learner can share a common object of awareness but pedagogically, their relationship is necessarily asymmetrical and the persuasive power of the teacher (Dandurand, 1971) is an essential element of the development of learning. (p. 44)

It seems then that the role of teaching in some form at least, is still essential

in those areas where an acknowledged body of knowledge or skill is involved.

Since a large proportion of adult educators' work is dealing with such knowledge

or skills, adult educators need not fear complete redundancy on that score. A

second view of why the teacher cannot disappear entirely is offered by Boud

(1981):

> Although independent learning involves a shift in the locus of control, it does not remove the teacher from a position of authority. He or she still remains the representative of the institution and is responsible for providing the best circumstances for the development of autonomy in the students for whom, in this sense, he or she is responsible. The exercise of authority then becomes one of the most sensitive, and possibly contentious, issues (Huntington, 1980). It is not a simple move from an authoritarian position to a *laissez-faire* one. Individual teachers have to come to terms with their new role and explore for themselves the implications for their subject-matter expertise, which still remains, and for their relationships with their students. (p. 28)

Taken together, these two perspectives seem to amount to a view that (a)

learners can only learn from someone or something called a teacher, because

learning "is evaluated according to a standard which, at least at the beginning of the learning process, is outside the self . . . " (Chené, 1983, p. 43); and (b) learners become autonomous only under the tutelage of a supportive teacher.

The first comment concerns (a) above, that is, the view that all knowledge must be taught in some senses by "a teacher, institutionally recognized as such, or a surrogate such as computer or book or any other replacement" (Chené, 1983, p. 43). As will be discussed in the next chapter, such a comment implies that knowledge to be acquired exists outside the knower, yet there are whole domains of knowledge (personal practical knowledge and self-knowledge) which require no teacher. Accordingly Chené's comment applies mainly to those forms of knowledge which are discipline-based. It is true that a teacher or trainer may strive to make himself or herself redundant, by enabling learners to attain autonomy with respect to the subject matter, but it is in the nature of discipline-based knowledge that only a small proportion of the population at any one time will achieve such autonomy with respect to each subject, and accordingly there will always be a demand for the teaching of such knowledge.

The second comment concerns (b) above, namely the idea that learners can only become autonomous if they have a teacher to help them. It is argued in this dissertation that a teacher can never be responsible for the development of autonomy in students, although he or she may create circumstances in which learners may choose to exercise autonomy.

In summary, therefore, it is asserted that learner-control may imply a *change* for the teacher, but not the complete *redundancy* of the teacher (Boud, 1981, p. 28).

2. Towards a new role for the adult educator

What, then, is the role of the adult educator in situations of increasing learner-control? Many theorists and writers have attempted a specification. Tough (1971), for instance, emphasises the transition from the role of 'director' to that of 'resource' or 'helper.' The function of the teacher in this relationship is "providing information, advice (or suggestions and recommendations), and reasons that help the learner make the decision and understand the reasons for it. The helper provides detailed information about the various possibilities that are open, but lets the learner himself make the decisions" (p. 177).

Wedemeyer (1981) writes that, with respect to what he terms 'open learning'; "New faculty roles, in which there is less teaching of the lecturing style and more individual counselling, are implied. Faculty may find themselves nudged towards the Platonic model, with teacher as mentor, guide, developer of learners, and problem solver, rather than information and law-giver" (p. 80). Farnes (1975) adds that, in situations of learner-control, "the responsibility of the tutors would need to be extended; they would help the students define their learning objectives and area of study; encourage students with similar or complementary interests to co-operate in self-help groups; make recommendations about suitable materials that could be obtained locally [or] nationally . . . " (p. 5); and Wight (1970) likens the role of the educator in this new paradigm to that of a coach:

> In the beginning, he provides the rules and structure, he helps each person develop the skills and understanding to play the game or to perform effectively, and he works with each individual to help him continuously improve his performance . . . . But it is the player, not the coach, who plays the game, and in Participative Education, the game is learning. (p. 250)

Collectively, these descriptions closely resemble the prototypic 'helper' in the situation of guided or assisted autodidaxy discussed in chapter four. However, it is argued here that, until the learner senses that total control of the situation has passed from the teacher and, moreover, feels competent to exercise the control, the situation is still one of independent study, rather than autodidaxy, with 'ownership' still vested in the teacher. The question of ownership will be discussed in chapter eleven.

3. Difficulties in the transition

Because these roles differ so sharply from those to which many adult educators are accustomed, it is hardly surprising to find that attempts to increase learner-control often encounter difficulties. Harrison, for instance, comments that teachers or trainers often prove more intractable than learners, and that; "our experience is that participants are far more ready for responsibility than educators are to give it to them" (Harrison, 1978, p. 166). He goes on to observe:

> Self-directed learning requires a fundamental shift in the locus of control in the classroom, and this shift is difficult for many educators to make. Once participants have gone beyond the diagnostic phase and the self-directed activity is well launched, there is often little for the educator to do. The needs of most educators for authority, visibility, and a sense of personal significance are not very well met by the self-directed format. (p. 166)

In Britain, in the mid 1970s, the Nuffield Foundation sponsored an extensive research project concerning independence in learning within higher education, and the report of this research group includes the following warning:

> All new schemes run the risk of being regarded with a mixture of suspicion and anxiety by some . . . teachers not immediately involved.

> There may be ignorance on the part of others about what is happening; uneasiness that they should be doing something similar; concern that their students who are also involved in the new course may develop a more critical attitude; or suspicion that in some way academic standards may be threatened. This last anxiety is particularly strong where students are involved in decisions about the curriculum and assessment procedures . . . (Nuffield Group, 1975, n.p.)

Difficulties are also experienced by individuals who "even if they can accept the approach and their new role intellectually," often find it hard "to adapt emotionally and behaviorally." Frequently, they have no stable role-model, nor any clear concept of what their alternative job description might look like; "Over a period of many years as students and instructors in the traditional educational system, they have developed a pattern of conditioned responses to the stimuli of the classroom. This pattern is very difficult to change, particularly when many of the students will resist the change and try to force the instructor back into the familiar, traditional role" (Wight, 1970, p. 252).

In addition to this problem of student expectations, there are many other potential stumbling blocks to increasing learner-control. Literature reveals that educators commonly report;

■ a sense of inadequacy and lack of preparation to act as a mentor, guide, counsellor and problem solver, rather than "information and law-giver" (Wedemeyer, 1975, p. 60);

■ a feeling of frustration and helplessness in watching students struggle with problems which the trainer knows could easily be solved or avoided (Gibbons & Phillips, 1978, p. 299);

■ inadequacy and unpreparedness to deal with the increasingly divergent demands made by adult learners as they pursue individual learning

programs;

- being daunted by the task of preparing independent study materials and programs of learning (Ainsworth, 1976, p. 282); "the amount of detailed design and preparation of learning materials required for self-directed learning goes far beyond that involved in putting together a syllabus and organizing some lecture notes. Many educators do not possess the design expertise required" (Harrison, 1978, p. 166).

- increased rather than lessened demands on their time. "Contrary to popular belief, a self-instructional course is not self-running, and it is completely false to suggest that it saves the instructor's time. There is nothing more effective in the use of the instructor's time than classroom-based instruction, where everything—information-dissemination, test-taking, failure-diagnosis—is done according to a schedule, in a group mode, with one explanation serving a large number of students, and where individual assistance is reserved for exceptional cases. Certainly, self-instruction relieves the instructor of the burden of disseminating information, but this is more than offset by the demands of increased individual counseling, and the increased testing, scoring, and diagnosis which commonly accompanies self-instruction" (Ainsworth, 1976, p. 279);

- removal of the usual on-the-job reward system of taking credit for student learning (Gibbons & Phillips, 1978, p. 299);

- a deep-rooted feeling of inadequacy and lack of autonomy, and a consequent unwillingness or inability to develop this capacity in others (Della-Dora & Blanchard, 1979, p. 9);

- Lingering doubts about the efficacy of such an approach compared with

more traditional methods. As Boud and Prosser comment; "a tutor in a course based on these principles must believe that students will be able to define their own goals, design their own programme, and assess their own achievement. And this he must believe without reservation for, if not, the limiting dependency relationship of students on staff will inhibit the growth of these attributes" (1980, p. 27);

- a concern about being idle or 'unprofessional' (Harrison, 1978, p. 166). In one experimental program in England, the senior tutor was explicit; "Every so often I get in a real neurotic state because I keep thinking this is just too loose for words. I feel as though I'm shirking my responsibility as a teacher, I should add more to these blank programme sheets, put a lot of things in those empty boxes" (Abercrombie & Terry, 1978, p. 92);

- a fear of becoming redundant, of being successful within the terms of a learner-controlled curriculum. As one faculty member expressed it; " . . . Is participant tutorage going to reach the goal I want at the end - that I shall not be of use any more, that I've passed on all my experience, my experience has developed the students so they can operate by themselves to be self-learning people?" (Abercrombie & Terry, 1978, p. 92);

- viewing learner-control as "yet another well-intentioned but impractical fad [which] will go away if ignored" (Ainsworth, 1976, p. 276). And, perhaps most telling of all;

- the fear of being pushed into the background; that the trainer's traditional authority and status will be undermined as the learners become more self-directing and more independent (Jankovic, 1979, p. 31).

Overall, because of the magnitude of the change involved, it is difficult to

overstate the strength of feelings which such an approach can engender in teachers and trainers familiar with a more traditional model. Wight (1970) deals at length with these difficulties, citing one traditional educator who described giving to learners responsibility for their own learning as: "just damned rhetoric that can lead to nothing but mischief." He continued on to say that "one does not put lunatics in charge of the asylum" and called this "the fool for a master school of education. Everyman his own professor. As a teacher, I cannot communicate to you the seriousness of a situation wherein students—however intelligent, sincere, and goodhearted—are encouraged to learn on their own hook. They simply do not have the discrimination to make their way through the maze of erroneous books, for one thing" (Wight, 1970, p. 274). Wight (1970) comments on these reactions by observing that:

> any change or attempted change in educational methodology in our schools and colleges will have to take into consideration the attitudes and assumptions of the teachers and instructors. We can expect that it will be quite difficult to establish meaningful dialogue with some. Their reactions to a suggested change as drastic as Participative Education will quite likely be more emotional than rational . . . (p. 275)

Whenever people react emotionally to an issue, either for or against, it almost certainly indicates that deeply-held beliefs are involved. Accordingly, the next issue to be considered is that of teachers' beliefs.

4. Teacher beliefs and the promotion of learner-control

There seems little doubt that encouraging learner-control represents a dramatically different educational mode from the familiar teacher-directed model, and perhaps not all trainers or instructors would be able to make the transition. Clearly, "teachers . . . tend to specialize in the mode in which they are most

skilled and with which they feel most comfortable. Each mode does seem to require basically different orientations to curriculum and instructional processes" (Blaney, 1974, p. 23). In view of the obvious importance of attitudes and values in the implementation of learner-control, it is worth enquiring as to what exactly is required of trainers and instructors in order successfully to make the transition. In his essay on 'Fostering self-direction,' Combs (1972) identifies four variables:

1. *We need to believe this is important.* It seems self-evident that independence and self-direction are necessary for our kind of world . . . Unfortunately, because a matter is self-evident is no guarantee that people will really put it into practice . . . To be effective as an objective, each of us must hold the goal of self-direction clear in our thinking and high in our values whenever we are engaged in planning or teaching of any kind . . . To begin doing something about self-direction we must, therefore, begin by declaring its importance; not as a lofty sentiment, but as an absolute essential. It must be given a place of greater concern than subject matter itself, for a very simple reason: It is far more important than subject matter . . .

2. *Trust in the Human Organism.* Responsibility and self-direction are learned. They must be acquired from experiences, from being given opportunities to be self-directing and responsible. You cannot learn to be self-directing if no-one permits you to try. Human capacities are strengthened by use, but atrophy with disuse . . . If we are to produce independent, self-starting people, we must do a great deal more to produce the kinds of experiences which will lead to these ends.

3. *The Experimental Attitude* If we are going to provide . . . people with increased opportunity for self-direction, we must do it with our eyes open *expecting* them to make mistakes. This is not easy, for the importance of "being right" is in our blood. Education is built on right answers. Wrong ones are regarded as failures . . . To be so afraid of mistakes that we kill the desire to try is a tragedy. Autonomy, independence and creativity are the products of being eager to look and willing to try . . . In the world we live in, victory is reserved only for the courageous and inventive . . .

4. *The Provision of Opportunity.* . . . If we are to achieve the objective of greater self-direction, I see no alternative to the fuller acceptance of students into partnership in the educative endeavor. Our modern goal for education, "the optimal development of the individual" cannot be achieved without this

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> . . . Few of us are deeply committed to tasks imposed on us;
> and students are not much different. Self-direction is learned
> from experience. What better, more meaningful experience could
> be provided than participation in the decisions about one's own
> life and learning? (pp. 59-63)

To these four, it is necessary to add a fifth. In order for someone to advocate and actively to encourage an enquiry approach in others, many authors stress that; "teachers . . . and other educators must be moving toward becoming self-directed learners themselves if they hope to succeed in helping students move in this direction" (Della-Dora & Blanchard, 1979, p. 9).

As early as 1960, Chamberlain in his research pointed out that twelve adult education professors at twelve American universitites rated highest, of objectives for graduate adult education *teachers*, the ability to 'carry on self-directed study,' and Strong (1977) cites this in support of her contention "that the ability to learn autonomously oneself relates to being able to guide autonomous learning" (p. 15). Boud and Prosser point out that, of the many skills, characteristics, attributes and areas of expertise needed by the adult educator; "his most potent influence is through his role as exemplar: his conduct should, as far as possible, model the behaviour of a self-directing person and demonstrate his commitment to the peer learning community" (Boud & Prosser, 1980, p. 32).

The point is perhaps made most eloquently by Torbert; when teachers stop doing things 'to' students, or even 'for' students, and instead to do things 'with' them, they are involved; " . . . in creating a special kind of social arena—a kind of social theater in which everyone is both participant and observer[22]—and this arena, in turn, requires of the leadership the most

profoundly spontaneous inquiring behavior. Only authentically inquiring behavior succeeds in 'converting' others to the practice of inquiry" (Torbert, 1978, p. 122).

a. Origins of teachers' beliefs

What, then, is the origin of the attitudes and personal predispositions which lead to the implementation, by educators, of programs stressing learner-control? Some have suggested that such 'self-directing behaviour' is the result of various personality attributes. In particular, Huggins' research (1975) showed evidence to support the contention that higher self-concept is related to the promotion of autonomy in learners, but also expressed caution concerning the complexity of the variables involved. M. L. H. Smith (1968), examined the relationships among self actualization, dogmatism, and the teachers' self-reported facilitation of student self-directed learning. The results confirmed her hypothesis that more open-minded and more highly self-actualized teachers did report behaviors likely to facilitate the development of self-direction in learners, and accordingly she recommended "a need for greater emphasis on self-actualization and open-mindedness in preservice and inservice teacher education programs" (M. L. H. Smith, 1968, p. ii).

Another suggestion is that the form of teacher-education, or previous learning experiences to which the educator had been subjected, might explain their predilection for learner-control. This notion was the focus of A. A. Johnson's (1973) study; the findings however, were that there was no clear relatonship between teachers' experience of an individualised mode of teacher education, and their self-reported propensity to facilitate learner-control in others. A supplementary finding was that predisposition towards learner control as a goal

was not linked significantly to success in that mode of instruction.

Although simple explanations for the origins of teachers' beliefs have failed, nonetheless it seems true that some teachers favour the notion of learner-control. Such a preference has been called a pedagogical orientation and, over the years, there have been numerous attempts to develop reliable and valid measures of teachers' pedagogical preferences[23]. Researchers, however, have been relatively slow to develop instruments relevant to the adult education context.

In 1969, Landvogt put forward "a framework for exploring the adult educator's commitment toward the construct of 'guided learning.' Six years later, in 1975, Hadley offered an instrument designed "to determine adult educators' orientation: Andragogical or pedagogical," and three years later again, Conti (1978b) tested his *Principles of Adult Learning Scale*, which is not, however, designed to measure espoused philosophies so much as "teacher behavior related to the collaborative teaching-learning mode." Most recently, Zinn (1983) developed and is reportedly field-testing another instrument—the *Philosophy of Adult Education Inventory*—intended to evaluate "an individual's personal philosophy of adult education with respect to five prevailing adult education philosophies: Liberal, Behaviorist; Progressive; Humanist and Radical" (Zinn, 1983, abstract).

There has been remarkably little research to establish the reliability or the validity (either internal or external[24]) of these various instruments, nor the links between espoused philosophies and professional practice. Holmes (1980) found that "a significant relationship existed between interpersonal behavior and the orientations of adult educators categorized as andragogical, [but] the relationship between interpersonal behaviors and the orientation of adult educators categorsied as pedagogical was not significant" (p. 18). Behaviour was not assessed directly,

however, but by means of the FIRO-B Scale, a self-report instrument of known psychometric properties.

b. Teacher beliefs and teaching practice

Much of this line of research, which seeks to examine the relationship between teachers' belief systems and their instructional behaviour, is based on the premise that personal action is linked to personal theory through a simple causal connection; that practitioners have a rationally developed, internally consistent perspective or world view, and this invariably and inevitably manifests itself in consistent professional practices.

In recent years, there has been some attempt to examine whether teachers' beliefs are indeed congruent with their practice (e.g., Borko, 1978; Cone, 1978; Russo, 1978). The results have been mixed, and several scholars have attributed the failure to find clear linkages to the fact that action itself embodies thinking, and thinking cannot be separated from action. This view is fundamental to the process of action research (Kemmis, 1982) which, in recent years, has given rise to a new generation of studies on teacher thinking (Elbaz, 1983; Elliot, 1976/77; Halkes & Olson, 1984; Oberg, 1983; Sanders & McCutcheon, 1984).

In a way, there is an analogy between the general orientation or predisposition of the trainer, and his or her response in a particular situation, and the general orientation or predisposition of a learner (for instance, with respect to autonomy in learning) and his or her actions in a particular situation. One could argue that the analogue of the learner's general-versus-situational autonomy in learning is the teacher's general-versus-situational response to

learner-control. And in the same way that learners have superordinate or overarching beliefs which give consistency to their actions, so teachers are guided by their higher-order or more overarching constructs too.

The factor which, above all else, gives coherence to how teachers behave is the desire "to be good teachers—to act effectively, to accomplish our purposes. We seek to be competent, not to fail, so our theories also account for what it takes to be effective" (Sanders & McCutcheon, 1984, p. 6). Effectiveness in teaching, however, is not inherent in the teaching act itself, rather it is a property attributed to the teaching by a judge, using standards or criteria. And the most important judging, at least that which potentially leads to observable change, is that carried out by teachers themselves. Hence, as Sanders and McCutcheon (1984) note, the criteria that teachers employ are of special interest:

> For example, a teacher might value teaching that enhances students' taking responsibility for their own learning, for growing in their ability to be in charge of what they do in order to learn . . . This teacher would use that value-rooted expectation in judging his/her own teaching as well as that of another. (p. 7)

One of the greatest difficulties for teachers in assessing the effectiveness of their instructional behaviour is that learners (especially adults) are volitional beings. Thus the consequences of teachers' actions depend on how learners perceive and construe them; "While a teacher may be acting in ways intended to encourage a student to enjoy and be successful in a lesson, some students may perceive that action as punitive or oppressive. Others may find it boring. In such cases, the consequences will very likely differ from those intended by the teacher" (Sanders & McCutcheon, 1984, p. 3).

This point is often overlooked by writers on learner-control, who seem

tacitly to assume that 'learner-control' is a commodity which can be given to learners, whereas it is a psychological entity which lies almost entirely outside the competence of the teacher or trainer. The notion of learner-control as a subjective reality is discussed further in chapter eleven.

This gives rise to a final point. Because adult educators have different criteria for success and for judging their effectiveness, they will advocate and use learner-control methodologies for a variety of reasons. Boot and Reynolds (1983) state that:

> . . . the same techniques may be advocated by different practitioners for quite different reasons. Broadly speaking, advocacy seems to be based on one of three rationales, which we might describe as instrumental, theoretical and ideological. The first represents a search for methods which are stimulating and motivating because they make for more interested and enthusiastic learners. The second is a concern for practice which reflects the theory of learning that sees experience as the raw material from which knowledge is constructed. The third is a belief that educational practice must be founded on the same principles of democracy and freedom desired in society as a whole.

> Obviously this is an oversimplification, but the point we would like to make is that because their guiding rationales may be different, teachers are likely to find themselves adopting quite different strategies for resolving the issues that arise in practice. (p. 13)

It has been noted elsewhere in this dissertation that learner-control (and autonomous learning generally) is favoured by educators whose philosophical and ideological perspectives differ sharply from one another. Very often the differences are not immediately apparent, and researchers are obliged to probe beyond the superficial justifications offered by educators, in order to understand fully the dynamics of any particular situation.

5. Capitulating to pressure: Pseudo-autonomy

In chapters two and six, learner-control was described as a multifaceted or multi-dimensional entity. However, it was pointed out that these dimensions are intertwined and that it is not possible to give learners control over one or two, while retaining other prerogatives for the educator. Despite the interdependence of these dimensions, there are many situations in which adult educators contrive to limit learner-control to certain particularities of the situation. This is because they frequently find themselves trapped in a conflict of values when it comes to increasing learner-control (Geis, 1976, p. 263).

On the one hand, there is the strong pressure for them to professionalise; to gain qualifications in order to teach; to join professional associations; to be expert at program planning, discussion leading, demonstrating, evaluating; and generally to be accountable for the effectiveness of their instruction. In many cases, the tradition of the 'gifted amateur' and the volunteer lecturer, which so animated and characterised the work of early adult education enterprises such as the W.E.A., Mechanics' Institutes, Chautauqua, and Frontier College, has given way to an overcredentialed replication of the formal education system.

On the other hand, adult educators are called on to hand over more and more control to learners, yet little in their training or in their experience as learners prepares them adequately for such a role. For many, 'facilitation' is a vague and barely understood concept, regarded with a mixture of suspicion and anxiety. Besides, it is difficult for an instructor to feel committed to a situation in which the prerogatives for objective setting; selecting content, pacing and sequence; and carrying out evaluation have all been ceded to learners. One corollary of this dilemma is the phenomenon of practitioners who find themselves

'going through the motions' of devolving responsibility onto learners, yet without commitment or conviction.

To describe this phenomenon of compliance, the term 'pseudo-autonomy' has been coined, based on Kremer's (1978) formulation of 'pseudo-progressivism.' In her study of classroom teachers and the relationship between their espoused beliefs and actual teaching practices, she found two things: "First teachers profess favorable attitudes towards progressive educational goals, but have a relatively low perception of the knowledge conducive to goal attainment and low expectations of achieving them. Second, the consistency between attitudes and classroom behavior is indeed contingent on the congruence between attitudes and personality traits" (p. 996).

Apart from what has already been discussed, the question of the ideological and personality basis of learner-control lies outside the scope of this dissertation. However the possibility of a difference between the public, espoused beliefs and the inner personal convictions of instructors is acknowledged in the following quote from Skruber (1982):

> In my experience as both an adult learner and teacher of adults, I have realized some significant incongruities in my espoused theory and theory-in-use (Argyris & Schön, 1974) concerning the idea of andragogy and self-directed learning. As an adult learner, . . . I criticized others who engaged in primarily pedagogic approaches to learning. I was particularly critical of those adult educators who themselves espoused theories compatible with self-directed learning, but whose theories-in-use were substantially teacher-directed activities.
>
> [However] in the course of being a teacher of adults, I rationalized my own failure to incorportae self-directed learning concepts with a variety of excuses: students didn't want to be self-directed, but would rather depend on me as the teacher; the institution did not sanction or encourage non-traditional learning practices such as self-directed learning; course content did not lend itself to such non-traditional practicers; and the most deceptive of all, I was practicing good adult education practices when in fact I was only at best practicing benevolent pedagogy. (pp. 6-7)

An interesting example of this sort of 'pseudo-autonomy' or 'benevolent pedagogy' is apparent in an interview between Pearse, a prison educator, and Boucouvalas, reported in the *Journal of Correctional Education* under the title, 'Self-directed learning in an other-directed environment' (1982). Pearse (Boucouvalas & Pearse, 1982) begins by describing his progressive disillusionment with the traditional, teacher-directed mode of instruction, and he then goes on:

> "After I had engaged in this type of pure teacher-directed instruction for about eight years, I began to realize that the learner was doing twenty percent of the work, and I was doing eighty percent. Of course, I used to walk around the school area and tell everyone what fantastic classes I was having. I had complete control over my classroom—no discipline problems, no rowdiness—and people were even learning! Of course, it was based on what I expected. Despite individualization, the learning was still under my control and direction. It wasn't the learner's plan - it was mine with which the 'successful' ones were complying . . .
>
> "Then it slowly became clear that this approach which we're calling 'self-directed' was the best thing that could happen to a maximum security institution since it tended to foster a different kind of control - an internal kind on the part of the inmate . . . adult learner. No longer is the learner just a passive participant. He becomes involved in the prescription process [note medical metaphor] where he agrees to assume individual responsibility for his own informal learning contract . . . " (pp. 31-32)

However, Pearse's (1982) reluctance to 'let go' of certain prerogatives is disclosed when he goes on to elaborate the advantages of increased learner-control;

> "The major reason the self-directed approach is much more successful than the teacher-directed approach is that the self-directed method focuses on the needs and responsibilities of the learner. Once the prescription (which is usually competency based) is written (remember, it's done together), the learner assumes total responsibility for the completion of the learning contract. The responsibility [of] the facilitator at this point is to provide resources of information and guidance and direction only when necessary.
>
> "In retrospect, the self-directed approach provides consistent motivation and performance on the part of the learner *and a precise monitoring system for the facilitator.*" (pp. 31-32, emphasis added)

Clearly, this view of the teacher, who needs a "precise monitoring system" is worlds apart from the conception of the facilitator of learning who believes implicitly and without reservation; "that students will be able to define their own goals, design their own programme, and assess their own achievement" (Boud & Prosser, 1980, p. 27). Hamm, in his 'Critique of self-education' (1982), is even more forthright about such benevolent pedagogy parading as learner-control:

> . . . is there not a deception in the suggestion that teachers "set expectations," "help students to explore alternative activities," "provide a general program structure,""setting realistic goals and deadlines" (Gibbons & Phillips, 1978, p. 298) and so on, while letting students think they are making the important decisions? Is this more than merely an aura of freedom? If one is not by those techniques attempting to convey the sense of freedom without actually granting the freedom, there is little difference between it and conventional teaching. (p. 102)

Over what, then, must learners have control if the situation is to be described as autonomous? Geis cites Holland (1969) when he points out "that providing choice for certain dimensions of learning (e.g. mode, pacing) is something of a sham if the *objectives* are not manipulable by the students" (Geis, 1976, p. 262), and Heron (1981) claims that control over evaluation of learning is the key issue:

> Assessment is the most political of all the educational processes: it is the area where issues of power are most at stake. If there is no staff-student collaboration on assessment, then staff exert a stranglehold that inhibits the development of collaborations with respect to all other processes. (p. 63)

If Heron is right about this, it casts doubt on the degree of control exercised by learners in the program described by Felder (1964), who argues that, "it might be hoped that others could be brought into the final evaluation of a student's

independent study. If increased freedom is to be matched by increased responsibility, a partial motivation for carrying out this responsibility could well come from the knowledge that independent study will be critically evaluated by someone other than the faculty member directly involved with the student" (p. 338)!

Clearly, this is not consistent with the spirit of devolving responsibility to learners as discussed earlier, and this raises the following questions: How is it possible to practise this sort of deception? Are adult educators knowingly involved in such duplicity? Surely a teacher or trainer is either *for* or *against* learner-control, and if in favour, then wholly so?

The first response is that, as Landvogt (1970) points out in her study of 'Adult educators' commitment toward the construct of guided learning'; "It was apparent that commitment to various ideas which are part of guided learning probably was not an 'either/or' proposition, but a matter of degree. An adult educator may be more or less committed to guided learning than he is to other teaching styles . . . " (Landvogt, 1970, p. 6). As previously mentioned, such a view is not tenable if learner control is taken to its logical conclusion.

Secondly, it is not that adult educators are guilty of deliberately misleading learners as to their intentions, but rather that they are often unaware themselves of the disjunctions between their espoused theory and their theory-in-use (Argyris & Schön, 1974). Thus, they might support the notion of learner-control at an intellectual level, yet be unaware of the long-term ramifications for students, or indeed for themselves, in advocating such a view. Related to this is the fact that educators frequently fail to recognise the holistic nature of the teaching/learning situation, and believe that it is possible to

compartmentalise the program, handing over control of some aspects to the learners, while at the same time retaining certain prerogatives for themselves.

If the ultimate intention of increasing learner-control is to have learners accept increased responsibility for valued instructional functions, it may seem strange to consider the perspective of the educator at all. However, it is argued in this dissertation that one of the distinguishing characteristics of the learner-control continuum is that at every point, from the extreme case of total teacher-direction to the opposite extreme of learner-control, both parties to the instructional transaction have a perspective which guides their response to the situation. Moreover, in the case of learner-control, even if the trainer or instructor is attempting to relinquish control over all aspects of the instructional situation (or perhaps *especially* if the instructor is intent on devolving all control), it is important to understand his or her reasons for doing so, and to explore his or her concept of what the educative role is supposed to be. As will be discussed in chapter eleven, many difficulties in the instructional situation arise from a mismatch in the perceptions or intentions of the parties involved.

Furthermore, it is argued in this dissertation that abstract orientations and espoused theories are of limited value when it comes to understanding and explaining a teacher's (or a learner's) behaviour in any particular situation.

C. LEARNERS AND INCREASED LEARNER-CONTROL

If autodidaxy were as widespread as many claim, and if it were synonymous with a high degree of learner-control (independent study) then it would seem that transition, at least from the learner's point of view, would be a relatively straightforward matter. Educators, accustomed as they are to certain

power relationships and burdened with particular concepts of their professional roles, might experience difficulties as discussed in this chapter, but learners should be capable of making the switch without difficulty.

However, for the past 40 years or more, the literature on learner-control has been pre-occupied with how learners can be helped to make the transition from teacher-direction to independence in study. It will be argued that this concern tacitly acknowledges that there is a significant difference between learner-control and autodidaxy, and moreover that much of the research and writing on the subject rests on an implicit view of the learner as a passive recipient, rather than as an active subject, in the teaching/learning transaction.

1. Individual differences in the acceptance of learner-control

Although individual differences are frequently invoked as a justification for increasing learner-control, there is a prevailing assumption that "all [learners] should want or, under certain specifiable conditions, would want more autonomy" (Dearden, 1972, p. 449). In other words, many authors do not allow for the existence of individual differences with respect to people's ability or willingness to be 'self-directing.' This is particularly so in adult education, because of the circular way in which adulthood and autonomy are defined in terms of each other.

However, in the past 30 years or more, there has been a steady accumulation of research findings which demonstrate that not all learners are comfortable with, or feel they can benefit from, increased learner-control in the instructional setting. There is evidence of 'cue seeking' behaviour (Entwistle et al., 1979) and of 'syllabus bound' students (Parlett, 1970); of external locus of

control (Rotter, 1966; Lefcourt, 1976); of low self-efficacy (Bandura, 1981); of field dependence (Theil, 1984a, 1984b; Theil & Tzuk, 1985; Witkin et al., 1977); of fragile or imperfectly developed self-concept (Powell, 1976); of learned helplessness (Even, 1984, 1985; Perry & Dickens, 1984; Roth, 1980; Seligman, 1975); and generally of docile, passive and acquiescent learners who prefer, or could be held to prefer, other-direction to self-direction. Indeed, Carl Rogers, the doyen of student centredness, has observed that only a third or a quarter of learners are self-directing individuals, the majority being people who "do just what they are supposed to do" (Rogers, 1969, cited by Moore, 1972, p 85).

It is the purpose of this section to examine some of the research which deals with individual differences in acceptance of learner-control, and to explore the extent to which it is desirable (or for that matter possible) to persevere with learners beyond their initial reluctance or even hostility, to some point of acceptance of, and agreement with, learner-control.

Often, when educators have experimented with learner-control, they have encountered negative reactions (especially at first), and observed an apparent unwillingness on the part of learners to accept the increased responsibility. Dunbar and Dutton (1972), for instance, note that:

> From the instructor's point of view, the purpose and design of the course were clear enough and reflected their beliefs as to what was necessary for student learning to occur . . . However, many students felt lost and confused with this unfamiliar structural design. Some responded with curiosity, exploring what could be done in the new situation. But others became passive, sullen, or even violently angry because they could not understand what was expected of them. (pp. 27-28)

Gruber and Weitman (1962), summarizing a series of research studies carried out more than 25 years ago, write:

A generally negative reaction to participation in the self-directed study experiments was expressed in the students' evaluations of the courses. In almost every case, students prefer the conventional method. Morale problems associated with similar experiments have been reported by Eglash (1954), Neel (1959), and Beach (1961). (Gruber & Weitman, 1962, p. 23 - 5)

Further evidence of learners' expectations was found in an experimental course for the training of adult educators at the University of Cape Town. There, Millar and his associates (1986) noted a degree of impatience amongst learners asked to accept an increased share of responsibility. They note the presence of:

a basic feeling underlying the questions and the silences, [which] rested on a wish "to get down to work" or "to get started," "to be practical" or "to be plain and straightforward". Implicit in these feelings and their expression was the assumption that the role dislocation was an interference with real purposes, an unnecessary preparation developed out of some remote theoretical interest pursued by staff and some students, and that it had nothing to do with the real tasks of teaching and learning. The concept of "real tasks" implied here conformed closely, of course, to the patterns of traditional teaching and learning. (p. 434)

More often than not, criticisms voiced by learners suddenly expected to take control in the instructional setting are aimed at the teacher or instructor, who is suspected of 'playing games' and accused of not fulfilling his or her normal role. Wight (1970) states that students who have been in school "long enough to know how school is supposed to be taught" (p. 271) will often accuse an instructor of "not knowing his subject matter or how to teach" (p. 271) if he or she moves in the direction of increased learner-control, and Dunbar and Dutton (1972) note that "when the professor enters the classroom, students are alert to, and looking for, clues as to which of the expected legitimate demands

will be imposed" (p. 28).

Overall, research has repeatedly shown that; "there seems to be a uniformly negative reaction to methods of instruction giving the student greater independence than he is accustomed to" (Gruber & Weitman, 1962, p. 23-5). Why is there such a negative attitude towards learner-control? There seem to be at least three plausible explanations, which might be summarised as: a preference for directed instruction; learned helplessness; and deliberately adapting to the instructional situation.

2. A preference for dependent learning

Some people would read Dunbar and Dutton's claim that students "could not understand what was expected of them," or the reference by Millar et al. to "role dislocation" from "the patterns of traditional teaching and learning," and infer from this, as Gruber and Weitman seem to, that "students prefer the conventional method."

Despite the assertion by Tough and others that 'self-directed learning' is widespread in the adult population, there is no evidence that a preference for independent learning is universal among adults. If, for instance, one takes the construct of field dependence/field independence as a metaphor for independence in learning (Tzuk, 1985), it is apparent that not all adults are (or for that matter would wish to be[25]) regarded as 'field independent.' The kinds of characteristics, preferences and orientations distributed across the population include the predisposition to conduct one's own education, and the common assertion that "adults are self-directing" seems to be normative rather than empirical, and to embody the confusion already referred to between self-construction as a

philosophical construct, and self-direction as a psychological one. The question of individual differences was discussed earlier in this chapter, but there would seem to be legitimate and enduring differences among people with respect to their capacity to control aspects of the learning situation.

3. Learned helplessness and jarring loose the 'passive set'

A second way of looking at the same evidence is to assume that the learners' apparent preference for the traditional patterns is itself learned. Learners have expectations both of teachers and of what constitutes legitimate teaching, in just the same way that teachers have expectations of learners (Hounsell, 1984). McKean (1977) argued that adult learners have "culturally influenced ideas" about "the kinds of activities that provide meaningful learning," and that accordingly "sometimes adult learners react negatively to attempts to involve them in self-directed learning" (McKean, 1977, p. ii).

Sometimes, these "culturally influenced ideas" extend to the learners' views of themselves. Thus, it is argued, prolonged exposure to particular relationships in education has created in learners the belief that they are incapable of independent initiative, and the only way that they can 'learn' something is to be 'taught.' It is commonly assumed that those who want more direction are simply the victims of an educational system which has systematically deprived them of the opportunity to be 'self-directing.' Moore (1973), for instance, writes; " . . . it seems likely that a particular kind of person is prone to surrender his learning autonomy, and to become dependent" (p. 31). This choice of words is revealing, because it implies that autonomy is the natural state of affairs, which one might choose to 'surrender,' rather than an outcome towards which education might be

structured. Ricard (1982), too, assumes autonomy to be the normal situation; he enlists the notion of adult autodidaxy to buttress his assertion that adult learners should, as a matter of course, share control within formal educational settings (p. 4).

In view of the predominant methods of instruction commonly encountered in formal institutions, it is not surprising that, after a few years, people might come to regard themselves as 'helpless,' at least with respect to learning. Wight (1970), for instance, comments:

> Most students have had very little practice in school with the use of inductive, discovery, and critical-thinking modes of learning . . . They are much more familiar and comfortable with the traditional modes—memorizing from lectures and reading assignments, completing exercises and taking tests assigned by the instructor. They need to relearn how to learn . . . (p. 252)

Students even make this observation themselves. For instance, in an early study, now over 30 years old, one student, quoted by Eglash, said: "This method won't work unless we are brought up in this system and are used to it, and unless everyone co-operates. It allows too much independent thinking" (1954, p. 261). Gruber (1965) makes a similar point about the origin and reinforcement of dependent styles of learning:

> . . . having had years of training in certain teacher-directed patterns of education, the student is perfectly capable of privately preserving these patterns, at least in large part, unless far more drastic changes in his situation are introduced or, alternatively, unless training methods are developed to deliberately break up these patterns. Given a textbook, a course outline, and an impending final examination, there is nothing to prevent the student from recreating and maintaining the passive, cramped, teacher-directed study pattern to which he has long been accustomed. Indeed . . . if the American college student has learned little else, he has learned the strategy of passive acquiescence in uncritically assimilating the material the teacher thinks is important. This is a strategy that *works*: it has gotten him where he is . . . (p. 3)

The fact that learners might adjust their learning strategies to the demands of the situation will be dealt with in the next section, but if, indeed, the disinclination or inability to accept responsibility is actually a learned phenomenon, akin to learned helplessness, then one could argue that it would be possible, and perhaps even desirable, to jolt adult students out of their compliance and passivity. This may be achieved gradually, though the progressive devolution of control to the learners, or it may be sudden. Certainly Mezirow sees, in the ensuing conflict between teachers and taught, the potential for significant learning to take place; learning which is based on a realisation and acknowledgement by the learner of previously tacit beliefs and assumptions. He calls this process 'critical reflectivity' (1981, p. 19).

Mezirow is not the first to draw attention to the potential value of confronting learners' preconceptions about teaching and learning. According to Wispe (1951), both Cantor (1946) and L. Gross (1948) "attempted to study the consequences of 'skillfully opposing' and jarring loose the fixed attitudes of the students" (p. 161). Campbell (1964) reported a similar phenomenon. He noted that when students were simply 'let loose,' and told to be self-directing, they very often floundered, but if they were given 'coached practice,'[26] they were much more successful:

> Why did practice in self-conscious appraisal by the student of his own learning activities help? Our classroom observations and early individual interviews strongly suggested the following as the primary reason: We broke their set for passive instruction, a set to do just as they are told, which is deeply ingrained after a few years of formal education. It seems to take lot of jogging to get students out of this passive set. Verbal instructions alone seldom suffice. (p. 357)

Throughout these descriptions, it is possible to detect glimpses of the 'construing

learner': an individual searching for cues; striving to interpret and even anticipate the demands made in various situations; adjusting his or her behaviour accordingly. It is maintained that had researchers sought out the learner's constructions of various situations, a pattern of actions would be discerned which would suggest both consistency and purposefulness on the part of the learner.

4. Adapting to the situation: A deliberate strategy

If it is true that prolonged exposure to 'other direction' robs people of their natural or spontaneous 'self-directedness,' it would be reasonable to expect that more formal education would lead to lower levels of 'self-directedness' in learning, and indeed Chickering (1969, p. 285) cites several studies showing that "those who persist longest in college—compared with their peers who leave or interrupt their education—are more authoritarian, more rigid, less creative, less complex." He adds that "numerous studies of attrition show that the most creative and complex are the ones who leave."

Although this is a lamentable indictment of the formal education system, creativity and complexity are not the only hallmarks of independent learning. In her research into the relationship between field independence and 'self-directed learning,' Tzuk (1985) shows "that significant differences in field dependence/field independence exist between adults studying in various educational levels . . . (p. 139), and Peterson & Eden (1981) claim that "persons with more formal education are likely to be field independent" (p. 60). Since field independence has been found to correlate, at least moderately with 'self-directedness' in learning (Tzuk, 1985, p. 144), the net effect of these findings is to indicate that more highly educated individuals are more likely to participate in, and be successful at,

independent learning of various types.

How can this discovery be reconciled with Chickering's observation that many students, even those with advanced graduate level studies, are unwilling to accept responsibility for independent study? The answer would seem to be that many have deliberately acquiesced and adjusted themselves to the implicit requirements for success in the formal system, and that this *modus operandi* carries over into their contacts with adult education.

It seems clear that there is frequently a disjunction between the overt requirements for success in instructional settings, and those which count. Wight (1970) notes:

> The teacher may ask for active involvement—thinking, questioning, problem solving, evaluating, creating—but his actions, the methods he uses, and the rewards of the system are for passive activities. Listening and accepting without questioning are stressed more than thinking, memorization more than problem solving, and conformity is valued over creativity. (p. 236)

Over the past decade or fifteen years, a number of researchers in various parts of the world have studied the influence which students say that the learning environment—and especially its assessment procedures—has on their learning. In their various studies of the dissonance between the formal requirements of educational environments (thought, creativity, competence, independent thinking, critical thinking) and the actual requirements as perceived by students (memorisation, fact-gathering, conformity, rote learning), authors such as Becker et al. (1968), Miller and Parlett (1974) and Snyder (1971) have drawn attention to the strategies which learners use to master the 'hidden curriculum.'

For example, Becker et al. (1968) apply the idea of 'situational adjustment' to the experience of the college student: students learn the

requirements of social situations and what makes for success in them, so that they turn themselves into the kind of persons that the academic context demands. Becker argues that the academic situation requires attendance and written work, but does not reward students for showing intellectual involvement, even though the institution says that it does.

Research in Britain has supported and amplified Becker's findings, although the results are based on small samples. Miller and Parlett (1974), for example, found that the academic environment defined by examinations in a Scottish university led to the employment of distinctive strategies of adaptation by different students. The authors show that one group of students (labelled 'cue-seekers'), who went out of their way to make a favourable impression on faculty, and who revised very selectively for examinations, obtained the best degree results. This group of students were often uncomfortably aware that these strategies were detrimental to learning.

Ramsden (1979) draws a parallel between these studies of students, who 'know the game' and who adjust their behaviour accordingly, and the work of the Göteborg Group in Sweden, who have studied the approaches to learning used by students in reading academic articles (Marton, 1975; Marton & Säljö, 1976). Of the Göteborg Group Sweden studies, Ramsden (1979) writes:

> The notion of deep level processing shows a remarkable similarity to what lecturers in many disciplines have described as a desirable goal of higher education—the development of 'critical thinking.' . . .
>
> [Yet] . . . as we have shown, whether a student's approach to a learning task is to tackle it in a superficial way or to strive for meaning is very much affected by his perception of that task, which in turn is influenced by level of interest, personal commitment, and previous knowledge. (pp. 415, 426)

In this section, it has been shown that learners may well vary from one another with respect to their willingness and ability to accept and exercise control over instructional events. In particular, three alternative explanations have been offered for why learners may choose what appears to be a passive and dependent learning stance: (1) they prefer to be taught (at least with respect to this subject or in this situation; (2) they have been socialised by years of experience in formal education into a passive roles, and do not associate learning with a more active posture; or (3) they have deliberately conformed to the tacit requirements for success in the instructional situation, and have difficulty in figuring out what the instructor 'really wants' in the allegedly learner-controlled situation.

Embedded in these three explanations are three different views of people as learners. The first and third both rest on the view that people are active choosers; in the one case choosing to pursue their own preferred learning style, and in the other choosing to adapt consciously to outside demands. In the second, however, learners are seen primarily as passive recipients, victims who have been robbed, by events over which they have no control, of any concept of themselves as decisive or independent learners. Each view evokes important practical and ethical implications. For instance, if it is assumed that learners are active choosers, then one corollary is that they might 'actively choose' to be taught, in which case denying learners such structure could be seen as unethical. Conversely, if learners are victims of an educational system which has drained them of their capacity to be self-directing, and if the development or enhancement of the capacity to be active choosers is thought to be a defensible goal of education, then the imposition of structure and limitations would be as

unwelcome and unacceptable as withholding guidance in the former case.

In this dissertation, it is argued that independent learners also judge and evaluate the demands of each learning situation, and that their perception of the task, like that of the 'student,' in the third case is also influenced by "level of interest, personal commitment, and previous knowledge."

D. SUMMARY

It has been the purpose of this chapter to examine the literature concerning the transition from situations of teacher-direction to situations of learner-control, and in particular to identify difficulties in this transition which might be elucidated by further research from a constructivist point-of-view.

The chapter began by considering the implications of attempting to restructure the basic power relationship on which most traditional teaching/learning transactions are based. It was shown that the dramatic and far-reaching nature of such proposed changes affects both teachers and learners, and that its successful implementation requires teachers and learners to adjust their attitudes, as well as their understandings about the purposes of education. It was shown that teachers cannot unilaterally 'give' control to learners unwilling to accept it. Increasing learner-control demands a negotiated consensus between the parties involved. Accordingly, the perspective of both teacher and learner was considered in this chapter.

In discussing the difficulties confronted by teachers, it was shown how situations of learner-control potentially threaten the notion of teaching as conventionally defined, and that the construct of facilitation of learning, which has made an appearance in the literature, is regarded with some circumspection by

teachers, even those intellectually committed to attempts to shift the locus of control to learners. It was shown that, whether in favour of learner-control or not, teachers' actions tend to be guided by beliefs about the nature and purpose of education (which Argyris &Schön call theories in action), and these manifest themselves in the teacher's response to particular situations.

The construct of 'pseudo-autonomy' was introduced to describe the situation in which adult educators attempt to devolve some responsibilities onto learners, with neither genuine commitment or conviction, nor a clearly articulated view of the long-term implications of their actions. Trainers who 'go through the motions' in this way are frequently unaware of the dissonance between their overt actions, and the beliefs and understandings which they espouse. Finally, it was argued that researchers should attempt to understand the issues surrounding devolution of control from the point of view of the teacher, by attempting to adopt a 'teacher's-eye-view.' However, this is only one perspective and any given situation can also be understood from the perspective of the learner.

In the second half of the chapter, attention was focused on the point of view of the learner. It was stated that there is often a curious disjunction in the literature, because individual differences are commonly cited as a reason for increasing learner-control, but are not always considered with respect to learners' ability or willingness to accept and exercise such control. Three major reasons why learners may prefer a more teacher-directed approach are: (1) a declared preference for being taught, at least in this subject area; (2) learned helplessness; or (3) deliberately adapting to the tacit requirements for success in the learning situation. Notwithstanding the fact that an autonomous person may be one who elects to be taught if he or she believes this to be appropriate in particular

circumstances, researchers have tended to ignore or discount the learners' active choice. Instead, researchers have often invoked the construct of learned helplessness to explain the inability or unwillingness of learners to accept the control they are ostensibly being offered.

Overall, three findings emerge from this chapter. The first is that teachers and learners alike are engaged in attempts to maintain personal equilibrium. If autodidaxy were, as often claimed, one end of the learner-control continuum, then it might be expected that adults, who apparently undertake such learning projects routinely, would experience little difficulty in adapting themselves to the demands of learner-controlled instruction. In fact, there is evidence to suggest that teachers and learners alike encounter difficulty in making the transition, and this might be taken as evidence that autodidaxy is not interchangeable with learner-control of instruction.

A second finding is that adult learners judge and evaluate the demands of learning situations in the same way that 'students' do, and adjust their learning strategies to what they perceive to be the demands of the task. Adult educators, like other teachers, have expectations of learners which are subtly transmitted to the learners who respond accordingly. Neither adult educators nor learners make the transition to learner-control without some residual interference from their preadult education experiences: "One has only to see a group of foundry foremen, helicopter pilots or nursery school teachers taking their seats for, say, a 'safety' lecture in a space laid out like a traditional classroom to realise how quickly all the old associations come crowding back" (Thomas & Harri-Augstein, 1985, p. 10).

The third finding consistent with the constructivist perspective is that a

rather different picture of learner-control might emerge if researchers were to adopt the perspective of the participants, and to explain the dynamic nature of choices made in the instructional situation from the vantage point of the main actors—the teachers and learners themselves.

Since this dissertation concerns the reframing of research, the next chapter will comprise a review of the main paradigms which underlie educational research. This will lead to a more detailed consideration of constructivism in chapter nine.

VIII. APPROACHES TO EDUCATIONAL RESEARCH

A. INTRODUCTION

The purpose of this dissertation so far has been to review critically literature pertaining to self-direction. Three bodies of literature have been surveyed: self-direction as a personal quality or disposition; self-direction as the independent, non-institutional pursuit of learning (autodidaxy); and self-direction as a way of arranging instruction (learner-control). In part, this review has resulted in the identification of certain interesting and provocative findings; it has also led to the identification of paradoxes, conundrums and contradictions which seem to call for further exploration. Some of these incongruities may be attributable to disjunctions in the phenomena themselves, others however may be attributable to 'slippage' between the ideas being studied and the research methods employed. In other words, it may be that research designs have been adopted which are incompatible with underlying assumptions concerning self-direction, and this may help to explain why research into self-direction has been inconclusive and has tended to become 'blocked' or 'stalemated.'

It is the purpose of this chapter to review briefly the major paradigms that have influenced educational research, and to examine those which have been most influential in the study of 'self-direction.' This will lead, in the next chapter, to an exploration of constructivism as a way of understanding people, and of viewing phenomena, which might hold particular promise for the study of self-direction.

B. EDUCATIONAL RESEARCH: THREE DIFFERENT PARADIGMS

In one form or another, doing research seems to be as much a natural human function as breathing. Cohen and Manion (1985) place research along with experience and reasoning as the principal ways in which people attempt to understand their environments. Emery (1986) in the introduction to a set of papers on qualitative research writes:

> . . . research . . . is an ancient and ubiquitous human activity. Curiosity about others and the worlds in which they live has always been displayed through conversation, asking questions, working together to see what happens after different kinds of actions are performed, talking or gossiping about others to tease out intentions and other reasons for behaviour, clarifying and understanding circumstances; all are fundamental research functions. (p. i)

It is upon such slender foundations that the whole massive superstructure of 'research' as a formalised, specialised and commonly as an institutionalised process is based. It is beyond the scope of this dissertation to attempt to survey the vast and complex topic of social and behavioural research, or even the narrower but still overwhelming field of educational research. However, it is true that research is far from a unified and monolithic enterprise, and that there are important divisions within the research community, which affect such vital areas as what is considered worth knowing, how research ought to be conducted, and what is to count as evidence in supporting knowledge claims. Thus, as criticism has been directed, in this dissertation and elsewhere, at the tradition which has tended to dominate educational research (including research into self-direction) until comparatively recently, some general overview of the issues seems appropriate.

Although most researchers would readily assent to the proposition that their ultimate goal is to understand and explain some phenomenon of interest,

they are often sharply divided as to the best way of doing so. Indeed, such differences of opinion are sometimes so deeply entrenched, and individual researchers' fixations on one method or approach so exclusive, that the common endeavour to 'know' or to 'understand' is obscured. The emergence of such "methodological provincialism" (Rist, 1977, p. 42) is reflected in the reification of the terms 'qualitative methodology' and 'quantitative methodology,' and in a continuing, if inconclusive, debate about the superiority of one approach over another. Rist (1973) says such questions of methodology, however, mask deeper concerns, for "when we speak of 'quantitative' or 'qualitative' methodologies, we are, in the final analysis, speaking of an interrelated set of assumptions about the social world which are philosophical, ideological and epistemological. They encompass more than simply data-gathering techniques (p. 43).

These "interrelated sets of assumptions" are commonly referred to as paradigms, a term popularised by Kuhn (1962/1970) in *The Structure of Scientific Revolutions*. Kuhn defines a paradigm as "a set of interrelated assumptions about the social world which provides a philosophical and conceptual framework for the organisation of that world." Building on this, Patton (1975) states that a paradigm is "a world view, a general perspective, a way of breaking down the complexity of the real world. As such, paradigms are deeply embedded in the socialization of adherents and practitioners, telling them what is legitimate, what is reasonable" (p. 9). From these two definitions, it can be seen that paradigms are artifacts, invented or adopted to manage the complexity of the world. Once adopted, a paradigm serves to organise the view of the world, highlighting some aspects, while suppressing or diminishing other aspects (Petrie, 1972).

Black (1962) although using the term 'metaphor' instead of paradigm,

gives a graphic illustration of how a paradigm limits and distorts what is seen:

> Suppose I look at the night sky through a piece of heavily smoked glass on which certain lines have been left clear. Then I shall see only the stars that can be made to be on the lines previously prepared upon the screen, and the stars I do see will be seen as organised by the screen's structure. We can think of a metaphor [paradigm] as such a screen and the system of associated commonplaces . . . as the network of lines upon the screen. (p. 41)

Until comparatively recently, the argument about alternative approaches to educational research was commonly presented as a simple dichotomy, with pairs of terms being applied to the respective paradigms: rationalistic vs naturalistic; positivistic vs interpretive; rigorous vs intuitive; objective vs subjective and even 'hard' vs 'soft.' However, this rather simplistic formulation has been disturbed, firstly by the recognition that there are major differences <u>within</u> paradigms, and secondly by the acknowledgement of a third broad approach, namely that of critical science or historical materialism. An overview of these three dominant paradigms follows.

In the late nineteenth and early twentieth century, research into education began to emerge as a legitimate form of scholarly inquiry. At that time, and in fact until recently, it was commonly assumed that such research should be based on the aims and methods of established science. Educational phenomena were assumed to be governed by the same sort of regularities and law-like relationships which characterised the so-called 'hard' or 'natural' sciences.

However, many researchers, notably anthropologists and sociologists, but also including some psychologists and others, became increasingly disenchanted with this empirical-analytical approach, and instead sought to explain how people attribute meaning to their circumstances, and how they develop and make use of

rules which govern their behaviour. Thus, a second major approach to the study of educational phenomena developed - the interpretive or hermeneutic (Bauman, 1978).

Critics have been quick to point out the limitations and weaknesses of such approaches. They argue that a knowledge of the meanings which individual actors bring to bear does not go far enough; that human beings do not live in worlds entirely of their own devising, and that people generally are subject to influences and pressures that shape their attitudes and perceptions and yet of which they are often unaware. In short, they advocate approaches to research which explore how social relations have developed historically, and how individual people's interpretations may be distorted by ideological convictions. This third major paradigm is commonly referred to as critical (Sullivan, 1984). It appears, then, that educational research has been influenced by three different intellectual traditions which, for the present purpose, will be referred to as positivistic, interpretive and critical. In the sections which follow, each of these will be briefly explored, before moving on to a more detailed consideration of constructivism.

1. Positivism

Positivism is not a systematically formulated doctrine, but rather a general philosophical outlook which stresses the power of 'positive' knowledge to solve major practical problems. Although its origins can be traced back to classical antiquity, it emerged in the latter half of the nineteenth century as a potent intellectual force in Western thought. The term itself is associated with the French philosopher Comte, who eschewed theological and metaphysical claims to

knowledge, arguing instead that only sensorily apprehended experience could form the basis of valid knowledge and that accordingly knowledge could be advanced only by means of observation and experiment (Cohen & Manion, 1985, p. 12). When first coined, the term 'positivism' itself had quite positive connotations, being associated with ideas of scientific progress and liberation from mentalism. Today, it is a derogatory epithet, used as a weapon of attack and as a term of derision. There are many versions of positivism, however most share some common features. These include: (1) the belief that theory is universal and that law-like generalisations are not bound to specific contexts or circumstances; (2) the commitment to an objective or dispassionate pursuit of 'scientific truth'; (3) a belief in determinism, or the assumption that events have causes which are distinct and analytically separable from them; (4) the view that variables can be identified and defined and that knowledge can be formalised; and (5) a conviction that relationships between and among variables can be expressed in mathematically precise ways in the development and testing of theoretical propositions.

From a set of assumptions such as these flows the implementation of the 'scientific method,' including the specification of hypotheses at the start of research, the attempt to remain objective and detached from the area of study, the search for invariant causal relationships, and the attempt to reduce findings to quantified forms. Lying behind many of these practices is the notion that theory, conceived as a body of scientific knowledge, can be used to predict and hence to control outcomes.

There can be little doubt that, at least until recently, the assumptions of positivism, and the practices of the empirical-analytical approach, have dominated

psychological research. Rist (1977) comments that "quantitative research is *the* dominant methodology in educational research. It is more widely published, taught, accepted, and rewarded in educational research circles than any other approach" (p. 42). This same dominance seems to have extended to adult education research where, according to Jennings (1985), "almost all research methodology . . . has been imbued with the values associated with the empirical model. . . . The dominance that this model has assumed may reflect the concern of researchers in this relatively new field to gain 'respectability' through the empirical tradition" (p. 4). Despite its dominance, however, it has become increasingly apparent that "no one methodology can answer all questions and provide insights on all issues" (Rist, 1977, p. 42). This is particularly true of 'self-direction' in learning, at least some features of which are simply not amenable to research in this tradition.

2. Interpretive approaches

The positivistic paradigm has been subjected to severe critical scrutiny and debate. In its place, many theorists have advocated a new epistemological framework, one which aims to produce 'interpretive' accounts of phenomena, rather than law-like generalisations. Like the positivists, who cover a range of different positions and perspectives, opponents of positivism also subscribe to a variety of schools of thought. Nonetheless, they are united in their rejection of the belief that human behaviour is governed by general laws. Instead, they argue that the social world can only be understood from the standpoint of the individual actors. Carr and Kemmis (1983) express it thus:

> . . . [human] actions cannot be observed in the same way as natural
> objects. They can only be interpreted by reference to the actor's

motives, intentions or purposes in performing the action. To identify these motives and intentions correctly is to grasp the 'subjective meaning' the action has to the actor. (p. 88)

According to interpretive theorists, human interactions are not governed by inviolable laws so much as by agreed rules which are consensually validated by people - a simple example might be the custom of shaking hands as a form of greeting. Many such rule-governed practices are symbolic, and thus interpretive approaches are sometimes referred to as 'symbolic.' According to Popkewitz (1984):

> at one layer, the purpose of a symbolic and an empirical-analytic (or positivistic) science is the same: to develop theories about social affairs. The notion of theory, however, shifts from a search for law-like regularities about the nature of social *behavior* to the identification of social *rules* that underlie and govern the use of social 'facts.' (p. 41)

Central to the work of interpretive or symbolic theorists are the concepts of intersubjectivity, motive and reason. Intersubjectivity refers to the consensual norms which define what is 'real' or valid in any social situation; motives are the events or circumstances which cause other events or circumstances (i.e., 'because of'); reasons are the as-yet-unfulfilled expectations which influence behaviour prospectively (i.e., 'in order to'). Positivistic research has tended to focus almost exclusively on 'because of' type motives, ignoring the intentions, values, attitudes and beliefs which influence people to behave 'in order to' achieve some desired state of affairs.

Assumptions commonly shared by interpretive theorists include: (1) the belief that any event or action is explicable in terms of multiple interacting factors, events and processes, and that 'causes' and 'effects' are mutually

interdependent; (2) an acceptance of the extreme difficulty in attaining complete objectivity, especially in observing human subjects who construe, or make sense of, events based on their individual systems of meaning; (3) the view that the aim of inquiry is to develop an understanding of individual cases, rather than universal laws or generalisations; (4) the assumption that the world is made up of tangible and intangible multifaceted realities, and that these are best studied as a unified whole, rather than being fragmented into dependent and independent variables (in other words, context makes a difference); and (5) a recognition that inquiry is always value-laden, and that such values inevitably influence the framing, bounding and focussing of research problems.

The interpretive paradigm has given rise to certain specific approaches to research, including phenomenology, ethnomethodology and symbolic interactionism. Other methodologies, such as fieldwork, case-study and participant observation are also commonly associated with the interpretive paradigm although, as Jennings (1986) points out, there is a good deal of looseness in the application of such terms, and in any case such methods are not *necessarily* tied to any one particular paradigm (p. 14).

Central to the interpretive methodologies is the need for interpretive accounts to be 'coherent' (i.e., to comprehend and account for insights and evidence within a consistent framework). Interpretive accounts must also make sense to the actors whose behaviour is being studied; in other words they must pass the test of participant confirmation (Carr & Kemmis, 1983, p. 91). This means that interpretive accounts in research do not seek to reinterpret the actions and experiences of the actors, but rather to give a deeper, more extensive and more systematic representation of events from the point of view of

the actors involved.

From the review of 'self-directed learning' earlier in this dissertation, it appears that examining the attitudes and intentions of learners is essential to gaining a full understanding of their actions. However, the attitudes and understandings of self-directed learners are intensely personal and idiosyncratic, and are beyond the 'reach' of conventional positivism, which relies so heavily on observable behaviour. Thus, it may be argued that interpretive approaches suit perfectly many of the research questions surrounding this aspect of education.

3. Critical approaches

There is little doubt that, at least with respect to educational research, interpretive approaches are superior in many respects to those sanctioned by positivism and logical empiricism. By taking account of the perspectives of the individuals who are the subjects of research, the interpretive approaches seem to be grounded in people's practical realities, and moreover they resonate with the dominant humanistic and liberal value of respect for the person (Lukes, 1973). However, interpretive approaches to research have not escaped criticism, either from positivists or from opponents of positivism. Not unexpectedly, those imbued with a positivistic outlook have criticised interpretive approaches as representing a return to mentalism and highly subjective and 'pre-scientific' accounts of phenomena. They also object to "the inability of the interpretive approach to produce valid knowledge in the form of wide-ranging generalisations, or to provide 'objective' standards of verifying or refuting theoretical accounts" (Carr & Kemmis, 1983, p. 94).

Perhaps more seriously, interpretive approaches to social research have

been criticised 'from within', because they do not go far enough. It has been pointed out that, "like the empirical sciences, the interpretive tradition seeks objectivity and value-free inquiry into the human realm of intersubjective meaning" and that in doing so, "many interpretive studies are covert forms of positivism" (Jennings, 1985, p. 5). In the view of such critics, the fear that the respondent may become contaminated by the subjectivity of the researcher threatens to reduce the researcher to a passive role, and the subject of the research again becomes an 'object' of research; ironically one of the main criticisms aimed at positivism.

A second major critique is that merely describing a situation from the perspective of the participants, no matter how skilfully and systematically, ignores the fact that there are certain external features of social reality which are very influential in shaping that reality. In particular, individuals are often caught up in "crucial problems of social conflict and social change" (Carr & Kemmis, 1983, p. 94) of which they may be unaware. In discussing the epistemology of oral history, Murphy (1986) makes a similar point when he writes:

> just as there is a difference between using language and enquiring into its use, so the actors themselves need not have consciousness of the rules in order to follow them properly; and it is not they whom the interpreter would wish to interrogate in his search for the consistent formulation of the rules. Consequently, the ideological and cultural parameters of social action are not necessarily those which people articulate, and may lie below the surface of verbal communication. (p. 167)

What is required is a broader and more inclusive perspective than any one participant, or group of participants, may be able to bring to bear. As Rex (1974) puts it:

Whilst patterns of social reactions and institutions may be the product of the actors' definitions of the situations, there is also the possibility that those actors might be falsely conscious . . . [Researchers] have an obligation to seek an objective [sic] perspective which is not necessarily that of the participating actors at all . . . We need not be confined purely and simply to that social reality which is made available to us by participant actors themselves. (p. 86)

Those who favour critical approaches argue that, by emphasising the subjective meanings of social action, interpretive researchers often neglect the relationships between individuals' interpretations and actions and external factors; ignoring the fact that social reality is both shaped by, and shapes, the interpretations and perceptions of individuals. Critical researchers maintain that research can legitimately look beyond the perceptions which individuals have, to the factors (often ideological) which influence such perceptions, for "the very process whereby one interprets and defines a situation is itself a product of the circumstances in which one is placed" (Cohen & Manion, 1985, p. 38).

Cohen and Manion (1985) go on to state that one important factor in such circumstances is the power of others to impose *their* definitions of situations or view of reality upon others. Thus, as Carr and Kemmis (1983) point out, social conflicts may arise in two distinct ways. On the one hand, conflict may occur simply because different social groups have conflicting interpretations of reality. On the other hand, there may be contradictions in the reality itself, yet the perspective of one group is taken to be more 'real' or more acceptable than that of the other.

When a person or group of people uncritically accepts someone else's definition of a situation (even if it conflicts with their own experience), they are often said to be falsely conscious, and the concern with disclosing 'false

consciousness' and identifying contradictions in people's lives explicitly acknowledges the political and value-laden nature of research. Whereas interpretive approaches may be inclined towards revealing misconceptions and confusion, while leaving situations unchanged, "the function of critical theory is to understand the relations among value, interest, and action and, to paraphrase Marx, to change the world, not to describe it" (Popkewitz, 1984, p. 45).

The label 'critical theory' has been applied to a range of phenomena (Carr & Kemmis, 1983, p. 129) and it is apparent that, like both positivism and the interpretive approaches to research, critical theory is not, and never was, a "fully articulated philosophy shared unproblematically" (Giroux, 1983, p. 7). Partly because of this, and partly because of the inherent complexity of the ideas themselves, it is difficult to find in any one place a succinct statement of the convictions underlying research within this paradigm. However, most researchers subscribing to a critical approach would assent to some or all of the following guiding assumptions: (1) much human action is outside the conscious control of personal agency, and is embedded in social conditions beyond the consciousness of the actors involved; (2) any interpretive explanation makes sense against a background of social rules, practices and beliefs, and there is thus a 'logic of the situation' which differs from the 'logic of causes'; (3) unless research is restricted to merely recording actors' interpretations and understandings, it inevitably involves the reformulating or 'resymbolising' of events or expressions which is an act of construction rather than of discovery; (4) researchers make use of expert knowledge that potentially sets them apart from the subjects being researched and which gives them access to a specialised language of interpretation not accessible to the people being studied; and (5) intentional agency may be

frustrated by social rules, by constitutive meanings of the social order and by "the habitual sediment of the past," and the core project of uncovering such constraints through research is one of human liberation and emancipation.

In its commitment to social change (and indeed to political reform) the critical approach abandons any pretense at neutrality, and recognises that "questions of ethics, morality and politics are interrelated with science to orient individuals to what is right and just in a given situation" (Popkewitz, 1984, p. 46). The critical approach seeks explicitly to identify and criticise disjunctions, incongruities and contradictions in people's life experience. It focuses on critical self-reflection, coupled with action for change. Such action, however, is not imposed, but is characterised by prudent decision-making and free commitment on the part of those being researched (often called co-researchers because of the nature of the relationship they enjoy with researchers [Groundwater-Smith, 1986]). The dialectical interaction of reflection combined with action is captured in the notion of praxis. The critical approaches are most closely identified with sociological perspectives in research, and in many respects may be said to 'go beyond' or to subsume interpretive approaches, especially those based on individual psychology. Critical approaches are more overtly political than either the positivistic or interpretive approaches, and are directed towards personal or social transformation rather than scientific 'description.'

4. Relationships among paradigms

In discussing these three paradigms, it has been made to seem that each is a neatly articulated, water-tight compartment, with clear boundaries which distinguish it from the others. In fact, the three paradigms do not exist in

nature, they are themselves theoretical artifacts, or constructs: an invention of the theorists who have studied social science research. Moreover, they are not discrete entities, but represent clusters of assumptions and broad orientations, each one of which encompasses a wide range of approaches.

In her paper 'On the Interpretation of Classroom Observations,' McCutcheon (1981) suggests that these three approaches to inquiry might be depicted as forming a triangle:

positivistic

interpretive   critical
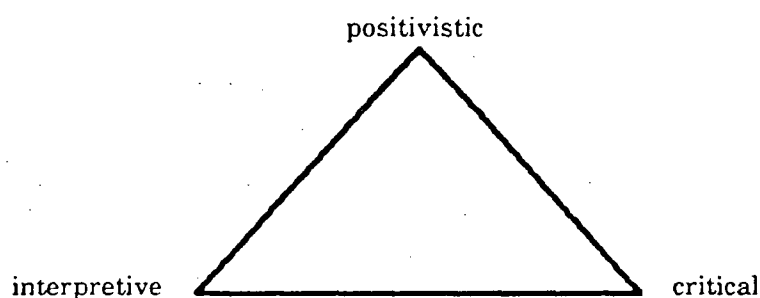
Figure 9: Approaches to inquiry

Each axis reflects a shared feature which distinguishes those two paradigms from the third. For instance, the interpretive and critical paradigms are united by their rejection of positivistic accounts of knowledge, and by their concern with the perspective of the actors involved. On the other hand, positivistic and interpretive approaches often have in common their attempt to be 'objective' about the elicitation and portrayal of data, yet this is regarded as an unattainable goal by proponents of critical theory. Finally, critical theory and positivism may share an acknowledgement of wider social and cultural influences, which may be neglected by interpretive theorists who tend to "weight agents with more agency than they

really have at their disposal" (Sullivan, 1984, p. 124).

Thus it can be seen that each paradigm has certain features in common with the others and, at the same time, differs in important respects from the others. Few pieces of research are ever 'pure' examples of any one paradigm, fitting unequivocally into one category to the exclusion of the others. Rather, as McCutcheon (1981) notes:

> we can place work along any axis, and indeed within the triangle, by the degree to which it evidences the assumptions and principles underlying each of the three or blends them together. Distinctions can be made among them by the methods each employs, the questions to be addressed, and the assumptions regarding issues such as generalizability and objectivity/subjectivity. (p. 5)

Because these categories are to an extent artificial, the decision to classify a particular piece of research, or researcher, as predominantly representing one rather than another paradigm might well be contested by the researcher involved. This is not to say, however, that the decision to classify research in one way or another is entirely arbitrary. Although research projects rarely proclaim the paradigm from which they derive, it is nevertheless possible to discern from the overall approach and the dominant 'tone,' some of the ideological biases and assumptions implicit in the research. Nowhere is this more obvious than in the researcher's preference for validity rather than reliability, or vice versa. Ideally, all three approaches would strive for high validity *and* high reliablity. In practice, however, the positivistic approaches tend to emphasise reliability (replicability and consistency of findings) while the interpretive approaches are centrally concerned with questions of validity (closeness to the data, description of phenomena from the perspective of the actors, and valid, empathetic representation of what is going on). The almost inevitable trade-off between

validity and reliablity, especially in qualitative research, is discussed by Sullivan

(1984), who distinguishes *distance* from *relation*. He writes:

> What must be involved in interpretive explanation is a dialectic of
> distance and relation with the phenomena studied. When the dialectic
> is collapsed on the side of *distance* (i.e., expert viewpoint), there is
> the possibility of a total *alienation* from what is studied. At the other
> extreme, when the dialectic collapses on the side of *relation*, there is
> such a total immersion (if that is possible) that the interpreting
> observer has difficulty in separating the forest from the trees. (p. 114)

According to Sullivan (1984), amongst others, it is only the critical

paradigm which manages adequately to maintain the delicate balance between

distance and relation. This contention is hotly debated by advocates of the

various approaches, but as Rist (1977) writes, "this should immediately make

apparent how, in the debates over the relative merits of the . . . paradigms,

each finds fault in the other for an absence of its own strength" (p. 45).

It is this fundamental, and irreconcilable difference in emphasis which

leads Rist to claim that a 'grand synthesis' of paradigms would be difficult, if

not impossible, to achieve. Such incommensurability had been foreseen years

earlier by Kuhn (1970), who wrote:

> To the extent . . . that two scientific schools disagree about what is
> a problem and what a solution, they will inevitably talk through each
> other when debating the relative merits of their respective paradigms.
> In the partially circular arguments that regularly result, each
> paradigm will be shown to satisfy more or less the criteria that it
> dictates for itself and to fall short of a few of those dictated by its
> opponent . . . Since no paradigm ever solves all the problems it
> defines, and since no two paradigms leave all the same problems
> unsolved, paradigm debates always involve the question: Which
> problems is it more significant to have solved? (p. 109-110)

It appears, then, that the selection of any one paradigm must be based

on its 'goodness of fit' or appropriateness to the subject of the inquiry, and

moreover that any paradigm will have some 'blind spots' which could well be addressed by another approach. The question; "Which problems is it more significant to have solved?" must act as a guide to the choice of research approach.

C. SELF-DIRECTION - A PSYCHOLOGICAL OR SOCIOLOGICAL ISSUE?

As Kuhn (1970), Laudan (1977) and others have so ably demonstrated, the progress of research in any field is seldom, if ever, a smooth passage from ignorance to enlightenment, but often appears in retrospect as a series of discontinuous steps or 'lurches.' In part, this may be attributed to the accumulation of anomalies, and the sort of paradigm shifts discussed by Kuhn. In part, also, it may represent the pendulum swing of fashion in research. Twenty-five years ago, sociological approaches to educational phenomena were the norm, and topics were commonly tackled from a sociological point-of-view. In the past two decades, however, individualistic psychology has been in the ascendancy, and since 'self-direction' has emerged as a major theme of educational research during that time, it has not surprisingly been tinged with an individualistic hue. To what extent, then, is self-direction in learning inherently a matter of individual psychology?

On the surface, autonomy in learning is quintessentially individualistic. The way in which individual learners approach learning tasks, their concepts of themselves, how they construe the material they encounter, and how they develop and assert their independence in learning situations, are all the legitimate domain of the psychological researcher. However, it is important to recognise that many of these features are socially constructed and historically mediated, and that one

could argue forcefully for a more critical and sociologically based approach to the study of autonomy in learning (Sullivan, 1984). Recent work which reveals the social and ideological bias in the concept of 'self-direction' includes that by Borgström (1985), Brookfield (1984, 1985) and Shapiro (1984), although as long ago as 1930, Snedden intimated that social class and educational experience may account for a good deal of the variance in people's ability and willingness to undertake what he termed 'self-education.'

As mentioned earlier with respect to the debate between paradigms, it may well be that autonomy in learning has both a psychological *and* a sociological dimension, and that accordingly, rather than it being a case of *either/or*, it is a case of *and*; the choice of paradigm being a response to the question: "Which problems is it more significant to have solved?" This present dissertation is restricted to a reframing of research from a psychological perspective, but this is not to deny the pervasive influence of social and cultural factors, nor of the fact that the whole phenomenon of self-direction might profitably be investigated through the use of complementary research paradigms, emphasising sociological as well as psychological dimensions.

D. SELF-DIRECTION AND THE INTERPRETIVE PARADIGM

The main argument in this dissertation thus far may be summarised as follows. Commonly, the field of 'self-direction' in learning has been treated as a single, undifferentiated domain. In this dissertation, however, it has been proposed that, under the umbrella of 'self-direction' as a philosophical ideal, self-directed learning should distinguish between 'learner-control' on the one hand, and 'autodidaxy' on the other. Secondly, it has been stated that research can be

carried out from a positivistic, interpretive or critical perspective. Thus, any given piece of research work might be distinguished according to two criteria: whether its main focus is on learner-control or autodidaxy, and the perspective from which it has been undertaken:

Learner-Control

Autodidaxy

- Critical

- Interpretive

- Positivistic

Figure 10: Research into 'self-direction within three paradigms

It has also been shown that self-direction can be considered and examined as a matter of individual psychology, or as a sociological issue. Thus the two

dimensional diagram above (Figure 10) can be modified by the addition of a third dimension, to produce a cube as follows:
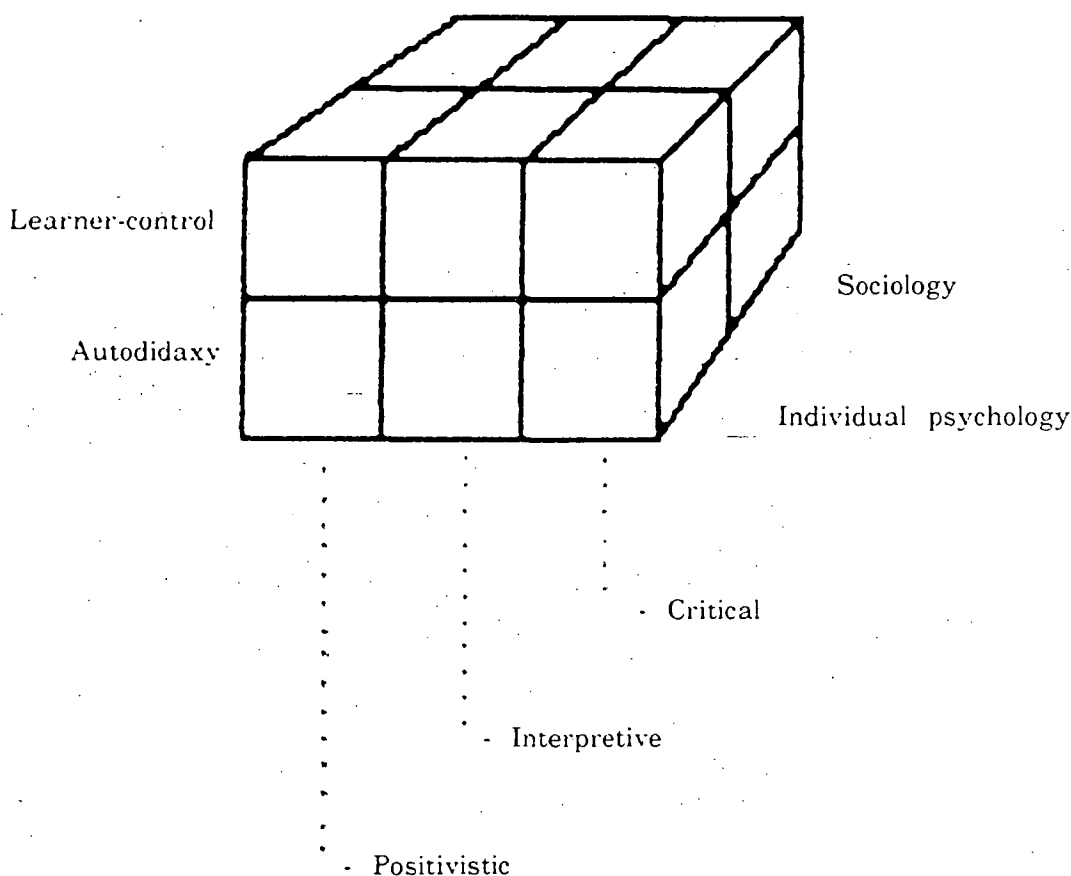
Figure 11: Three-dimensional portrayal of research into 'self-direction

In reviewing the literature on 'self-directed learning', it appears that research has been dominated not only by a psychological perspective, but also by a positivistic view of knowledge. The search for law-like generalisations, and for mathematically precise causal relationships is perhaps most pronounced in the domain of learner-control, where researchers have frequently assumed that particular teaching strategies or curricular innovations, would inevitably lead to

changes in the acceptance of responsibility by learners. This tendency is also evident, although to a lesser extent, in research into autodidaxy where, as Brookfield (1984, 1985) points out, there has tended to be an overemphasis on the quantitative and quantifiable dimensions of such self-guided learning endeavours, commonly without regard to the quality of learning or of its meaning to individual learners.

That such preoccupations are manifest in the research literature on self-direction seems particularly ironic, in view of the nature of the phenomenon being studied. If researchers were inquiring into the migration patterns of whole species of birds, for instance, or the behaviour of large bodies of water in the open ocean, the search for law-like generalisations may seem appropriate. But self-direction, by its very nature, is distinguished by its concern for individual cases and by its emphasis on the vagaries of human motivation and interests. Researchers have shown that 'self-direction' is a highly individualistic phenomenon, yet individual differences tend to be submerged by research methods which emphasise similarities; an individual person's ability to be self-directing may well vary from one situation to another, yet research methods often ignore such situational differences; the processes of self-directed learning (both autodidactic and learner-controlled situations) seems to zig-zag and to follow unpredictable patterns, but researchers have commonly assumed a linearity in the process and have employed research methods based on such 'means-end' logic; finally, learners appear to pay attention to different features of each situation in determining their level and direction of personal autonomy, but researchers have often implicitly assumed that external and publicly observable features are the criteria by which autonomy is to be judged. In short, some of the very features which

appear as paradoxical or problematic could potentially be overcome by the adoption of an alternative research perspective. In order to acknowledge the unique features of 'self-directed learning' in its various manifestations, what seems called for is a research orientation which emphasises individuality, which acknowledges situational variability, which takes account of the apparently random and serendipitous nature of human affairs, and which above all gives due prominence to the fact that people are active choosers and participate actively in the creation of the social world of which they are a part. Constructivism, it is suggested, offers such an orientation.

E. SUMMARY

In this chapter, three dominant paradigms in educational research have been reviewed - positivistic, interpretive and critical. Each paradigm was considered in turn, and its major assumptions explored. It was asserted that research into 'self-direction' has been dominated by the positivistic paradigm, as has research in education generally. However, positivism has been shown to be inappropriate to the study of many educational phenomena, and it seems that the assumptions of positivism are, if anything, particularly antithetical to those underlying 'self-direction.' Accordingly, it was proposed that an interpretive approach would probably be more congenial to the study of 'self-direction' in learning.

The question of whether self-direction is essentially a psychological or sociological matter was discussed, and it was concluded that it exhibits elements of both, and could accordingly be studied from either perspective. However, as this dissertation is limited primarily to the domain of personal psychology, it was

decided to consider a theoretical framework which unites individual psychology with the interpretive approach to inquiry. The theoretical framework selected was constructivism. the study of 'self-direction' in learning.

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IX. CONSTRUCTIVISM

A. INTRODUCTION

Constructivism is a broad and somewhat elusive concept. According to Gergen (1985) the term has been used in reference to Piagetian theory, to a form of perceptual theory and to a movement in twentieth century Russian art and architecture. However, more importantly for the present purpose, it has also been applied to an approach to research based on the notion that discourse about the world is not a reflection of the world, but is a social artifact. In this sense, constructivism has its origins in, and is linked to, areas of study as diverse as philosophy of science, ethnomethodology, history and sociology of knowledge, literary theory, symbolic anthropology, deconstruction of meaning, dramaturgical analysis and recent advances in historiography.

It is beyond the scope of this dissertation to attempt a comprehensive review of constructivism in its many manifestations. However, it is the purpose of this chapter to introduce the major tenets of constructivism as they apply to psychological inquiry and to show how they are related to one another. The next chapter will indicate the relevance of constructivism to the study of 'self-direction' and, in the following chapter, research into 'self-direction' will be reframed from this constructivist perspective.

Like positivism, constructivism (or constructionism as some prefer to call it [Gergen, 1985]) is not a single monolithic theory, but rather a cluster of perspectives united by underlying similarities in world view. Although some theorists have linked constructivism to the pioneering work of Lewin in the 1930s and 1940s (Sarbin, 1977), its intellectual origins can be traced back to

philosophers such as Spinoza, Kant and Nietzsche and ultimately to Plato (Gergen, 1985, p. 269).

Until recently, constructivism played a relatively minor role in epistemology, although the notion espoused by constructivists, that knowledge cannot be taught, but must be constructed by the learner, is not new. Smock and von Glasersfeld (1974) trace the origins of constructivism back as far as "a fragment of the pre-Socratic Parmenides in the 5th Century B.C." (p. xi). They also deal with "the suspicion . . . that knowledge and explanation might have more to do with the knower and the explainer, than with what was being known or explained" (p. xii) in the eighteenth century work of George Berkeley (1710) and Giambattista Vico (1710).

Paradoxically, it is the field of science, so frequently assumed to deal with 'hard' facts and 'real' data, which has done most to bring constructivism to the fore as an alternative way of viewing knowledge. A century ago, in 1886, Mack recognised the tenuous base of positivism in science; "We are accustomed to regarding the object as existing unconditionally, although there is *no such thing* as unconditional existence" (cited in Toulmin, 1970, p. 30). Einstein and Infeld (1952) also recognised a form of constructivism when they wrote:

> Science is not just a collection of laws, a catalogue of unrelated facts.
> It is a creation of the human mind, with its *freely invented* ideas and
> concepts . . . . The only justification for our mental structures is
> whether and in what way our theories form . . . a link with the
> world of sense impression. (p. 310)

It seems ironic that, just as research in education has been striving to render itself more 'scientific' (meaning more concerned with invariant laws and objective data), research in science has become more concerned with the relativity of

knowledge (Feyerabend, 1975; T. S. Kuhn, 1970; Lakatos, 1970; Manicas & Secord, 1983; Pope, 1982, 1983, 1985; Popper, 1963).

Although the philosophy of science has led the way, there have also been dramatic shifts in this direction in other domains, too. For instance, Geertz (1973) and Levi-Strauss (1962) in anthropology; Schutz (1967) and Berger and Luckman (1967) in sociology; and Heider (1958) and Kelly (1955) in psychology, amongst others, have all emphasised how people invent, organise and impose structures on their experiences, and that knowledge is thus essentially a social artifact. However, as Magoon (1977) observes, these changes in the parent disciplines are not well understood by many educational researchers.

One of the central tenets of constructivism is that individuals try to give meaning to, or construe, the perplexing maelstrom of events and ideas in which they find themselves caught up. This extends to attempts to construe constructivism itself. It is intriguing to see how people commonly try to subsume constructivist ideas under some more familiar, and therefore more comfortable, category or label. Writing of his own work, Kelly (1970) notes with wry amusement:

> Personal construct theory has . . . been categorized by responsible scholars as an educational theory, a learning theory, a psycho-analytic theory (Freudian, Adlerian and Jungian - all three), a typically American theory, a Marxist theory, a humanistic theory, a logical positivistic theory, Zen Buddhistic theory, a Thomistic theory, a behavioristic theory, an Apollonian theory, a pragmatic theory, a reflective theory, and no theory at all! (p. 10)

There are at least two problems with these sorts of categorisations. The first is that constructivism is not a single theory, but a cluster of different, although related, perspectives united in their underlying view of the world. There is thus

a good deal of variability *within* constructivism. Secondly, "constructivism in its pure, radical sense, is incompatible with traditional thinking" (Watzlawick, 1984, p. 15). As von Glasersfeld and Smock (1974) observe, constructivism offers, amongst other things, "an alternative way of looking at knowledge, knowledge acquisition, and the process of cognition. The approach is neither easy nor comfortable" (p. xi).

For both these reasons, constructivism defies ready classification within some existing theoretical framework. Even among those who have found themselves questioning established views concerning the production and transmission of knowledge, constructivism demands a substantial revision of ideas and perspectives. In fact, as von Glasersfeld (1974) observes:

> Revision may be too gentle a word for the kind of reorganization of ideas which . . . is indispensible for an understanding of the theory of knowledge which . . . constructivist formulations entail. It is not a question of merely adjusting a definition here and there, or rearranging familiar concepts in a somewhat novel fashion. The change that is required is of a far more drastic nature. It involves demolition of our everyday conception of reality and, thus, of everything that is explicitly or implicitly based on naïve realism; it shakes the very foundations on which nineteenth century science and most of twentieth century psychology has been built, and it is, therefore, not at all unlike the change that was wrought in physics by the joint impact of relativity and quantum mechanics. (p. 2)

What, then, is the essence of this way of looking at educational issues? The basic concern of constructivism is with how people make sense of the perplexing variety and constantly changing texture of their experience. Unlike positivism, which tends to view knowledge as deriving from a more or less competent mapping of an external reality, constructivism "asks one to suspend belief that commonly accepted categories or understandings receive their warrant through observation" (Gergen, 1985, p. 267). Constructivism is presented by its

proponents as infinitely richer and more complex than most empiricist/positivist approaches to understanding social phenomena. Its detractors and critics, like those who criticise interpretive approaches generally, point to its excessive emphasis on the individual, although recent work in social psychology has been attentive to the social and historical context of individual meaning-making (Buss, 1979; Gergen, 1985; Sullivan, 1984; Watzlawick, 1984; Wexler, 1983).

According to Sarbin (1977), constructivism is subsumed under the root-metaphor of contextualism (Pepper, 1942), which emphasises constant change and novelty. Events are in constant flux, and the conditions of one event alter the context of a future event. In view of the way in which self-directed learning activities often unfold (Spear & Mocker, 1981, 1984) an approach which emphasises and allows for the ebb and flow of circumstances would seem to be preferable to one which presumes a simple linearity. Because constructivism is more like a "shared consciousness" (Gergen, 1985) than a cohesive movement, there are many formulations of what it entails. However, at what might be called a metatheoretical level, constructivist thought usually manifests some combination of the following assumptions:

(i)   people participate in the construction of reality;

(ii)   construction occurs within a context which influences people;

(iii) construction is a constant activity which focuses on change and novelty rather than fixed conditions;

(iv)   commonly accepted categories or understandings are socially constructed, not derived from observation;

(v)   given forms of understanding depend on the vicissitudes of social processes, not on the empirical validity of the perspective;

(vi)   forms of negotiated understanding are integrally connected with other human activities;

(vii)   the 'subjects' of research should be considered as 'knowing' beings;

(viii) locus of control resides within the subjects themselves, and complex behaviour is constructed purposely;

(ix)   human beings can attend to complex communications and organ complexity rapidly; and

(x)   human interactions are based on intricate social roles, the rules governing which are often implicit.

To attempt to deal adequately with constructivism in its fullest sense lies well beyond the scope of this dissertation. Instead, it has been decided to concentrate selectively on those dimensions which are of greatest relevance to research in education. As shown in the preceding chapter, educational research is based on certain assumptions about human nature, the nature of knowledge, and the meaning of learning. These three domains are bound up with one another; collectively they may be said to constitute a paradigm or world view. Thus, if one has a particular view of knowledge it tends to affect one's ideas of how learning should (or at least might) take place; and this, in turn, implies a particular view of people generally (Lawson, 1982, p. 41). Alternatively, seeing people in a particular way is likely to affect one's view of people as learners which consequently implies a certain understanding of the nature of knowledge. A researcher who sees learning as essentially a matter of mastering a stable body of 'facts' is likely to adopt a substantially different approach to research from

the one who sees learning as a dynamic interaction between a learner and a constantly changing world: as Kessen (1966) observes; "The [learner] who is confronted by a stable reality that can be described adequately in the language of contemporary physics, is a [learner] very different from the one who is seen facing phenomenal disorder from which he [or she] must construct a coherent view of society" (pp. 58-59).

The discussion which follows will concentrate on three basic domains; a constructivist view of people, a constructivist epistemology, and constructivism in teaching and learning. For convenience in exposition, these three domains will be treated separately, however it must be emphasised that they are highly interdependent, and that any attempt to subdivide them like this is inevitably artificial. In discussing constructivism, von Glasersfeld (1984) makes the point well:

> Language inexorably forces us to present everything as a sequence. The three sections of this essay, thus, will have to be read one after the other, but this inevitable succession should not be understood as a logically necessary order. What is contained in each of these sections could be outlined only very approximately as independent themes, because, in constructivist thought, each is so closely interwoven with the other principal themes that, presented separately, each would seem to be little more than a finger exercise. Singly, the arguments . . . presented here certainly cannot create a new way of thinking about the world; if they can do that at all, it will be through the fabric of their interrelations. (p. 37)

B. A CONSTRUCTIVIST VIEW OF PEOPLE

One of the core components of constructivism is the belief that people, particularly adults, are not shaped by circumstances beyond their control. Many contemporary theorists have sought to explain human behaviour either through the 'push' of stimuli located in the environment, or the 'pull' of needs located

within the person. In either case, people are commonly (though not universally) portrayed as more-or-less passive and inert beings, jerked this way and that by forces over which they have no control. Constructivists, on the other hand, maintain that people are embarked, from the time of their birth, on a continuing voyage of enquiry and exploration, and that; "instead of buying the prior assumption of [the human being as] an inert object, either on an implicit or explicit basis, we propose to postulate a *process* as the point of departure for the formulation of a psychological theory. Thus the whole controversy as to what prods an inert organism into action becomes a dead issue. Instead, the organism is delivered fresh into the psychological world, alive and struggling" (Kelly, 1966, p. 37).

It is assumed at the outset that people "have two basic attributes, an innate and powerful drive to relate to others, and a continuing attempt to make sense of their experiences" (Ryle, 1975, p. 1), and that they pursue these goals by selectively interacting with others and, at the same time, adapting or creating for themselves representational models of reality which become guides to their actions. Central to this view of people is the notion of choice. Certainly, people have both a genetic and a cultural inheritance, but as Mair (1977) points out; "we are not bound by our conditioning or our family dynamics, or delineated completely by our heredity, unless we choose so to be . . . we can be different if we go out and do differently, we can become different by acting differently" (p. 267).

Constructivists maintain that the individual can, in principle at least, always find an alternative way of looking at a situation; "that events are subject to as great a variety of constructions as our wits would enable us to contrive"

(Pope, 1985, p. 10). As Kelly puts it, "No one needs to paint himself into a corner; no one needs to be completely hemmed in by circumstances; no one needs to be a victim of his [or her] biography" (Kelly, 1955, p. 15). People are viewed as 'self-contructing' (Birren & Hedlund, 1984) because what they "become" (Allport, 1955) is the product largely of their own activity. In other literature, this phenomenon is referred to as 'self-culture,' and in a forceful and elegant essay written almost 150 years ago, William Channing (1883) stated:

> There are two powers of the human soul which make self-culture possible—the self-searching and the self-forming power. We have first the faculty of turning the mind on itself; of recalling its past, and watching its present operations; of learning its various capacities and susceptibilities, what it can do and bear, what it can enjoy and suffer; and thus of learning in general what our nature is, and what it was made for. It is worthy of observation, that we are able to discern not only what we already are, but what we may become.
>
> We have a still nobler power, that of acting on, determining, and forming ourselves. This is a fearful as well as glorious endowment, for it is the ground of human responsibility. We have the power not only of tracing our powers, but of guiding and impelling them; not only of watching our passions, but of controlling them; not only of seeing our faculties grow, but of applying to them means and influences to aid their growth. We can stay or change the current of thought. We can concentrate the intellect on objects which we wish to comprehend. We can fix our eyes on perfection, and make almost everything speed towards it. This is, indeed, a noble prerogative of our nature. Possessing this, it little matters what or where we are now, for we can conquer a better lot, and even be happier for starting from the lowest point. Of all the discoveries which men need to make, the most important, at the present moment, is that of the self-forming power treasured up in themselves. (pp. 14-15)

This self-constructing person is a familiar prototype in the literature of philosophy, of psychology and of education, being referred to variously as 'self-actualizing,' 'fully-functioning,' 'authentically emerging' or simply 'becoming.' The adoption of this constructivist view of people has at least five important implications for a study of autonomy and 'self-direction.' The first is that the

self-constructing person would, by nature and by definition, be autonomous. He or she would be presumed to have both the ability and the willingness to be introspective and self-aware, as well as having an inclination towards self-improvement. Moreover, this autonomy would be considered innate: it is a natural state of affairs, rather than a condition towards which people must be educated.

Second, the use of the term 'self-constructing,' rather than 'self-constructed,' implies a continuing process rather than a finished state. Because it connotes action, autonomy is seen to be a continually renewed and renewable condition, not a static accomplishment. It is perhaps useful to think of people, in whatever they are doing, as homeostatic, or in a state of dynamic equilibrium. They respond to any disruption or perturbation of this equilibrium by seeking to restore the balance. Several authors have argued that people consciously seek to be autonomous, and events which suppress or deny their autonomy will be resisted or denied.

A third implication of adopting such a perspective is that autonomy is not something that happens to people, or something that can be given to them: while an adult educator may be able to give learners freedom, it is not possible to give them autonomy.

Fourth, if people are seen as 'self-constructing,' there must be some inner-life, some central tendency or coherent belief system around which their constructions are organized. This means that behaviour (for instance undertaking

a learning project, or declining to accept control of a learning situation) must be seen as intentional and logical, at least within the learner's own frame of reference. Magoon (1977) expresses this assumption thus:

> The important implication here is that much behavior must be understood as purposive; i.e. aimed toward some end . . . Much important, complex behavior like teaching and learning might best be understood as being constructed purposively by the subjects (both teachers and pupils) themselves, and cannot adequately be studied without accounting for meaning and purposes. (p. 652)

Finally, because the subjects of research are seen as active construers, constructivism sanctions both action research and other naturalistic inquiry methodologies. This is dealt with in Appendix B. The corollary of adopting a constructivist view of people in researching self-directed learning is that weight needs to be given to their view of the situation. Researchers should, as far as possible, seek to elicit from respondents, and to represent as faithfully as possible, the views of self-directed learners themselves about their interests, attitudes, intentions and understandings. Moreover, since these factors are likely to be situationally variable, a constructivist approach demands field-based enquiries as far as possible. The sort of questions a researcher might choose to pursue are outlined in chapter eleven.

It must be noted, however, that the constructivist view presented here has been criticised as naïve and idealistic because it tends to assume that people are free to think what they like *and* to act in accordance with their thinking. In other words, it ignores potent constraints which operate on people's world views and on their actions. This is not to say that those who favour a critical approach to social inquiry reject the importance of the actor's point of view - as

Sullivan (1984) points out, "critical interpretation does not relinquish the conscious intentions of actors. In fact, a critical interpretation of the personal world is grounded, at the outset, in the 'intentional project' of the actors or agents" (p. 123). However, as Sullivan goes on to say, "if we stopped here, we would be guilty of a crass form of idealism. The full scope of institutional living cannot be reduced to conscious intentions of agents . . . notwithstanding intentional action, human action must also be understood as being caused by social conditions over which the agent exerts no conscious or intentional control" (p. 124).

This constitutes one of the major limitations of constructivism, and hence of this study, that simply exploring with learners their personal constructions of autonomy does not address the factors which may inhibit, constrain or determine either their constructs or their ability to act freely.

C. THE CONSTRUCTIVIST EPISTEMOLOGY

It is not possible to talk of any kind of learning, including autodidactic learning, without adopting some view of the nature of knowledge. Accordingly, this is a recurring theme in this dissertation. Only rarely, when authors advocate a particular approach to teaching (or learning), do they make explicit their view of what constitutes valid knowledge, of how it is created, shared or reproduced. Thus, it is necessary to infer the theory of knowledge on which various formulations about learning (and, in particular, autodidactic or independent learning) are based.

As discussed in the preceding chapter, until comparatively recently, the dominant view of knowledge—at least in the behavioural sciences—was derived from a positivistic perspective. In this so-called 'received-view,' knowledge was

thought of as an accumulated body of empirically verified 'facts,' derived directly from observation and experimentation. von Glaserfeld and Smock (1974) note:

> Knowledge,' not only in common usage, but also in most of the current psychological and philosophical literature, is always tacitly assumed to be knowledge of an existing world. That is to say, what we know is assumed to be an aspect of an independent reality, a reality that exists by itself and in itself . . . (p. xiv)

This view has been very influential in shaping conceptions of teaching, because it implies that there is one objective reality, to which learners should be introduced. It has also influenced many approaches to research, where it is considered to be the purpose of the researcher to discover and represent this objective reality as faithfully as possible (Koetting, 1984; Merriam & Simpson, 1984; Soltis, 1984).

The constructivist perspective differs significantly from this view of knowledge as deriving from a process of copying or replicating (von Glasersfeld, 1974, p. 7). While not denying the existence of an outside reality Nysted and Magnusson (1982) state:

> . . . it is fundamental to the constructivists' view that the environment can never be directly known, but that conception determines perception. We know reality only by acting on it. This means that knowledge is neither a copy nor a mirror of reality, but the forms and content of knowledge are constructed by the one who experiences it. The active interaction between the individual and the environment is mediated by the cognitive structures of the individual. What we learn in interaction with the environment is dependent upon our own structuring of those experiences. Thus, according to this view, man does not merely respond to the environment, he construes it . . . (p. 34)

It is important to emphasise that constructivists acknowledge the existence of a 'real' reality beyond the individual knower. One of the charges sometimes levelled against constructivism is that it adheres to the metaphysical position of solipsism,

which is the claim that there is no reality outside the self, and that all human perception and experience exists only in the mind. A detailed refutation of this claim lies outside the scope of this dissertation (see e.g, von Foerster, 1984), but Kelly (1955), in the original assumptions underlying personal construct theory, states; "We presume that the world is really existing, and that man is gradually coming to understand it" (p. 6). And in 1969, he indicated that a person's constructions of reality may not even be congruent with reality as experienced by others; " . . . the fact that my only approach to reality is through offering some responsible construction of it does not discourage me from postulating that it is there. The open question for man is not whether reality exists or not, but what he can make of it" (p. 25).

The proposition that different people construe the same reality in different ways sometimes proves a stumbling block, even to those who are able to accept the notion of people as active construers. The point might best be grasped by reference to an example. It is a common experience for people to misconstrue each other's motivations. Such misunderstandings might be based on past experience, on information provided by a third person, on some small gesture—real or imagined—or on a number of other fragments of evidence. Even a contrary explanation by the person concerned is frequently not enough to dispel a particular impression once it has been formed.

As people interact, they are constantly judging one another, and often searching for evidence which backs-up or supports their own interpretation of the situation. Such 'evidence' need not be objectively 'true' for it to function as a powerful guide to their actions. All the time, people are testing out whether their construing of a situation adequately accounts for what they see, hear and

experience. However, central to constructivism is the perhaps radical proposition that all we can ever know for certain about the real world is what it is *not*. Watzlawick (1984) illustrates this provocative thesis by means of a metaphor:

> A captain who on a dark, stormy night has to sail through an uncharted channel, devoid of beacons and other navigational aids, will either wreck his ship on the cliffs or regain the safe, open sea beyond the strait. If he loses ship and life, his failure proves that the course he steered was not the right one. One may say that he discovered what the passage was *not*. If, on the other hand, he clears the strait, this success merely proves that he literally did not at any point come into collision with the (otherwise unknown) shape and nature of the waterway; it tells him nothing about how safe or how close to disaster he was at any given moment. He passed the strait like a blind man. His course *fit* the unknown topography, but this does not mean that it *matched* . . . the real configuration of the channel. It would not be too difficult to imagine that the *actual* geographical shape of the strait might offer a number of safer and shorter passages. (pp. 14-15)

It would also not be difficult to imagine that another person could, under similar circumstances, sail a different course which also *fitted*, without necessarily *matching*, the contours of the channel. Kelly (1955) uses much the same imagery to explain his notion of personal constructs:

> Man looks at his world through transparent patterns or templets which he creates and then attempts to fit over the realities of which the world is composed. The fit is not always very good. Yet without such patterns, the world appears to be such an undifferentiated homogeneity that man is unable to make any sense out of it. Even a poor fit is more helpful to him than nothing at all. (pp. 8-9)

Systems of personal constructs (which are also referred to, amongst other things, as cognitive structures or schemata) may be likened to the abovementioned courses in that they *fit* the features of people's worlds, without necessarily *matching* each other, or the contours of the 'real' world as experienced by someone else, such as a researcher. To the constructivist,

knowledge does not necessarily reflect or map exactly the external reality, but consists of a set of workable hypotheses, or 'templets,' constantly being put to the test in interactions with other people's constructions of the 'same' situation. Not only are such construct systems complex and intricate, but it seems certain that no two people would ever have exactly the same cognitive structures.

Earlier in this chapter, it was asserted that people "adapt or create for themselves representational models of reality, which become guides to their actions." Now, it is possible to restate this assumption in the form that people "adapt or create for themselves representational models which become their reality, and which thus act as guides to their actions."

For many, it is unacceptable to suggest that learners *construct* their own realities, and even more heretical to maintain that they then experience this reality 'as though' (Rix, 1983, p. 9) it were external to themselves. As von Glasersfeld (1974) says, "Such a statement would be rather shocking. We would all like to be hard scientists, and such an 'as though' threatens to pull the rug out from under our feet. It smells of solipsism, and that is something to which, by and large, we have developed an intellectual allergy; it makes us extremely uncomfortable, to say the least" (pp. 3-4).

In fact, the notion of 'as though' is a powerful one in education. Some extol its use in educational situations where they are seeking attitude and behavioral change, and where they call on learners to experiment with new behaviours 'as though' they had in fact changed (e.g., Diamond, in press, on the use of Fixed Role Therapy in teacher education). However, it is argued here that whatever the 'objective' reality, learners respond to events 'as though' they were true. This means that learning often proceeds from a series of personal

propositions which, if not disproved, are assimilated into explanatory schema 'as though' they were demonstrably true. After a while, they become so thoroughly internalised that, to all intents and purposes, they *are* true for the individual.

The acceptance of a constructivist perspective poses the researcher with the problem of how to gain access to each individual respondent's personal world view. Observation can do little more than to provide data about behaviour, rather than intentions (and even then, it is distorted through the construct system of the observer). Asking questions presupposes firstly that the respondent is able to articulate his or her understandings and intentions, and secondly that he or she uses words to mean the same as the researcher does; a particular problem in the case of autodidacts. Moreover, there is always the likelihood of obtaining the respondent's 'espoused theory' rather than his or her 'theory-in-use' — the attitudes, values, beliefs and intentions which actually lie behind action.

To overcome these problems, researchers have developed a range of strategies - participant observation, case study, critical incident technique, Q Sort, stimulated recall, repertory grid, open ended interview and so on. In doing so, although they have striven for unobtrusiveness and naturalistic research techniques, they have often lost sight of the "realization that their 'subjects,' even when out of direct contact with the investigator (as in a questionnaire situation), nevertheless react differentially to the research stimulus" (Lincoln & Guba, 1985, p. 94). This phenomenon is referred to as *reactivity*, and it seems particularly ironic that constructivist researchers might lose sight of the very essence of constructivism, namely the construing respondent, and assume that their research methods are somehow immune to these reactive processes. In his review of methodological problems confronting Personal Construct Psychology,

Neimeyer (1985) points to the fact that in truly constructivist research, "the constructs a subject records on the grid are not *elicited* from some pre-existing repertoire, but are *created* in response to experimental demands" (p. 118). To assume otherwise is tacitly to sanction a positivistic understanding of personal knowledge.

Another compelling criticism levelled at constructivism is its apparent over-emphasis on individualism. According to Quinton (1971):

> Ever since Descartes brought it into the centre of philosophical attention, epistemology has been a thoroughly individualistic discipline or, as it is usually put, a thoroughly subjectivist one. The individual knower or subject is represented as setting out on his cognitive career with nothing more than the senses and reason that he stands up in. He gets to work on the virgin territory of the unknown with this rudimentary survival kit and in due time, through his industrious activities of construction and inference, he accumulates a substantial body of general theory and a somewhat less stable stock of singular beliefs. (p. 201)

When this idiosyncratic view of knowledge is taken to extremes, it appears that each person's world-view and explanatory system is entirely unique, a position referred to as 'radical subjectivism.' Such a position would render all forms of communication, including direct teaching, and vicarious experience, virtually impossible and, as Crittenden (1978) points out: "there are probably very few serious defenders of the complete subjectivism that intellectual autonomy in the strict sense entails" (p. 108). Quinton (1971) goes on to observe:

> . . . this Crusonian story of initially solitary knowers building up their private stores of knowledge and only then entering into exchange relationships is plainly unacceptable. It utterly fails to recognize the extent to which we are cognitively members of one another. As Popper says; "quantitatively and qualitatively by far the most

important source of our knowledge is tradition . . . " (1963, p. 27).

> My private or personal knowledge, what I have discovered by
> my own observations and stored in my memory, together with what I
> have inferred from this, constitutes a quantitatively minute fragment
> of what I claim to know. And if quality is a matter of scope and
> importance rather than of certainty, all but a vanishingly small
> proportion of my general, theoretical knowledge is derived from others.
> (p. 203)

As mentioned earlier in this chapter, research within a constructivist framework may well give due attention to the personal understandings and attitudes of individual actors. However, researchers must not lose sight of the wider social and cultural issues which influence, and in many cases determine, how particular individuals see their personal worlds. Crittenden makes a similar point when he criticises the "simplistic image of learning; each human organism independently interacting with its environment and deriving its own concepts out of this experience . . . As human beings, we are not isolated individuals constructing our private realm of concepts out of the data of our raw experiences. We acquire concepts, and learn to apply them in interpreting and understanding our experience through the social processes . . . of various human practices" (Crittenden, 1978, p. 113-114).

At the beginning of this chapter, it was stated that, until recently, constructivism had played a relatively minor role in epistemology. However, this is not to say that educators have always failed to emphasise a constructivist perspective in their work or in their writings. For instance, in *Democracy and education*, John Dewey (1916) wrote: "that education is a constant reorganizing or reconstructing of experience . . . what is really *learned* at any and every stage of experience constitutes the value of that experience . . . " (p. 89). Piaget,

whose contribution to developmental psychology has influenced generations of educators and educational researchers, is also well-known for his articulation of a genetic (or constructivist) epistemology (Sigel et al., 1981; von Glasersfeld, 1974).

In their book *Teaching as a subversive activity*, Postman and Weingartner (1971) discussed the relative nature of knowledge, and recognized the subversive implications of such a view for conventional education. They argued that the issue was a direct challenge—possibly even a threat—to teachers who saw their role as passing on established truths. This is because, if knowledge is seen to be relative, the student is free to question the utterances of the teacher. The role of the latter was conceived as helping to release and develop the capacity of learners to enquire for themselves.

In the same year, Young edited a book entitled *Knowledge and control* in which Esland (1971) wrote of the fluid, negotiable (in the navigator's sense of searching for a safe or workable passage) and tentative nature of knowledge, especially once disciplinary boundaries are dismantled:

> If knowledge is de-reified, it is, then, a much more negotiable commodity between teacher and pupil . . . there is no reason to suppose that these will remain within the boundaries of what are now heuristically labelled as 'subjects.' New configurations of knowledge are likely to emerge from the combinations of questions which arise in the learning situation . . . the boundaries are only human constructs and can, therefore, be broken. (p. 96)

The acceptance of a constructivist approach to knowledge has significant implications for researchers. In science education, for instance, it has resulted in a virtual paradigm shift away from positivism and naïve realism (Pope, 1982, p. 4) and, among other things, to the formation of a Special Interest Group of the American Education Research Association on Cognitive Structure and Cognitive

Change. In the domain of 'self-directed learning.' it seems that individual learners place their personal constructions on learning situations as well as on the content they are learning, and this calls for research methods which emphasise the unique and idiosyncratic nature of each individual's system or structure of meanings, while recognising the shared nature of much human understanding.

D. CONSTRUCTIVISM, LEARNERS AND LEARNING

If knowledge is viewed in this way, it is clear that: "a constructivist's epistemology has implications for both the scientist and the teacher because it leads directly to the specific proposition that knowledge cannot be taught but only learned (i.e., constructed). Cognitive structures are never passed ready made from a 'teacher to a pupil.' . . because cognitive structures (i.e., knowledge) must under all circumstances be built up by the learner" (von Glasersfeld & Smock, 1974, p. xvi).

Such a perspective runs counter to much conventional wisdom and established educational practice. Even in individualised instruction, with its ostensible focus on individual differences, it is commonly assumed that knowledge can be broken down into 'natural' constituent elements, that it can be transmitted from teachers to learners and that, although it may be reassembled by learners in idiosyncratic ways, there is nevertheless an 'inner logic' of each subject which the learner will sooner or later come to internalize.

The constructivist view of learning, based as it is on the individual construction of reality, is particularly congruent with the notion of self-direction. Writing of open education from a constructivist perspective, Rathbone (1971) states that the learner is regarded:

. . . as a self-activated maker of meaning, an active agent in his own learning process. He is not one to whom things merely happen; he is the one who, by his own volition, causes things to happen. Learning is seen as the result of his own self-initiated interaction with the world: the [learner's] understanding grows during a constant interplay between something outside himself—the general environment, a pendulum, a person—and something inside himself, his concept-forming mechanism, his mind . . . (p. 100)

. . . in a very fundamental way, each [learner] is his own agent - a self-reliant, independent, self-actualising individual who is capable on his own, of forming concepts and of learning. (p. 104)

Within such a conception, learning cannot be simply a matter of memorising or 'acquiring' knowledge. Instead, it is a constructive process which involves actively seeking meaning from (or even imposing meaning upon) events. In a review of literature concerning academic tasks, Doyle (1983) summarises an emerging constructivist theme in education, with the following characteristics:

1. Comprehension of texts is an active constructive process, not merely reception or rehearsal of information. Personal knowledge of the world is organized into associational networks or schemata;
2. Prior knowledge plays a significant role in this process of construction, in problem solving, and in learning. One of the major findings of research in this area is that domain-specific knowledge plays a central role in problem-solving and learning within a content area;
3. Solution strategies are learned 'naturally' through experience; from these natural strategies, learners invent procedures for solving routine problems. Sometimes these problem-solving strategies are systematic, but wrong;
4. Academic work requires both domain-specific knowledge and complex solution strategies;
5. Age and ability of the learner influence subjective complexity of academic tasks. Mature learners are selective and efficient in extracting information relevant to a task, less mature learners attend to a broader range of stimuli and are less likely to select and process information to fit the demands of a particular task. (pp. 166-172)

Central to these characteristics of academic work, and indeed to constructivism in education generally, is the notion of a system of personal constructs, associational networks or schemata—the representational model referred

to earlier—built up and modified on the basis of experience. This system of personal constructs provides the 'anticipatory scheme' which the learner uses to make sense of any given situation. Thus, constructivism in education is concerned with two things: how learners *construe* (or interpret) events and ideas, and how they *construct* (build or assemble) structures of meaning. The constant dialectical interplay between construing and constructing is at the heart of a constructivist approach to education, whether it be listening to a lecture, undertaking a laboratory session, attending a workshop, reading a text, or any other learning activity.

This brings to light a crucial point. Many educational innovations such as open learning, activity-based learning and discovery learning place great emphasis on the active participation of the learners, apparently under the impression that activity *per se* is the key to enhanced understanding and retention. However, as D. Kuhn's (1981) ingenious experiment showed, two learners can be equally active, but it is the existence of varying anticipatory schemes which seems to influence learning outcomes. Many educational innovations tend to confuse physical activity and situational independence with intellectual activity and epistemological independence. Even mathematics, which one might think of as objective and rule-governed, is a subject whose understanding is constructed, rather than discovered, by the learner. von Glasersfeld and Smock (1974) go on to say:

> The mathematician's enterprise . . . is after all a human activity and, as such, it is dependent on human cognition. If cognitive processes are, indeed, processes of construction rather than replicating or depicting an *a priori* existing reality, then the focus of any explanatory effort must shift from what there *is* or *may be* to *how we arrive at* the conceptual constructs we actually have. Richards' (1974) discussion, consequently, develops the dichotomy of a 'logic of discovery' and a 'logic of reconstruction.' . . (p. xix)

> . . . the method of mathematical instruction cannot be the

imparting of mathematical 'truths,' but must, instead, be the setting up of circumstances which will induce the learner to achieve in his own mind—i.e. to reconstruct—the conceptual entities and relational functions the mathematicians have 'discovered.' The logic of reconstruction, thus, becomes crucial to the didactic endeavor and Richards's analysis suggests that to ensure the learner's reconstruction, a good deal more is needed than the mere description of the mathematical constructs he is to acquire. (p. xx)

The task for the trainer clearly shifts from "mere description" of the constructs the learner is to acquire, to attempting to understand the existing understandings and meaning systems of the learner. This is not to say, however, that there are no standards against which a learner's constructs might be assessed, although one might be forgiven for thinking this on the basis of comments such as the following by Rathbone (1971):

> Individualization in learning goes well beyond any single notion of 'each according to his own speed.' Open education sees a fundamental independence of each learner from all others, from all would-be assistants such as teachers . . . , and from all codified knowledge as it exists in universities or texts. It holds the individual [learner] capable of interacting with and learning something from nearly any responsive element in his environment. (p. 103)

Constructivism is sometimes criticised for its apparent willingness to accept each person's interpretation of events as being as valid as every other person's, as if there were no criteria for judging among them. However, not all constructions are equally useful or valid, and one purpose of education may be to allow people to 'reconstrue' events and ideas in ways that lead to more functional outcomes for them (Freire, 1972). It is often difficult to do this in isolation, or at least in the absence of guidance, and this may constitute one of the major arguments in favour of guided instruction; otherwise learners are 'trapped' by their own constructions, without access to alternative ways of

viewing events and ideas.

As discussed in the last chapter, the willingness to accept uncritically each respondent's interpretation is one of the criticisms aimed at constructivism by advocates of a critical science approach: "If psychological interpretation . . . simply reiterated and repeated the life world of some particular cultural form, it would be redundant. One could call such interpreters 'scribes' rather than interpreters, since nothing new would be added to the situation" (Sullivan, 1984, p. 118). This is a timely observation in the present context. If the reframed research into self-direction did no more than "simply catalogue" learners' understandings, it is unlikely to result in a useful reinterpretation of the dynamics of 'self-directed learning.' By the same token, accepting the premises of constructivism, "it would be foolish to venture that there must be one *correct interpretation* . . . the whole process of interpretation must be carried out with a considerable degree of humility and openness [which] is characterised as a dialogue between the interpreter and the interpreted" (Sullivan, 1984, p. 119).

E. SUMMARY

Despite its central importance, the subject of epistemology is frequently ignored in programs of educational research. This means that people's views of what constitutes knowledge are rarely challenged, and so rarely thought through explicitly. The purpose of this chapter has been to introduce the major tenets of constructivism, and to consider some of its implications for research into 'self-direction,' including self-directed learning. This is based on the notion that constructivism, although it is a complex and somewhat controversial philosophical and epistemological position, provides a better 'fit' with the phenomenon of

self-direction than does the more conventional positivist view.

One particularly useful way of looking at knowledge is the scheme proposed by Habermas, and elaborated with respect to adult education by Mezirow (1981, 1985). Habermas proposed that there are three distinct domains of knowledge. Two of the domains concern 'public,' and one concerns 'private' forms of knowledge (Polanyi, 1967; Thomas & Harri-Augstein, 1985).

The first part of the 'public' domain concerns knowledge about the environment, and how to manipulate, control and work within the environment. Instrumental action is governed by technical rules, and involves predictions about observable events—physical or social—which can prove correct or incorrect (Mezirow, 1981, p. 4).

A second form of 'public' knowledge, which Habermas (1970) typifies as 'practical' or 'communicative' knowledge, "is governed by binding consensual norms which define reciprocal expectations about behavior and which must be understood and recognized by at least two acting subjects. Social norms are enforced through sanctions [and] . . . while the validity of technical rules and strategies depend on that of empirically true or analytically correct propositions, the validity of social norms is grounded only in the intersubjectivity of the mutual understanding of intentions and secured by the general recognition of obligations" (Habermas, 1970, p. 92).

In this view, the creation, distribution and interpretation of knowledge are social processes involving everyone (Lawson, 1982, p. 36). Becoming knowledgeable involves acquiring the symbolic meaning structures appropriate to one's society and, since knowledge is socially constructed, individual members of society may be able to add to or change the general pool of knowledge. Teaching and

learning, especially for adults, is a process of negotiation, involving the construction and exchange of personally relevant and viable meanings (Pope & Shaw, 1979; Thomas & Harri-Augstein, 1982, p. 2). This trend is "reacting to the excesses of the mechanistic, positivist account of knowledge" (Crittenden, 1978, p. 108), and is in turn part of a larger backlash against positivism generally (Carr & Kemmis, 1983; Manicas & Secord, 1983; D. C. Phillips, 1983).

The third area of cognitive interest, or domain of knowledge, is private, and Habermas characterises it as 'emancipatory.' This domain is not concerned with the external world as much as it is with the learner's own self-awareness and, according to Mezirow (1981):

> This involves an interest in self-knowledge, that is the knowledge of self-reflection, including interest in the way one's history and biography has expressed itself in the way one sees oneself, one's roles and social expectations. Emancipation is from libidinal, institutional, or environmental forces which limit our options and rational control over our lives, but have been taken for granted as beyond human control (p. 5).

This sees knowledge as idiosyncratic and personalistic: each person has a unique world view, based on his or her unique, cumulative life experience. There is no order to knowledge but that which the learner sees in it, and thus curriculum in the sense of a stable, ordered, logical exposition of subject matter is impossible. Teaching, therefore, can be no more than facilitating learning which, by definition, is "coterminous with life" (Lindeman, 1925, p. 3). Mezirow claims that this is the most distinctively adult form of learning because it refers to the learning which occurs as people move through "the existential challenges of adulthood, ... negotiating an irregular succession of transformations in 'meaning

perspective" (Mezirow, 1981, p. 6).

The constructivist approach, which deals with attempts to understand the meaning of intentional actions, fits within the second of Habermas' knowledge-constitutive domains, and as such may suffer from the criticism levelled at the hermeneutical sciences generally, namely that they "tend to ignore the role of authority and power in meaning constitution" (Sullivan , 1984, p. 124).

The chapter began by contrasting the assumptions underlying constructivism with the more familiar positivistic position that "the activity of 'knowing' or 'cognizing' [is] viewed as a kind of copying or replicating. The copying subject was thought to acquire or build-up inside himself a replica or image-like representation of the outside things, i.e. the *real* object which he is getting to know" (von Glasersfeld, 1974, p. 7). Central to constructivism is the idea that people are 'self-constructing,' and that they can reconstrue their circumstances through the application of their personal world view. The behaviour of people is seen as purposive and intentional, and thus researchers need to attempt to enter into the understandings which actors have of their own situations. Five major corollaries of this assumption were mentioned: (1) the striving for personal autonomy is a natural state of affairs, though it may be retarded or constrained by social circumstances; (2) personal autonomy is a process rather than product: it is continually renewed, rather than being a static accomplishment; (3) autonomy is determined partially by personal characteristics, and partially by environmental circumstances— people can be given freedom, but they cannot be given autonomy; (4) people's search for a dynamic equilibrium is mediated by, and accomplished through, a complex belief system or set of personal constructs having both cognitive and affective dimensions; and (5) constructivism sanctions

both action-research and naturalistic inquiry methodologies.

It was argued that, as people develop and mature, they acquire a set of personal constructs (also called associational networks or schemata) which act as the perceptual filter through which they observe, experience and evaluate events. These personal constructs are not immutable, they can be changed, but provide the framework through which, and into which, all new learning is appropriated.

Although there is presumed to be an external reality, knowledge is not derived from mapping or reflecting the externalities of the real world, but is constructed by developing representations which *fit* rather than *match* this external world. Since each person experiences reality slightly differently, knowledge is always somewhat idiosyncratic. However, it is easy to lose sight of the fact that many aspects of a person's knowledge are actually shared with others, being influenced by factors such as age, gender, class, and cultural background, and that much knowledge is accordingly intersubjectively grounded and consensually validated, rather than being completely individualistic.

Teaching is not a process of transmitting knowledge intact to learners, but a matter of negotiating meanings. Learning was asserted to be an active process of *constructing* a system of meanings, and then using these to *construe* or interpret events, ideas or circumstances. As such, the constructivist view of learning is particularly compatible with the notion of self-direction, as it emphasises the combined characteristics of active enquiry, independence and individuality in a learning task. According to von Glasersfeld and Smock (1974), however, the appropriateness of constructivism is not limited to the domain of self-directed learning:

> Many of the fads and foibles of educational practices, at all levels, are recurrent simply because of the failure to clearly conceptualize the

epistemological bases of instructional theory and practice. The recent return to 'discovery' methods, 'open' classrooms, and activity-based curricula accentuates, for example, the need for modification of teacher-training programs in the direction of consistency with a constructivist epistemology. It is doubtful whether any technology (materials and methods) can be invented that will prevent teachers trained as 'absolute realists' from using these innovations in such a way that the intended objectives cannot be achieved. (p. xvii)

The purpose of the next chapter is to explore the links between self-direction and constructivism by examining the convergence of their underlying assumptions.

X. CONSTRUCTIVISM AND 'SELF-DIRECTION': A REVIEW

A. INTRODUCTION

This dissertation has several purposes. One of the most significant has been to critically review the literature and to demonstrate the shortcomings and inadequacies of previous research into self-direction, which occupies a central position in the discourse of adult education. It has been suggested that such research could profitably be redirected through the adoption of a constructivist perspective. Before proceeding to this, however, it is appropriate to review the argument thus far and, in particular, to compare what might be termed the 'traditional' or 'conventional' view of self-direction with the constructivist view.

To recapitulate briefly, chapter three concerned 'self-direction' as a personal attribute, chapters four to seven were devoted to a critical analysis and review of the literature on two major educational domains—autodidaxy and learner-control—chapter eight compared and contrasted major paradigms in educational research and chapter nine contained an overview of constructivism. It is the purpose of this chapter to draw together these various strands and to link the extensive literature on self-direction with the concept of constructivism.

Although it is not universally true, much previous research into 'self-direction' and in particular into learner-control, has been based tacitly on the assumption that educators can unilaterally manipulate instructional situations in order to bring about both increased personal autonomy and increased control over a number of dimensions such as objective setting, content, sequencing, pacing, mode of learning and evaluation of outcomes. It has been pointed out that it is often artificial and arbitrary to subdivide and compartmentalise these dimensions

in this way, for control over one tends to lead inevitably to demands for control over the other parts as well.

Some instructional modes encourage greater acceptance of learner-control than others; for instance, discovery-learning versus a lecture format, or individualized instruction versus a group-based curriculum. However, as Snow (1980) notes, "The question for research on learner-control is too simply put if it concerns only whether or not learners are allowed to choose their own amounts, sequences, contents or methods of instruction." This is because "learners always exercise some degree of control over their own. . .activities during instruction, regardless of treatment. . . Learners differ. . .in how they exercise control, both when they are, and are not given it directly" (p. 157).

Some have argued that, irrespective of the teaching approach employed, the personal 'style' and presentation of the instructor is the variable which affects the extent of learner-control, but Perry and Dickens (1984) cite the instance of a hypothetical 'disorganised teacher' who may have unpredictable, and even opposite, effects on various learners. On the one hand, such a person may cause "students lacking in control [to] feel even more out of control" or paradoxically, may force students to "work harder [in order] to organize their notes and to ask more questions." On the other hand, an organized teacher employing structured methods "may lower perceived control because it limits teacher-student interaction, resulting in less personal contact" or alternatively "the greater responsibility. . .may enhance perceived control" (pp. 966-967).

Thus it appears that neither the mode of instruction *per se*, nor the instructor's personal characteristics, can adequately explain the phenomenon of learner-control, and this clearly calls into question attempts such as that by

Moore (1972, 1973) to classify educational programs according to the degree of autonomy permitted to the learner. Although some programs permit more control, unless learners feel capable of exerting control, no *real* change has taken place. Thus, central to the notion of 'self-direction' is the learner's sense of personal control.

B. THE LEARNER'S SENSE OF PERSONAL CONTROL

When researchers switch their attention from the situational to the personal aspects of learner-control, whether in autodidaxy or instructional settings, most often their work has been predicated on the notion that autonomy is a general disposition: a personal characteristic which will manifest itself in a variety of situations. Instruments such as the Self-Directed Learning Readiness Scale (Guglielmino, 1977; Guglielmino & Guglielmino, 1982) are based on the view that respondents can answer general questions which reflect their disposition to behave in certain ways in specific situations. Moreoever, it is also tacitly assumed that the capacity for 'self-direction' in learning can be developed in a 'content-free' way, without reference to specific circumstances in which learners may be autonomous.

On the surface, it does seem as if a preference for autonomy in learning is a relatively stable and enduring personal characteristic, a correlate of some established dimension of personality such as field-independence. However, if autodidaxy is as widespread as some claim, it is apparent that not all autodidacts feel capable of exerting control in instructional settings. Conversely, some learners assumed to be lacking in autonomy may function autonomously in a particular learning setting. This apparent contradiction is explained in two

ways. Firstly, learner-control is situationally variable; and secondly, this situational variability is determined by the learner's subjective construction of the situation.

As mentioned elsewhere in this dissertation, many adult educators seem to value learner-control because they believe it to be worthwhile in itself, or because it will lead to valued outcomes such as the ability to learn autonomously. There is evidence that increased learner-control, especially over a protracted period, leads to the demand for more control, and often to a generally enhanced capacity to direct one's own learning. But, except tangentially, there is little evidence to suggest that increased learner-control necessarily results in heightened autodidactic activity. Moreover, increased learner-control in one subject or topic, often does not 'carry over' to another topic area. The reason is that different learning activities are *construed* by learners in different ways.

Whereas other authors write as if learner-control is a commodity, in a very detailed review of the literature, Wang (1983) observes that many recent studies have established a link between "students' *sense* of personal control and their learning processes and outcomes" (p. 213). The perception of personal control is defined as "students' belief that they are personally responsible for their school learning" (p. 214) and, according to Wang, this notion is strongly influenced by Rotter's (1966) concept of locus of control. Wang summarizes studies which reveal that internal locus of control is positively related to: degree of classroom participation, academic performance, scores on academic achievement tests, ability to delay gratification, reflectivity, attentiveness, and rates of knowledge acquisition.

Given, then, that internal locus of control seems to be related to a number of desirable attributes, the next question is whether it is amenable to

educational intervention. Wang summarizes a number of studies from 1969 to 1979, all of which suggest "that locus of control orientation can be modified" (p. 216). Accordingly, based on the dual assumptions (1) that students' sense of personal control greatly affects their learning processes and outcomes; and (2) that students' sense of personal control can be modified through instructional intervention (p. 216), Wang hypothesises a model for the development and consequences of students' sense of personal control. Implicit in this model is the transactional influence between the teacher and the student in the latter's development of a sense of personal control (see Figure 9).

According to Wang, there are two parallel dimensions, or "critical design characteristics" in programs intended to develop the learner's sense of personal control. These are (1) instruction in, and opportunities to practise, self-management skills; and (2) instruction in, and opportunities for mastering academic skills (p. 218). Wang claims that the sense of personal control derives from the accomplishment or attainment of these two sets of skills.

1. Self-management skills

Self-management skills are defined as "skills related to management of the learning environment and the learning process," and they include:

(a)   obtaining and returning learning materials and equipment;
(b)   searching out, ordering and organising information;
(c)   breaking complex tasks into meaningful and manageable subparts;
(d)   setting realistic goals and learning tasks; and
(e)   estimating the amount of time and effort required to complete a task.

These 'self-management skills' bear a marked resemblance to many of the items included in the profile of an autonomous learner discussed in chapter five (see also Appendix A). Wang (1983) writes: "Few attempts have been made to
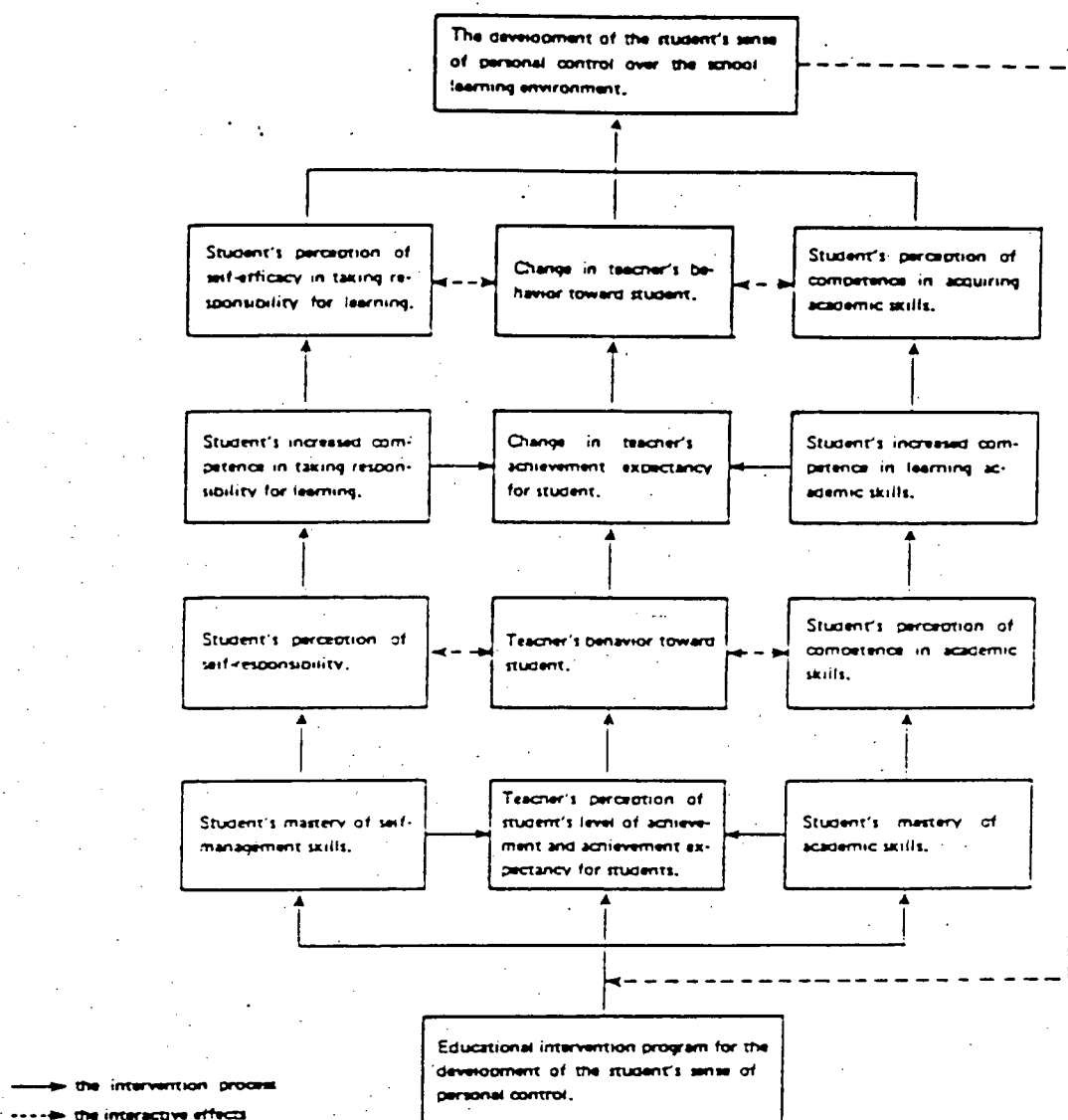
Figure 12: A conceptual model of the development and consequences of the student's sense of personal control

(reproduced from Wang, 1983, p. 217)

develop self-management skills through instructional intervention. . . . It is usually assumed that such skills are present in more 'socially mature' and 'academically able' students, and are developed in other students as they become 'socialised' during the process of schooling" (p. 219).

It is, however, possible to design learning environments to develop these

self-management skills, and Wang reports "that students in classrooms designed with 'learner-controlled instruction' features were more autonomous, engaged in more conceptually-based information exchanges, and asked more questions than students in traditional classrooms. . . When [learners] were taught self-management skills, and provided with opportunities to use them, they became more independent, and their task completion rates increased significantly. . ." (p. 219). However, as discussed in chapter nine "implementation of instructional programs that encourage the development of self-management skills requires fundamental changes in the traditional classroom authority structure and instructional-learning process" (p. 219).

2. Academic skills

The second critical design characteristic in developing learners' sense of personal control is "the extent to which learning environments provide opportunities for each learner to experience success in acquiring academic. . .skills" (p. 220). Central to the development of academic skills is Bandura's (1981) notion of 'self-efficacy,' defined as "the ability to process information conveyed by an event, weigh all the elements of the prospective situation, and then make judgments about how to organize and carry out the necessary actions to deal with that situation" (in Wang, 1983, p.220). According to Wang, such self-efficacy can be enhanced through various forms of education which "focus on adapting learning to student differences". Wang (1983) goes on to specify how instruction can be adapted to these individual differences through:

(a)   built-in provision for permitting students to enter a given subject area at entry points based on analyses of their individual competencies and learning needs;

(b)   provision for alternative approaches to instruction, including options for selecting learning tasks and learning objectives;

(c)   explicit statements of student performance standards, as well as alternative ways of assessing success;

(d)   hierarchical grouping of learning objectives in small subsets with built-in checkpoints that allow for teachers to give formal and informal feedback; and

(e)   required student acquisition of each set of skills before proceeding to the next level (p. 221).

It can be seen from the foregoing that this model, even though it is based on the student's *sense* of personal control, is not consonant with a constructivist perspective. It still portrays knowledge as existing outside the learner ("permitting students to enter a given subject area at entry points based on analyses of their competencies"); it sees knowledge as naturally existing in some absolute way, with its own logic ("hierarchical groupings of learning objectives"); and it still views learner-control as a method of organising instruction ("built-in checkpoints that allow frequent opportunities for teachers to give feedback"; "required student acquisition of each prerequisite subset of skills before proceeding").

C. COMPARING CONSTRUCTIVISM WITH OTHER PARADIGMS

Wang's view differs in important respects from the perspective put forward in this dissertation. Here, it has been argued that the learner's sense of personal control in any situation is not directly manipulable by the instructor, but arises from the learner's subjective construing of the learning situation. Wang's work also typifies another tendency discussed in this dissertation, the mixing together of assumptions derived from differing research paradigms. In this case, she has made use of the notion of teachers' expectancies and of learners' perceptions, both of which are congruent with a constructivist perspective. However, she has combined these with other assumptions (and language) which

owe more to a positivist or reductionist point of view, such as "breaking complex tasks into manageable subparts" and "hierarchical grouping of learning objectives in small subsets."

Throughout the literature, there are examples of this sort, where the notion of personal autonomy (or of learner-control) appears superficially to be treated from a constructivist point of view, but where the researcher still seems to be influenced by an alternative set of assumptions. Therefore, before attempting to reframe research into 'self-direction' from a constructivist perspective, it is appropriate to summarise the assumptions which appear to be implicit in much previous research in this domain, and to compare them with constructivist assumptions. This summary is shown in Table 1. Several preliminary observations about the table are demanded.

The first observation is that any table such as this inevitably involves some compression, which can cause distortion. In attempting to be concise, some subtleties may be lost. The second observation is that researchers rarely make explicit the assumptions underlying their work. Thus it is necessary to infer assumptions from the way the study is framed and written. Such inferences may be incorrect in any particular case, although the combined effect of how a study is framed, undertaken, and written-up is usually a good guide to the underlying assumptions.

A third observation is that in both cases, but especially the 'traditional' assumptions, authors do not always subscribe to the position as presented here, but rather to a modified, usually a 'softer' version. Thus, assumptions should not be thought of as fixed points, but as continua with varying degrees of intensity. The fourth observation is that clearly not every previous piece of research or

writing on self-direction will embody all the assumptions listed here. It is not implied that all previous research will exhibit the same biases, or to the same degree; however an extensive review of the literature reveals a recurring tendency towards these core assumptions.

This gives rise to a fifth, and very significant observation, which is that it is possible to discern, in the literature, instances where researchers seem to have mixed incompatible or incommensurable assumptions derived from differing research paradigms. Wang's (1983) research discussed earlier in this chapter is an example. It has been argued throughout this dissertation that this tendency to incorporate assumptions, and to import methodologies, derived from different paradigms has made it difficult to develop integrative reviews of the literature, because the findings reported are often 'hybrid.'

The sixth and final observation concerns the "selected implications" column at the right edge of the table. It is suggested that if a constructivist perspective were adopted, research into certain phenomena would seem appropriate. For the most part, these areas of interest have not been the focus of previous research into self-direction. This list is not intended to be exhaustive, but suggestive of directions for further research. Each research suggestion refers to one of the recommendations dealt with in the next chapter. Every recommendation appears under several different headings, and many of the assumptions give rise to several different recommendations. This is intentional. Part of the essence of research from a constructivist point of view is the integrated and holistic nature of phenomena to be studied. Thus it is appropriate that some assumptions give rise to several areas of research, and conversely that some areas of research reflect a cluster of related assumptions.

Table 1: COMPARISON OF ASSUMPTIONS UNDERLYING PREVIOUS RESEARCH AND THOSE UNDERLYING CONSTRUCTIVISM

Dimension	Implicit assumptions underlying previous research	Constructivist assumptions	Selected implications for research into self-direction from a constructivist perspective
Personal autonomy	Individuals can be described as autonomous based on objective evidence of their behaviour.	Individuals can be described as autonomous based on their behaviour and their view of themselves in any situation.	Learner's self-concept generally and in particular situations (Rec. Seven).
	Personal autonomy is a stable personal attribute.	Personal autonomy varies from situation to situation.	Learner's perceptions of opportunity to exercise autonomy in a range of settings (Rec. Eight).
	Personal autonomy is a static accomplishment which can be achieved as part of a developmental continuum.	Because personal autonomy is situationally variable, and depends on the person's subjective judgements, it may be a lifelong pursuit.	Longitudinal studies to establish components of learner's striving for personal autonomy (Rec. Eight). Criteria used to choose between goal attainment and pursuit of autonomy (Rec. Five).
	Personal autonomy can be developed through educational interventions.	Many aspects of personal autonomy arise from a combination of natural disposition, early socialising influences and prior educational experiences.	
	Personal autonomy can be developed through the use of methods of learning which stress independence and/or individualisation.	There is no invariant link between techniques of instruction and the development of personal autonomy. The learner's own subjective experience and personal meanings influence how any particular educational encounter is construed.	Learner's view of different instructional techniques and opportunities for development of personal autonomy. Comparison of different learners' views of same instructional experience (Rec. Eight).

Dimension	Implicit assumptions underlying previous research	Constructivist assumptions	Selected implications for research into self-direction from a constructivist perspective
	The development of personal autonomy is a major goal of adult education.	The development of personal autonomy is not the only goal of adult education, nor is it only the goal of adult education.	
Autodidaxy	The ability to undertake an autodidactic project is indicative of the ability both to undertake other such projects and to exert control in the instructional setting.	Competence in one domain is not necessarily transferable to other situations unless the learner can see salient similarities between the two contexts.	Learner's self-concept as a learner (Rec. Seven). Learner's view of subject-matter and learning strategies (Rec. One).
	Learning projects can be studied and understood without reference to the specific intentions and purposes of the learner.	Learning projects can best be studied and understood in the context of the specific intentions and purposes of the learner.	Learner's intentions and purposes (Rec. Three).
	Autodidactic projects bear an underlying similarity to one another which distinguishes them from other approaches to education.	Autodidactic projects differ from one another in important ways, depending on the nature of the material to be learned, and the learner's interpretation of the learning task.	Learner's previous knowledge and conceptual frameworks (Rec. Four).
	Learning projects follow a predictable sequence (either linear or cyclical) and have identifiable objectives.	Learning projects occur in complex and unpredictable patterns, the learners taking opportunities as they present themselves, and constantly reformulating their purposes.	Learner's intentions and purposes (Rec. Three). Changes in learner's approach to learning tasks as they proceed (Rec. Two).

Dimension	Implicit assumptions underlying previous research	Constructivist assumptions	Selected implications for research into self-direction from a constructivist perspective
	The qualities of an autodidactic project remain constant throughout its duration.	The qualities of an autodidactic project change as the project progresses and in particular as the learner attains the ability and confidence to question expert opinions.	Learner's changing conceptions as familiarity with material increases (Rec. Three). Evolution of learner's structures of meaning and anticipatory schemes as learning proceeds (Rec. Four). Learner's changing self-concept (Rec. Seven).
	Learning is best considered as the acquisition of quanta of knowledge or skills.	Learning is best considered as the transformation of personally relevant and viable meanings.	Learner's view of learning – deep-level or reproductive (Rec. Four).
	Autodidaxy can be utilised by a program planner or educational agent as a strategy for the attainment of educational goals or aims.	Autodidaxy lies outside the ambit of educational strategies which can be invoked by an educator because the initiative (ownership) rests with the learner.	Learner's intentions and purposes (Rec. Three). Learner's view of distinction between assistance and direction (Rec. Five). Instructor's views of autonomy in learning (Rec. Nine).
	Those who assist autodidacts with their projects can meaningfully be classified according to objective criteria such as amateur or professional, intimate or acquaintance.	Those who assist autodidacts with their projects are better viewed and may be classified according to the criteria actually employed by the learners themselves.	Impact of learner's changing purposes and intentions (Rec. Three). Learner's views of distinction between assistance and direction (Rec. Five).

Dimension	Implicit assumptions underlying previous research	Constructivist assumptions	Selected implications for research into self-direction from a constructivist perspective
	Resources utilised by autodidacts can be classified into categories according to public criteria such as human and non-human and in the latter category, print and non-print.	Resources utilised by autodidacts can more usefully be described and classified according to criteria employed by learners themselves.	Learner's views of usefulness of resources (Rec. Six).
Learner-control	Attitudes and skills necessary to the exercise of learner-control can be taught as curricular content.	Attitudes and skills necessary to the exercise of learner-control can be taught partly as curricular content, but are learned primarily through the way in which instruction is conducted.	Teacher's views of practices likely to enhance learner-control (Rec. Nine). Learner's views of changing nature of learning task (Rec. Three).
	Attitudes and skills necessary to the exercise of learner-control are generic and can be transposed from situation to situation.	Attitudes and skills necessary to the exercise of learner-control are partly generic and partly situation-specific.	Learner's view of knowledge (Rec. One). Learner's view of assistance or direction (Rec. Five).
	Learning contexts can be classified as learner-controlled or teacher-directed on the basis of objective criteria.	All learning contexts involve at least some learner-control. The learner's subjective view determines in part the extent to which a situation may be classified as learner-controlled.	Learner's frames of reference and views of subject matter (Rec. Four). Learner's view of distinction between assistance and control (Rec. Five).
	Instructors can give learners control over valued functions in the instructional setting.	Instructors can create circumstances and encourage learners to exert control over valued instructional functions.	Instructor's views of learner autonomy (Rec. Nine).

Dimension	Implicit assumptions underlying previous research	Constructivist assumptions	Selected implications for research into self-direction from a constructivist perspective
	If instructors relinquish sufficient control over the instructional setting, learners will eventually attain full ownership over the teaching/learning situation.	Learners will not attain full and undisputed ownership of any teaching/learning situation while they construe the instructor as still exerting some residual authority.	Learner's view of assistance or direction (Rec. Five). Learner's awareness of cues in the learning situation (Rec. Seven).
	It is possible for instructors to relinquish control over some elements of the instructional situation, while maintaining control over others.	The instructional situation is an integrated whole, and learner-control over some dimensions is likely to lead to demands by learners for control over other dimensions.	Instructor's views of learner autonomy (Rec. Nine). Instructor's view of the helping nature of relationship (Rec. Ten). Learner's changing self-concept (Rec. Seven).
	Independence from external constraints is the major determinant of the ability to exercise learner-control.	Independence from both internal and external constraints is the major determinant of the ability to exercise learner-control.	Learner's perception of assistance and direction (Rec. Five). Learner's view of self as learner both generally and in particular situation (Rec. Seven).
	An inability on the part of the learner to exercise control in an instructional situation may be best explained in terms of learned-helplessness (i.e., the generalised belief that there is no contingent relationship between one's actions and the outcomes of those actions).	The unwillingness on the part of the learner to exercise control may be better understood either as deliberate situational adjustment or as a personal learning myth. In either case, it is related to the learner's view of the particular learning situation.	Learner's view of self as learner (Rec. Seven). Teacher's response to perception of learner's need for help (Rec. Ten). Changing nature of learner's motivation and learning strategies (Rec. Three).

Dimension	Implicit assumptions underlying previous research	Constructivist assumptions	Selected implications for research into self-direction from a constructivist perspective
	The ability to exert control in an instructional setting will manifest itself in increased competence to undertake autodidactic projects.	The ability to exert control in an instructional setting may result in increased competence (i.e., skill and confidence) to undertake autodidactic projects if the learner construes the situations as comparable.	Learner's view of learning situations causing feelings of particular competence or disability (Rec. Seven). Learner's view of relationship between subject-matter and learning strategies (Rec. One).
The nature of inquiry	Reality is single, fragmentable, comprising dependent and independent variables.	Realities are multiple, holistic, best studied as a unified whole.	
	The researcher maintains a distance from the object of study. Researcher and subject are independent and separable.	Researcher and the object of inquiry are interactive. Human subjects are influenced by the process of inquiry.	
	Time and context free generalisations (i.e., nomothetic statements) are possible.	Only time and context bound working hypotheses (idiographic statements) are possible.	
	Effects are related to temporally precedent or contemporaneous causes.	Causes and effects are in a constant process of mutual simultaneous interaction and shaping.	All of these assumptions are relevant to the conduct of research. Constructivism sanctions both action-research and naturalistic inquiry modes. See Appendix B: A note on research methodologies.
	Inquiry is value-neutral – "the facts speak for themselves."	Inquiry is value-laden, as reflected in the choice of problem, and framing, delimiting and focussing of the problem.	
	The purposes of inquiry are understanding, prediction and control.	The purposes of inquiry are understanding, explanation and interpretation.	

D. SUMMARY

It has been the purpose of this chapter to act as a bridge linking the review of the literature on self-direction with the premises or assumptions underlying constructivism. The chapter began by asserting that much previous research into 'self-direction' (and particularly learner-control) has been based on the assumption that autonomy is a context-free attribute or disposition which an instructor can develop in learners. However, central to the learner's autonomy in learning situations is a *sense* of personal control, defined as the learner's personal belief that he or she is responsible for, and capable of, directing his or her own learning. This sense of control cannot be *given* to learners by an instructor or trainer. It was asserted that this sense of personal control has, as stated elsewhere in the dissertation, two components—the skills and abilities related to the management of the learning environment and process, and the ability to process information and make judgements about the subject matter being learned. Wang (1983) refers to these as "self-management skills" and "academic skills" respectively.

In reviewing how these skills might be operationalised and developed through instructional interventions, however, it became apparent that what at first sight appears to be a constructivist perspective (the learner's *sense* of personal control) turns out to be grounded in more reductionist assumptions. This led to a comparison between the core assumptions underlying much (though not all) previous research into self-direction, and the assumptions associated with a constructivist perspective. The comparison was presented in a tabular format, perhaps giving the impression that the two positions are clearly defined in research. In fact, many researchers adopt freely from both, with the result that

research findings reflect a mixture of paradigms.

The chapter also identified selected implications for research into self-direction from a constructivist perspective. These are cross-referenced with chapter eleven, and it is shown that some constructivist assumptions call for research into several phenomena, and conversely that research into some phenomena is based on several assumptions. This is congruent with the constructivist assumption that situations are construed holistically, rather than in a piecemeal way. In the next chapter, attention will be focussed on reframing research into self-direction, and identifying a number of themes which researchers might consider from the constructivist point-of-view.

XI. REFRAMING RESEARCH INTO 'SELF-DIRECTION'

A. INTRODUCTION

One of the recurring themes of this dissertation has been that personal autonomy is not objectively determinable, but depends in large measure on the actor's subjective interpretation in any particular situation. It has been argued that research into self-direction generally has failed to take adequate account of the personal perspective of those being researched, and that constructivism offers a framework whereby such research might be reformulated and approached from a different standpoint.

Central to constructivism are the personal purposes, intentions and frames of reference which individual actors, in this case the learners themselves, bring to bear in any circumstances. In learning situations, these influence everything from the initial willingness to engage at all, to the help sought and resources used, to the outcomes arising from the learning encounter. Yet it is precisely this perspective which is almost totally absent from research and writing about 'self-direction.' In the case of assistance sought by learners, little attention is given to the *personal significance* which such help might have for the learner. In the case of an autodidactic project, one rarely encounters descriptions of what the learner *feels* or what he or she *thinks* as the project takes shape. In considering the issue of learner-control, few researchers seem sensitive to the fact that the learner's *perception* of being in control is more vital than some arbitrary set of circumstances engineered by the instructor.

The absence of this perspective is so generalised that it is difficult to detect, akin (as Ruddock, 1981, points out) to the problem that a fish might

have in discovering water. Moreover, the perspective itself is so unusual in adult education research, its implications so far-reaching, that it is difficult to grasp fully its significance. If the learner's understanding of his or her own situation is used as the vantage point from which to survey the 'learning landscape,' the researcher needs to become accustomed to viewing issues from a range of unfamiliar, and possibly even incompatible, points of view.

This position is difficult to accept. The presumed relationship between 'objective reality' and knowledge is so profoundly rooted in our culture, including that of educational research, that one readily embraces the idea that circumstances (such as the purpose or progress of a learning endeavour) can be systematically described from a unitary perspective; that if only one were able to get inside some sort of hypothetical helicopter and fly over the terrain, its features would look the same to everyone, and could be 'mapped' accordingly. However, as Ryle (1975) points out, in any given situation, it is almost "as if the participants are using charts with the same titles, but with systematic differences of scale, shape and direction in respect of the main features" (p. 2).

It is intended in this chapter to inject a constructivist perspective into enduring problems in the area of self-direction in learning. It has already been demonstrated, in the same way that a radioactive injection is used in diagnosing cardiac problems by showing up constrictions and blockages in the flow of blood, that research into self-direction has been stultified and limited. It is intended to demonstrate profitable new directions in research which might be opened up and exploited. Constructivism might do for the study of self-direction what open-heart surgery can do for an ailing heart: give it a new lease of life.

Although a constructivist perspective might allow for new approaches to

existing research concerns, it is predicated on such different assumptions from most conventional research in this area, that its adoption is more likely to render redundant some 'traditional' areas of research interest, and to direct the attention of researchers into entirely new, or undeveloped, areas of inquiry.

One corollary of adopting a constructivist perspective is that the researcher becomes aware of precisely whose perspective is being presented. The issue of 'self-direction' at least in formal instructional settings (and to a lesser extent in situations of autodidaxy) can be viewed from the perspective of the learner as well as that of the teacher/trainer/coach/facilitator or helper. Thus, in the discussion which follows, the domain of research interest will be subdivided according to the perspective taken— that of the learner or of the person assisting the learner.

B. AUTONOMOUS LEARNING FROM THE LEARNER'S PERSPECTIVE

Despite protestations of learner-centeredness, it is relatively unusual to encounter studies of autonomous learning, whether in formal instructional settings or in the natural societal setting, which represent the situation in the language of the learner, from the point-of-view of the learner. However, it has been argued that the learner's subjective construing of the situation significantly influences the strategies he or she employs, which in turn is a major factor in the outcomes obtained. This subjective construing includes at least four parts: (1) the learner's view of learning in general; (2) the learner's view of this specific learning endeavour; (3) the learner's view of assistance or direction received; and (4) the learner's view of autonomous learning and the development of personal autonomy. In the remainder of this section, these four aspects will be considered;

each of these, in turn, comprises a number of subsidiary elements, related to each other in complex ways.

1. The learner's view of learning in general

If one were to observe learners approaching a particular learning task, it would be possible to detect a number of different strategies. To take a simple example, confronted with the need to learn a new language, one learner may approach the task with a sort of grim determination, equipped with such paraphernalia as phrasebooks and dictionaries, tape recorders and notepads. Another may choose to live among native speakers, seeking to absorb the language in all the fullness and richness of its cultural context. Such differences in learning strategy could be ascribed to different learning styles, but on what are such differences based? To some extent, learning style preference might be related to personality, but it is also related to the way in which learners view learning itself and this, in turn, depends on two things: their view of knowledge, and their approach to learning tasks.

a. The learner's view of knowledge

Throughout this dissertation, one recurring theme has been the learner's view of the nature of knowledge, and how this may affect his or her willingness (or ability) to be 'self-directed' in learning. At one extreme, it is possible to discern the view that knowledge is fixed, enduring and external; that it has to be 'mastered.' Such an understanding implies that learners need 'study skills' in the same way that a mountaineer requires such accoutrements as crampons, ropes and steel spikes (not to mention a head for heights!). People who view

knowledge this way assume that some approaches to learning are 'safer' than others, and that one must master the easier parts before launching an attack on the summit. Autodidacts seeing knowledge this way would try to familiarise themselves with the 'basics' of their chosen field, before progressing to advanced levels, in the belief that 'basic' and 'advanced' are somehow properties of the subject matter, rather than of the learner. It will be noted that this view does not in any way imply passivity on the part of the learner, who may well have to undertake massive exertions in order to "appropriate previously consituted knowledge" (Millar et al., 1985, p. 18).

An alternative view of knowledge is that it is labile, evanescent and socially constructed. The learner is involved in actively constructing meanings and hence still requires tools, but different tools. In viewing knowledge thus, the learner becomes responsible for transforming understandings through reflection on experience (Boud, Keogh & Walker, 1985). Learning is not, and cannot be, a matter of rote memorisation, nor of simply 'increasing knowledge,' but is instead "an interpretive process aimed at the understanding of reality" (Gibbs et al., 1982, p. 134).

It has already been mentioned that, as learners become more 'mature' they tend to see knowledge differently. Perry's work suggests that, as students progress through university, they frequently come to view the subject they are studying in more relativistic terms, and research with autodidacts (e.g., Brookfield, 1981; Nolan, 1981) shows much the same phenomenon. However, attaining a level of epistemological sophistication in one topic area or domain does not necessarily influence people's view of knowledge more generally. Hence it is possible for someone to have an advanced knowledge of one subject area, yet to

regard something unfamilar as an impenetrable mystery. Not unexpectedly, such a view would dramatically alter the learning strategies employed, the kind of assistance sought, and the learning outcomes obtained (see Table 1, Learner Control).

Recommendation One: Researchers should examine how learners construe differing subject areas which they are attempting to learn. By virtue of the learners' unfamiliarity with the subject matter, this may entail research techniques which stress analogy and metaphor, and which call on the learner to describe their learning strategies in abstract or metacognitive terms.

b. The learner's approach to learning tasks

Acting as a sort of bridge between the learner's view of knowledge on the one hand, and his or her view of a specific learning endeavour on the other, is the understanding of what it means to learn. As part of the research work of the Göteborg Group in Sweden, Säljö has studied people's common-sense conceptions of learning. He did so directly, simply by asking them: "What do you actually mean by learning?" From the answers he has identified five distinct conceptions:

1. Learning as the increase of knowledge;

2. Learning as memorizing;

3. Learning as the acquisition of facts, procedures etc., which can be retained and/or utilized in practice;

4. Learning as the abstraction of meaning; and

5. Learning as an interpretive process aimed at the understanding of reality (Gibbs, Morgan & Taylor, 1982, p. 134).

One immediately striking feature of these five conceptions is the different views of knowledge which are implied. As Säljö observes, "A prominent feature of especially the second conception described above is the idea that knowledge is external to individuals. . . In contrast, the essence of conceptions four and five seems to lie very much in the emphasis on the assumption that knowledge is constructed by individuals as a result of an active effort on the part of the learner to abstract meaning from a discourse and also to relate this meaning to an outside reality" (cited by Gibbs et al., 1982, p. 134). Such a difference in the view of knowledge inevitably implies significant differences in the process of learning itself. This distinction is often referred to as the difference between rote and meaningful learning, characterised by Novak and Gowin (1984) as follows:

1.   Rote learning (most school learning)

Arbitrary, verbatim, non substantive incorporation of new knowledge into cognitive structures;

No effort to integrate new knowledge with existing concepts in cognitive structure;

Learning not related to experience with events or objects; and

No affective commitment to relate new knowledge to prior learning.

2.   Meaningful learning (creative production)

Non-arbitrary, non-verbatim, substantive incorporation of new knowledge into cognitive structure;

Deliberate effort to link new knowledge with higher-order, more inclusive concepts in cognitive structure;

Learning related to experiences with events or objects; and

Affective commitment to relate new knowledge to prior learning.

Rote and meaningful learning demand different levels of responsibility to be accepted by the learner. In their experiment with learner-control, Millar et al. (1985) noted that students had two different answers to the question: "What kind of responsibility do I have for learning?" One view, which they labelled the 'old orthodoxy' is typified by the response "I am responsible for appropriating previously constituted knowledge." The alternative 'new orthodoxy' is represented by the view that "I am responsible for transforming my understandings through reflection on experience" (1985, p. 18).

It seems that this difference in perspective is analogous to the distinction between surface and deep-level approaches to learning, already referred to with regard to autodidaxy and learner-control. The qualitative differences in learning outcomes which derive from learners' taking either a surface or a deep approach have already been discussed. However, very little research has been undertaken into the learning approaches adopted by adults in situations either of autodidaxy or of learner-control.

Recommendation Two: Researchers should investigate with learners their orientation to new learning tasks (Häyrynen & Häyrynen, 1980), their initial choice of a surface or deep approach and the criteria used in arriving at the choice; their personal definitions of whether learning is essentially a reproductive or a transformational process; and how their views change as they engage further in the learning process.

2. The learner's view of this specific learning endeavour

When a learner is confronting a new learning task, he or she must make some preliminary judgements about how to approach (or orient himself or herself to) this new domain. The implicit organisation of the situation will undoubtedly have an influence, including such tacit dimensions as the degree of structure already present, the nature and amount of assistance available, and other demands such as those of trainers or tests likely to cause 'situational adjustment.' Säljö's work has already been mentioned, in which he discovered that people conventionally distinguish between 'learning-for-life' and 'learning-for-school.' Although this distinction has been shown to influence learners' approaches to learning tasks, it has been little investigated in adult education, even less in the domain of 'self-direction.' Thus, the approach which a learner adopts in any particular learning endeavour will be influenced by the sort of purposes the learner has in mind and by his or her level of previous knowledge of this, or a similar field.

a. The learner's intentions and purposes

Intentions and purposes, although influential in shaping learners' approaches to learning generally, are rarely addressed in research into 'self-direction.' Imagine the case of two doctors, both interested in learning more about the use of morphine in alleviating chronic pain in cancer patients. The mother of one is dying of cancer; the other is attending a conference and wants simply to be able to speak to colleagues likely to be there. Both are self-directed, both capable learners, but with entirely different levels of concern about, or commitment to, the topic. Surely this will manifest itself in the

emotional orientation towards the task and the depth of understanding each might seek?

While one might describe both of these situations as instrumental autodidaxy, many learners undertake their projects as ends in themselves. Many hobbyists—the kind studied by Brookfield for instance—are of this type. They are learning for the sheer joy of the subject—butterflies or steam-traction engines, ecclesiastical architecture or Argentinean postage stamps—and their involvement knows no bounds. In the process of such learning, most come to think of knowledge (at least this particular slice of it) in a certain way. They are situationally autonomous in the sense that their motivation for the project comes entirely from within. They become epistemologically autonomous as they enter further and further into their chosen subject, and begin to question established expertise and conventional wisdom (see Table 1, Autodidaxy).

As mentioned in chapter five, the intention of the learner is undoubtedly a significant determinant of the approach which he or she takes, especially with respect to the decision as to whether or not to enter into deep-level transformational or surface-level reproductive learning. Moreover, experience suggests that what starts off as an instrumental project frequently becomes expressive (and sometimes vice versa!).

In their formulation of self-organised learning, Harri-Augstein and Thomas (1976) argue that a learner's strategy is developed in the light of the learner's purposes, but that these latter are not fixed. They write:

> A learning event is peculiar. The learner is purposive and yet it is in the nature of learning that you often cannot know what exactly you are going to learn until you have learned it. This means that the purpose can only be specified completely when it has been achieved. . . Effective learning almost always consists of. . .cycles in which purposes become progressively more clearly articulated, and the

outcomes become more precise and determined and well mapped onto purposes. (p. 15)

In researching learners' purposes, it is important to avoid the assumption that

purposes are fixed, and external to the learning act itself. In discussing both the theoretical and methodological crisis in personal construct theory, Neimeyer (1985) writes:

> We've found ways of cutting in, putting the slide under the microscope . . . But we haven't found ways of following process, seeing flow, and making sense out of it, which is very dangerous when you're dealing with something that is essentially about flow, essentially about people living over time. (p. 119)

This represents a major challenge for researchers from a constructivist perspective.

Recommendation Three: Researchers could inquire into the changing nature of the learning tasks as learners engage more fully, and enter more deeply into the material, and into the changing nature of their motivation towards learning endeavours, both in instructional and autodidactic situations. They could also explore, for individual learners, the relation between these emerging purposes and the strategies the learners employ, especially with respect to the selection and use of resources and assistance.

b. The learner's previous knowledge

It is commonly supposed that when learners confront a domain for the first time, they come to it without any prior knowledge, and hence without preconceptions. Yet this proves to be impossible, especially in adulthood. A person learning a new language must rely on his or her knowledge of other languages for parallels (whether in grammer, syntax or vocabulary); persons learning about childrearing will inevitably refer to similar experiences, their observations of friends and relations and, perhaps most commonly, the experience of their own

upbringing; one who seeks to learn physics as an adult will necessarily fall back on past experience, probably an amalgam of everyday experience (Pope, 1983), television and media explanations of phenomena, and half-remembered experiments and formulæ from school. Claxton (1982) refers to these domains as 'gut science,' 'lay science' and 'school science' respectively.

In an early experiment in autonomous learning, Mager and Clark (1963) comment, clearly with some surprise:

> In addition to the results just described a rather nagging phenomenon was repeatedly observed. No matter how ignorant the learners appeared to be, no matter how slowly they appeared to learn, no matter how naive they claimed to be, male or female, Ss all entered the experiment with some relevant knowledge about electronics. Some Ss knew more than others, of course, and one or two had developed some rather interesting misinformation about the subject. Nonetheless, no S started with zero relevant knowledge. (p. 72)

In recent years educators have become more aware of the 'frames of reference' which learners bring to bear in undertaking new learning tasks. There has recently begun a whole stream of research, particularly in science education, into learners' pre-existing understandings of scientific concepts (sometimes referred to as naïve theories, misconceptions, or alternate conceptions) and how this affects their classroom learning. In discussing the purpose and implications of this line of research, Driver and Erickson (1983) list several underlying assumptions, including the fact that:

1. Many students have constructed, from previous physical and linguistic experience, frameworks which can be used to interpret some of the natural phenomena which they study formally in school science classes; and

2. These student frameworks often result in conceptual confusion, as they lead to different predictions and explanations from those frameworks sanctioned

by school science. (p. 39)

The first of these assumptions is neither new nor surprising, indeed it is fundamental to Ausubel's (1968) crucial and widely cited notion concerning 'advance organisers' in teaching: "*Existing cognitive structure* is the principal factor influencing meaningful learning and retention" (p. 127). But the implications of the second assumption are less well understood. If an individual learner seeks to subsume new material into existing conceptual frameworks, especially without content-oriented guidance from a 'teacher,' this may well "result in conceptual confusion," especially when his or her existing frameworks "lead to different predictions and explanations" from those common in the field at large.

In discussing knowledge, in chapter nine, Habermas's three constitutive domains were introduced, "each with its own interpretive categories, ways of assessing knowledge claims, methods of inquiry, and . . . distinctive learning modes and needs" (Mezirow, 1981, p. 3). These three domains are typified as: (1) practical or technical; (2) social or communicative; and (3) personal emancipatory. It was argued that learners bring to bear different strategies and criteria when acquiring knowledge from these three domains and accordingly, the notion of 'self-direction' takes on different meanings in each of the three areas.

Reccomendation four: Researchers need to distinguish the kinds of autonomous learning possible in situations where there is an established 'body of knowledge' to master, from those where the learner's own understandings or insights are paramount, and should explore with learners the frames of reference which they create or invoke in different learning situations.

3. The learner's view of assistance or direction received

Learning of any type, including autodidactic learning, is not merely a mechanical function, in which a learner deals with abstract bodies of knowledge and inanimate resources. It is nearly always carried out in the context of interpersonal relationships, with a variety of emotional overtones.

As discussed in chapter four, the relationship between an autodidact and his or her helpers is often vital to the success of a learning project, but relatively little is known about the quality of the relationship from the perspective of the parties involved. In part, it might be expected that a learner's views concerning both help required and obtained, and direction received, would relate to his or her self-concept as a learner. However, researchers have been slow to exploit this dimension of the learner's construing. Accordingly, this section deals with the somewhat neglected personal and interpersonal aspects of autonomous learning.

a. The learner's views concerning help versus direction received

A beginner in any field is likely to turn for help to those from whom help is to be expected. Past experience is the best initial guide in this. If a learner has successfully used libraries before, she or he might well turn to libraries again. If friends have previously provided the needed support and guidance, then it seems likely, at least initially, that the would-be learner would seek such help again. This is just common sense. But how often is such common sense reflected in educational research? In the search for underlying patterns, generalisable across situations, researchers have often overlooked the simple fact that, from the point-of-view of an individual learner, what he or she

is attempting is unique, not generalisable.

Research suggests that those autonomous learners with longer exposure to formal education tend to turn to experts, libraries, or teachers to help them when they want to learn something new. It also appears likely that a disadvantaged single parent, living in an impoverished inner-suburban area, would look to friends and relations for help. What might happen if the situations were reversed, if each learner were forced to rely on the sources of help selected by the other? The disadvantaged learner (who may also have left school at an early age, and mistrust books) would possibly feel confused, anxious and timid when confronted with book knowledge. He or she would probably dismiss it as abstract, irrelevant or theoretical. The academically competent learner may feel as out-of-place, albeit for a different reason, relying for help and guidance on an assortment of well-intentioned, but ill-informed acquaintances. She or he would be likely to dismiss the advice received as unhelpful, little more than conventional wisdom and unfounded speculation. Thus, what is vital for one learner would be unacceptable to another, and *vice versa*. The difference resides in the cluster of connotations which each learner has built up on the basis of his or her past experiences, not necessarily on any quality inherent in the form of help itself (see Table 1, Learner-control).

For the sake of the illustration above, it has been decided to use two easily visualised stereotypes, the disadvantaged and impoverished learner versus the middle-class professional with a university education. But people are not stereotypes. Every learner is different.

Recommendation Five: Instead of striving only for general 'laws' concerning assistance with learning projects, researchers could profitably direct their

efforts towards exploring with learners: how they construe various forms of assistance; what criteria they use to decide between competing alternatives when the attainment of goals requires some relative loss of autonomy; what criteria they use to distinguish direction from assistance; and what renders one helper acceptable, while another is seen as threatening or inadequate.

Similar comments might be applied to the sort of information sources sought out and utilised by different learners (perhaps books, journals, documentary films and specialised groups by the one; popular magazines, family members or neighbourhood groups by the other). Previous research has been directed towards identifying either the inherent qualities of various information sources, or else the pattern of information sources utilised by particular 'types' of learners.

Recommendation Six: *Researchers should attempt to explore with learners how they view various learning resources, and in what way(s) some resources are seen as more helpful or more appropriate than others. They should seek to understand, from the learner's point-of-view, what he or she thinks is required in order to 'learn.'*

b. The learner's view of self-as-learner

Linked to both the assistance sought and resources utilized is the learner's concept of himself or herself as a learner. Elsewhere in this dissertation, the idea of learned helplessness (as popularly understood) was discussed, the notion that a person who has suffered prolonged exposure to other-direction may lack the faculties necessary to direct his or her own education: "Academic backgrounds may prove an obstacle to self-directed learning, if the learners have been conditioned to view the teacher as a 'Guru,' who must be present at all times,

assign tasks, set deadlines, test and evaluate progress in order for learning to take place" (Abe, Henner-Stanchina, & Smith, 1975, p. 59).

Despite the widespread acceptance of this idea, two alternative views have been offered in this dissertation. One is that of 'situational adjustment,' and the other is the idea of 'personal learning myths.' Situational adjustment was explored in some detail in chapter seven. It was argued that learners are conscious of cues embedded in the learning situation (especially where a teacher or trainer is involved), and that they adjust their behaviour accordingly. The second notion, that of personal learning myths, was raised in chapter five.

Personal learning myths are convictions held by a learner about himself or herself, based on past experience. They have four characteristics. Firstly, they are usually debilitating, and inhibit a person's learning potential. Secondly, they are commonly based on the acceptance of someone else's judgement or assessment—for instance parents, teachers or peers—but have been internalised as true by the learner. Thirdly, they tend to be self-fulfilling or self-validating. Fourth and finally, they may either be generalised (e.g., "I'm a failure" or "I couldn't learn if my life depended on it"), or fairly specific (e.g., "I can't learn languages" or "I can't do maths").

Recommendation Seven: Researchers should examine learners' concepts of themselves as learners. This would include trying to ascertain both generalised and subject-specific images of their learning competence; the origins of such notions in their past; how they change or consolidate their self-concept as a learner during the course of a learning endeavour; the particular points in learning experiences (both autodidactic and instructional) where they felt either especially blocked and incapacitated, or else especially competent and capable; and the cues embedded in

the learning situation which they believe inhibit or release their potential for exercising control over the learning situation.

4. The learner's view of autonomous learning and the development of autonomy

One of the most pervasive assumptions in the literature on self-direction is that there exists a connection between the conduct of education and the development and exercise of personal autonomy in some broader sense (see Table 1, Personal autonomy). For example, this assumption forms the basis of Snedden's (1930) article which includes interviews with two hypothetical adult learners whose respective taste for "self-education" had been shaped by their earlier schooling. In the absence of empirical data, however, this is little more than a "plausible assumption."

Skager (1979) calls for longitudinal studies to establish a connection between educational experiences and the 'self-directed learning' activities of adults in later life. However, with the exception of two Swedish studies (Borgström, 1985; Borgström & Olofsson, 1983), there is very little longitudinal data of any type concerning adults' participation in autodidactic activities, and even less regarding the relationship between educational experiences and personal autonomy in the broader sense. Moreover, in order to test assumptions about situational variability in personal autonomy, it would be necessary to work with adult learners across a range of settings; if possible, matching data about their overt behaviour with their subjective evaluation of each situation (Shores, 1985).

Recommendation Eight: Researchers should undertake long term studies of individual learners with a view to discovering the components of their continuing

search for personal autonomy. Researchers should explore with learners: their perceptions of the meaning of autonomy; the opportunities for development of autonomy embodied in various instructional techniques; and the factors in a range of situations which learners perceive as either inhibiting or facilitating the development or exercise of autonomy. Such research should include the same learners' views of different learning situations, as well as different learners' views of the same learning experience.

C. AUTONOMOUS LEARNING FROM THE FACILITATOR'S PERSPECTIVE

Having argued so strongly for the adoption of a constructivist paradigm, with its emphasis on the personal perspective of the actors, it might seem strange to advocate research based on the facilitator's point-of-view, especially as one of the major criticisms of present research into learner-control has been its over-emphasis on the teacher's perspective. While this criticism is valid, it is aimed not so much against the inclusion of the teacher's or trainer's perspective, as against the implicit assumption that it is somehow superior, in all respects, to that of the learner.

All instructional situations, and indeed all forms of assisted autodidaxy, rest largely on the quality of the relationship established between the learner and the 'helper.' It has been shown in chapter four that such a relationship depends on a "genuine responsiveness to the needs of the learner," and that it is "not, as some have depicted it, a technical one—with the helper acting merely as a resource person—but includes a substantial component of warmth, empathy, authenticity and interpersonal contact." Just as learners construe the situation in which they find themselves, and the sort of help they receive, so do instructors.

For instance, in discussing how various learners present themselves to librarians, J. C. Smith (1986) distinguishes between 'confident' and 'timid' learners, and she even suggests that the librarian's appraisal will influence how he or she might deal with the learner:

> "I'd probably be more motherly to the sort of person who, you know, looks weak and in need of lots of support. I'd be more 'jokey' and relaxed with a person who is very confident." (p. 251)

The constructions which a learner places on a situation—leading him or her to appear timid or confident—influence the constructions which the helper makes, and these in turn affect the sort of help provided. Thus, research from the point-of-view of the instructor (or, in the case of assisted autodidaxy, the helper) is not just acceptable, it is positively called for.

Recommendation Nine: Researchers should study how teachers construe learner autonomy. They should examine the extent to which individual practitioners regard it as a developable capacity, the sort of behaviours they would look for in autonomous learners, and the kinds of practices they believe lead to an enhanced sense of personal control. Ultimately, such research could be used as a way of exploring the teacher's ideological commitments to personal autonomy as an educational goal.

Such inquiries, especially if conducted in an action-research framework, would provide a legitimate focus for inservice professional development, as well as a basis for meaningful negotiations between teachers and learners with respect to instructional events and strategies.

It is also worth considering the advantages of investigating autodidaxy, at least in part, through the eyes of those who assist autodidacts with their

projects. Only one piece of research has been discovered which adopts such a perspective. Phillips (1980, 1981) pursued doctoral students through three years of their studies, interviewing them at monthly intervals. She also separately interviewed their advisers although less frequently, and then juxtaposed the perspective of the learner alongside that of the adviser. The differences in their views of the situation were striking, and serve to emphasise the need for data derived from the perspective of both parties to the teaching/learning transaction.

Recommendation Ten: Researchers should examine issues such as how the helpers view being approached for assistance, how they construe the learner's need for help, the sort of strategies they employ in trying to meet the learner's needs, and how they sense the learner is nearing independence and no longer needing their help.

D. SUMMARY

In this chapter, it has been argued that research into personal autonomy generally, autodidaxy and learner-control has reached something of an impasse. It is proposed here that the adoption of a constructivist perspective would allow both for the reframing of exisiting research concerns, as well as calling for some entirely new directions in these domains.

The chapter began by observing that research undertaken and reported from the point-of-view of the actors in any situation is relatively rare in adult education, and yet such an approach could revitalise research into self-direction. It was stated that, in most learning encounters, the situation may be portrayed either from the perspective of the learner or that of the person assisting the learning. Accordingly, recommendations for research were divided into these two

different vantage points.

With respect to research from the learner's perspective, four major themes were suggested: (1) the learner's views of learning in general; (2) his or her intentions or purposes in the situation; (3) his or her attitudes towards direction or assistance; and (4) views of autonomous learning and the development of personal autonomy. What is argued for in this chapter is neither the study of the situation *per se*, nor of the learner, but rather of the learner in the situation. This was the focus of Shores' (1985) dissertation, but little research has been undertaken concerning the learner's 'in-context' construing of autodidaxy, or of the dimensions of learner-control. This chapter has identified a number of research areas which, if implemented, could lead to a reconstruing by researchers of the dynamics of autonomous learning.

It was also suggested that research into autonomous learning could be framed from the point-of-view of the person or people providing the learner with assistance. The argument here is not so much against research from this perspective, as against research which implicitly assumes that such a point-of-view is somehow objective and should be shared by the learner.

For the sake of exposition, the issue of teachers' and learners' conceptions was subdivided into manageable components: views of knowledge, of resources, of assistance given or received, of self-as-learner, and of the process of learning itself. But constructivism, by its nature, abhors this sort of fragmentation. Instead, it endorses the notion that a person's construction of a situation comprises an integrated whole. One of the criticisms which constructivists make of the positivist paradigm is the tendency of the latter to alienate research subjects from their contexts, and further to compartmentalise the experiences and

perspectives of subjects in artificial ways. Constructivism, on the other hand, seeks to understand how a person construes a situation in all its complexity; what is regarded as salient, what connections and relationships are perceived by the subject himself or herself. One particularly challenging aspect is the need to develop research approaches which reflect the dynamic and constantly changing nature of learning endeavours; endeavours which function more like a movie than a snapshot.

Overall, what is suggested in this chapter is the acceptance of the 'person-in-context' as the main unit of analysis. What is called for is the attempt to understand how, in any particular situation, self-concept, overall orientation towards learning, shifting pattern of purposes, and frames of reference all interact to create the anticipatory schemes, and influence the strategies used, by either the learner or his or her assistants.

XII. CONCLUSIONS AND IMPLICATIONS

A. INTRODUCTION

This dissertation has involved a long and, at times, arduous journey through the treacherous territories of philosophy, psychology, and epistemology. In one way or another, it has touched on many enduring problems in educational discourse to which theorists and practitioners have applied themselves since the time of Plato and before. The study has drawn widely on literature from adult, as well as elementary, secondary, and higher education. It is now time to answer the question which ultimately confronts any researcher: So what? In what ways does this piece of work contribute to an understanding of 'self-direction' in adult education, and how can its insights be of benefit to theorists and practitioners?

This dissertation is not explicitly concerned with practice. Except incidentally, no recommendations are made which could be implemented directly or immediately by a practising adult educator. Instead, the primary focus of this dissertation is on theory, and improving theoretical understandings. Of course, theory can guide practice, and any contribution made to the theoretical understandings of phenomena may ultimately lead to greater clarity of purpose and to more knowledgeable practice. But the present dissertation is addressed, in the first instance, to those involved in research into adult education.

This chapter consists of three main parts. The first is an examination of the domains of autodidaxy and learner-control, and an attempt to distinguish them from one another on the basis of a constructivist perspective. The second recapitulates the six main findings of the study and presents a schematic

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representation of the variables which influence autonomy in learning. The chapter concludes with a recommendation for the acceptance of constructivism as a theoretical framework for research into self-direction.

Before proceeding to this, however, because of the importance of the distinction for research in adult education, the relationship between autodidaxy and learner-control of instruction will be considered, from a constructivist point of view.

B. DISTINGUISHING AUTODIDAXY FROM LEARNER-CONTROL

Throughout this dissertation, these two notions have been treated separately, and it has been argued that they should be, because they may well be different phenomena. However, this is not clear from the literature, where the indiscriminate application of the term 'self-direction' to both phenomena has done much to blur the distinction.

It is easy to see how the confusion might have arisen. Both phenomena share a number of similarities (stress on the primacy of the learner's purposes; independence of effort on the part of the learner; support or assistance rendered, rather than direct instruction). Moreover one can see why, even at a subliminal level, educationists might want to stress similarities. Autodidaxy is taken to be the paradigmatic case of autonomy in learning; autonomy, in turn, is a central notion within adult education. Autodidacts are known to be singleminded in their commitment to learning tasks, and often achieve high levels of expertise in their chosen areas of inquiry. All in all, if adult educators were able to encourage learners into autodidaxy, or even to 'define' them into autodidaxy, such major instructional issues as motivation, relevance, meaningfulness, independence and so

on, would be taken care of, *ipso facto.*

Elsewhere in the dissertation, learner-control has been depicted as a continuum extending from almost complete teacher-direction at one extreme to virtual learner-control at the other, as shown in Figure 13.
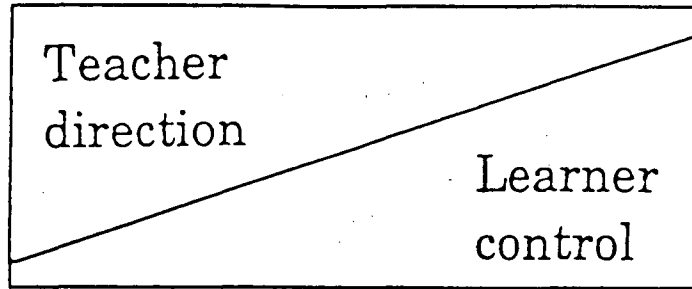
Figure 13: Changing balance of teacher-direction and learner-control in the instructional domain

The learner-control end of the continuum has been called independent study, exemplified by a high degree of learner-control over objective-setting, content, sequence, pace, selection of method and evaluation of learning outcomes. But is this the same as autodidaxy? In chapter three, it was pointed out that frequently an autodidact will seek assistance with a project, but it is just that— assistance. The project still rests firmly and indisputably in the learner's hands. This situation can also be represented diagrammatically (see Figure 14).
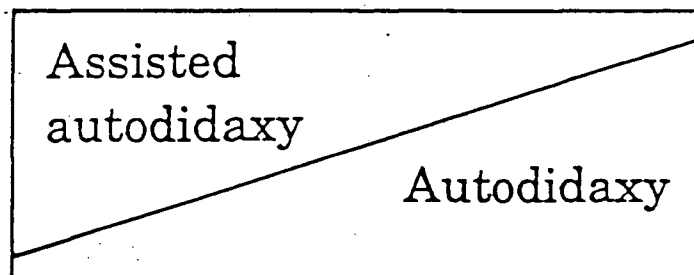
Figure 14: A hypothetical continuum of autodidaxy and assisted autodidaxy

It is even possible that the autodidact might make extensive use of a 'guide' or 'helper' (or perhaps even more than one), but this never seriously threatens his or her 'ownership' of the project, or the sensation of 'self-directedness.' Throughout this entire continuum, control of the learning project is still firmly in the hands of the learner, but differing levels of assistance might be sought, ranging from emotional encouragement, to the location and utilisation of specific resources, to management of the learning process itself (Danis & Tremblay, 1985b, p. 286).

From the point of view of an outside observer, such as a researcher, it might be impossible to distinguish a situation of assisted autodidaxy from one of independent study. It is almost as the two phenomena (i.e., the independent study part of the instructional domain and the assisted autodidaxy part of the autodidactic continuum) were interchangeable. This point might best be understood by reference to Figure 15.
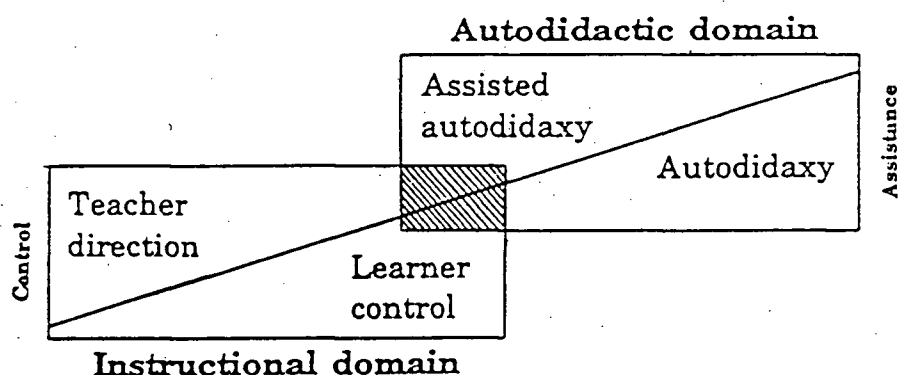
Figure 15: The relationship between autodidaxy and learner-control of instruction

The diagram represents the simple notion that there exists a single continuum from a high degree of teacher-direction to 'pure' autonomous learning

or autodidaxy, with an area of overlap (the shaded area) in between. The area of overlap represents the intersection of domains where, from the point of view of an outside observer, it is impossible to discern whether the primary orientation is one of 'instruction' or of 'self-instruction' (autodidaxy). However, it is argued here that the notion of a single continuum is misleading. Independent study and assisted autodidaxy, despite their apparent similarity, are not the same. Even if the difference cannot be detected readily by an outside observer, it is still important to the respective participants, because the quality of their interaction is partly dependent on their subjective interpretations of the situation.

What, then, is the difference? It seems to depend on the notion of 'ownership.' In the learner-control diagram (Figure 13), it can be seen that there is still a residue, albeit small, of teacher-direction. Even though the instructor might have all but vanished, the 'ghost' of the instructor lingers on, subtly influencing the learner's choices, and even the criteria he or she uses to make those choices. Whether symbolically or otherwise, the instructor maintains some degree of control (and hence ownership) over the instructional transaction and, in the final analysis, independent study is still a technique of instruction.

In the autodidactic domain, on the other hand, the learner is frequently unaware of being a learner, much less a student, and hence the image of an instructor is not present to begin with. Both ownership and control are vested in the learner from the outset, and the only question is the amount and type of assistance obtained. One way of envisaging this is to imagine these two continua rotated along their axes through 90°, so that they are viewed 'edge-on' or in elevation, instead of from above (see Figure 16).

Viewed thus, it can be seen that they are not continuous at all, but are
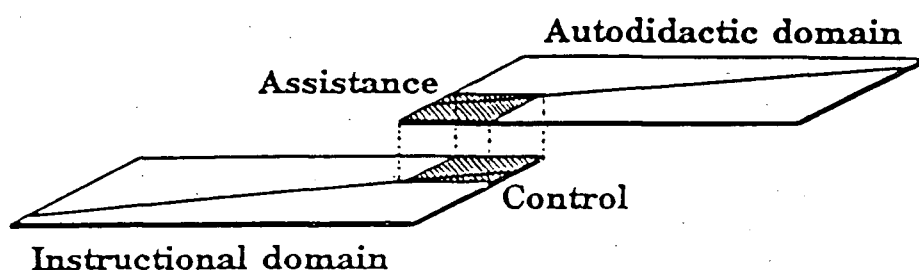
Figure 16: Learner-control and autodidaxy as 'laminated' domains

laminated or layered": One part is concerned with who has control, the other with the assistance obtained by the learner. A researcher or other outside observer may be unable to distinguish one situation from the other. Only the participants can be certain about whether 'ownership' has been transferred to the learner or not, and even they may be unclear (see discussion later in this section about mismatched expectations).

There are two reasons why it is important to distinguish these two domains from one another: (1) confusing autodidaxy with methods of instruction may have serious repercussions for theory-building in adult education; and (2) learners and those assisting them may behave differently in the two situations, and this will influence learning outcomes.

1. Implications of the difference for theory building

The concern to distinguish these phenomena is not mere pedantry, nor is it motivated solely by an interest in the learning behaviour of learners. Whether or not autodidaxy is part of the learner-control continuum has implications for research and theory-building in adult education. Ever since it entered the mainstream of educational enquiry in the early 1960s, autodidaxy has been

hailed as a legitimate, and possibly unique, domain of adult education research. There are, however, grounds for questioning whether autodidaxy should be considered as part of adult education at all.

Verner's (1964) comment has already been alluded to; "self-education is beyond the range of responsibility of adult education, since it is an individual activity and affords no opportunity for the adult educator to exert influence on the learning process" (p. 31). In 1972, Bowers and Fisher stated that "self-directed learning [is] learning organized by the learner in which no educational agency or teacher is consciously involved . . . *This form of learning is not regarded as education*" (p. 47, emphasis added).

Notwithstanding this, autodidaxy (in the form of 'self-directed learning') has been embraced by adult educators as an object of study. There is no denying the importance of autodidaxy to the field of learning; what is questionable is whether it measures up to the minimum criteria of 'education.' Again, according to Bowers and Fisher, "Education [is] organised communication designed to bring about learning . . . It involves an educational providing agency that organizes the learning situation and/or teachers who direct the communication" (p. 46).

Despite Strong's (1977) explicit support, and the clear weight of professional opinion as expressed through the research literature, it seems that autodidaxy does not exhibit the characteristics which would allow it to be treated as education. Thomas once described adult education as floating in a sea of learning. If one could extend the metaphor, it could be argued that research into autodidaxy is rather like bailing water in, rather than out: the sheer volume of autodidactic activity is likely to swamp the adult education boat and to drown its occupants. For this reason alone, it would seem to be desirable to make a

defensible distinction between autodidaxy and learner-control.

However, even disregarding self-preservation, adult educators should not be too keen to embrace autodidaxy as the dominant (or worse still, the only) mode of adult education, for there must surely be some areas of knowledge where teaching is still demanded. As Lawson (1979) observes:

> Unless education in the adult context is given a very different meaning, unless it is taken to involve no values whatever about what is learned, to refer to no standards of performance or achievement but to remain at the level of subjective personal insights which have no external intersubjective points of reference . . . the positive conception of a teacher has to be introduced . . . (p. 26)

In a way, the "positive conception of the teacher" is the feature which distinguishes autodidaxy from learner-control. It is the emasculation of the notion of teaching itself, and its transformation into something called 'facilitation' which, more than anything else, has contributed to blurring the valid and useful distinction argued for here.

Clearly the question of whether any particular instance is one of autodidaxy or of learner-controlled instruction cannot be determined by objective evidence alone. It is necessary to make reference to the personal meanings of the participants. What is more, contrary to conventional practice, it cannot be determined by reference solely to the perspective of the teacher/trainer or helper. This is because a learner's control over events in the teaching/learning transaction is not objectively determinable, but depends on the learner's personal construction of the situation. Accordingly, the next part of the chapter will concentrate on the importance of the distinction from the learner's point-of-view.

2. Implications of the difference for the learner

There is reason to believe that the learning outcomes from any given learning encounter depend substantially on the learner's contruction of the situation, and the strategies which he or she consequently employs. In his research into common-sense understandings of learning, Säljö (1979) asked 90 people, ranging in age from 15 years to 73 years, about their conceptions of learning. He found that, even though many people had given relatively little conscious or systematic thought to learning in general, or their own learning in particular, they neverthless commonly made three distinctions.

The first distinction concerns the increasing awareness of the influence of context on both what is learned and how it is learned. Citing Snyder (1971) and Miller and Parlett (1974), Säljö (1979) discusses how learners become 'cue conscious' or aware of the implicit rules governing learning, at least in a school context. While not all learners adjust their learning to demands such as teacher preferences and tests, nevertheless the awareness of such tacit rules is widespread (p. 448). The second distinction concerns the difference between 'learning-for-life' and 'learning in school.' Learning in school is typically regarded as stereotyped and routine, and not organically related to anything outside the school situation itself (pp. 448-9). The third distinction is that subjects often reported that they had started to think about the *nature* of what is learned. They distinguish between 'learning' and 'real learning,' or between 'learning' and 'understanding.' The main feature of real learning is that it involves going beyond the plain 'facts' to some general principle. These 'facts' are seen as subordinate to what should really be learned; that is, the general meaning (p. 449).

This, and other research by Säljö and others of the Göteborg group in Sweden, demonstrates that the way in which an individual learner construes the learning situation, especially in terms of criteria such as these, influences the approach taken to learning, and hence the outcomes obtained. What is more, a problem can arise when there is a discrepancy or disjunction between the perspective of the two partners involved.

The learner might believe himself or herself to be engaged in an instructional situation, and consequently to have certain expectations of the roles of the teacher or trainer. However, the teacher or trainer may think of the learner as an autodidact. There is the potential for conflict based on these dissonant perceptions. Conversely, if the learner wants to direct his or her learning endeavour, but the instructor is still retaining certain prerogatives, there is the potential for a mismatch of expectations. This situation may be represented as follows:

Instructor believes this

to be a situation of:

	Instruction	Autodidaxy
Instruction	/	X
Autodidaxy	X	/

Learner believes this to be a situation of:

These situations (indicated above by a cross **X**) represent what Millar et al.

(1985) typify as a 'vacuum,' that is a disjunction in the mutual expectations of teachers and learners. The effect of any such vacuum will depend on the direction of the mismatch. If the learner is expecting instruction, but the teacher has in mind a situation of guided autodidaxy, the learner will probably react to this by demanding more direction: the structure which he or she believes to be necessary to learning in that situation. Conversely, if the learner believes himself or herself to be engaged in an autodidactic project, the unwelcome imposition of restriction and structure is likely to result in resistance. This perspective helps to explain Wispe's (1951) early experimental results. The students' need-for-direction or need-for-permissiveness is not necessarily an enduring personal characteristic, but may arise from the learner's understanding of the demands of the learning situation.

C. MAIN FINDINGS OF THE STUDY

As mentioned in chapter one, the construct of 'self-direction' has become, for many adult educators, a guiding star. It is held up as the prime purpose, distinguishing characteristic and predominant methodology of the field. Indeed 'self-direction' is so universally acclaimed that it seems to unite, and to claim the loyalties of, educators who, in other respects, represent divergent and at times incompatible points of view. This is at once a strength and a weakness for, although self-direction has been adopted as a slogan by all manner of adult educators, its popularity has come at the price of its integrity.

Self-direction has become the unwitting accomplice of many educational schemes, some of whose intentions are the very antithesis of what might be understood as true 'self-direction.' Self-direction has been, and is, recruited by

behaviourists and humanists, idealists and pragmatists, radicals and conservatives, positivists and constructivists. A versatile concept, it has been co-opted to every purpose which adult educators espouse and pursue. *The consequence of this is that the literature on self-direction is extensive, but it is also confusing. The lack of internal consistency precludes the possibility of developing a coherent theory of self-direction, or even of self-directed learning from within the literature itself. This is the first major finding of this dissertation.*

Quite apart from these fractures, which extend deep into the substance of self-direction, it is apparent that the term itself is used in the literature to refer to at least three (and possibly four) distinct concepts. These are: self-direction as the independent pursuit of learning without formal institutional structures (referred to here as autodidaxy), self-direction as a way of organising instruction (learner-control), self-direction as a personal quality or attribute (personal autonomy). A sub category of the latter is self-direction as the manifestation of a certain independence of mind and purpose in learning situations (autonomy in learning). The relationships among these concepts are complex, and this complexity has led many adult educators (and others) to substitute one usage for another inadvertently. Accordingly, *the second major finding of this dissertation has two parts: (1) that from a constructivist perspective, learner-control and autodidaxy are not synonymous and that autodidaxy is not part of the instructional domain at all, and (2) autonomy in learning does not necessarily give rise to personal autonomy, nor does the existence of personal autonomy always manifest itself as autonomy in any particular learning situation.*

A good deal of research into personal autonomy has faltered because of the failure by researchers to recognise the situation-specific or context-bound

nature of personal autonomy. Researchers have assumed personal autonomy to be a generalised personal attribute which manifests itself in all situations. Similarly, much research into autonomy in learning has described the features of situations, without regard to the behaviour or reactions of the learners or other actors. *A third major finding of this dissertation is that autonomy apparently has both a personal and a situational dimension. It is not possible to look at a person and to pronounce him or her autonomous without reference to the context or environment (i.e., at work, at home, in his or her hobbies, in learning particular things, etc.). Conversely, it is not possible to describe a situation (such as a learning context) as autonomous without a consideration of the responses of the participants in that situation.*

However, it is not simply the interaction of the person and the environment which influences the extent and nature of autonomy in learning, but rather the subjective interpretation which the actors place on the 'distal situation' (Shores, 1985). It has been proposed in this study that research into self-direction (in each of the senses mentioned here) has not made significant progress in recent years because of the failure of researchers to account for the subjective meanings which the situation has for the actors (particularly learners and teachers).

In the case of both autodidaxy and learner-control, researchers have rarely attempted to portray the learning situation from the point of view of the learner, or to answer questions such as: "What is the learner's own perceived degree of autonomy? What value does that degree of autonomy have for her/him? What goals does s/he have related to the learning outcome consequences? How are values for autonomy and goals weighted by the learner? When goal attainment

requires relative loss of autonomy, how does the learner choose between the two? How do those factors change or remain stable from one situation to another? Do situations constrain or enhance the relative degree of autonomy?" (Shores, 1985, p. 81).

As discussed in chapter eleven, the strategies adopted by the learner (and accordingly the learning outcomes attained) depend on the learner's construction of the situation. *Hence, a fourth major finding of this study is that viewing the situation from the perspective of the learner is vital to gaining an understanding of the strategies employed, as well as the outcomes attained by learners. This applies especially to the learner's strategy for developing and maintaining a sense of personal autonomy.*

A fifth major finding of this dissertation is that autonomy in any given learning situation has two main components. These have been referred to as 'situational autonomy' and 'epistemological autonomy.' Situational autonomy comprises two dimensions: (1) the practical skills necessary to the pursuit of the learner's goals, and (2) the learner's independence from external constraints, pressures or direction. These components are referred to respectively as 'self-management skills' (discussed in chapter ten) and 'dimensions of personal autonomy' (discussed in chapter three)[28]. Epistemological autonomy, on the other hand, involves (1) the learner's ability to make informed judgements about the content to be learned, as well as (2) the ability to employ appropriate strategies of inquiry. These two components have been called 'anticipatory schemes' and 'learning strategies.'

These four features—self-management skills and the qualities of personal autonomy on the one hand, and anticipatory schemes and learning strategies on the other—are themselves influenced by further factors. The relationships are

depicted diagrammatically in Figure 17.
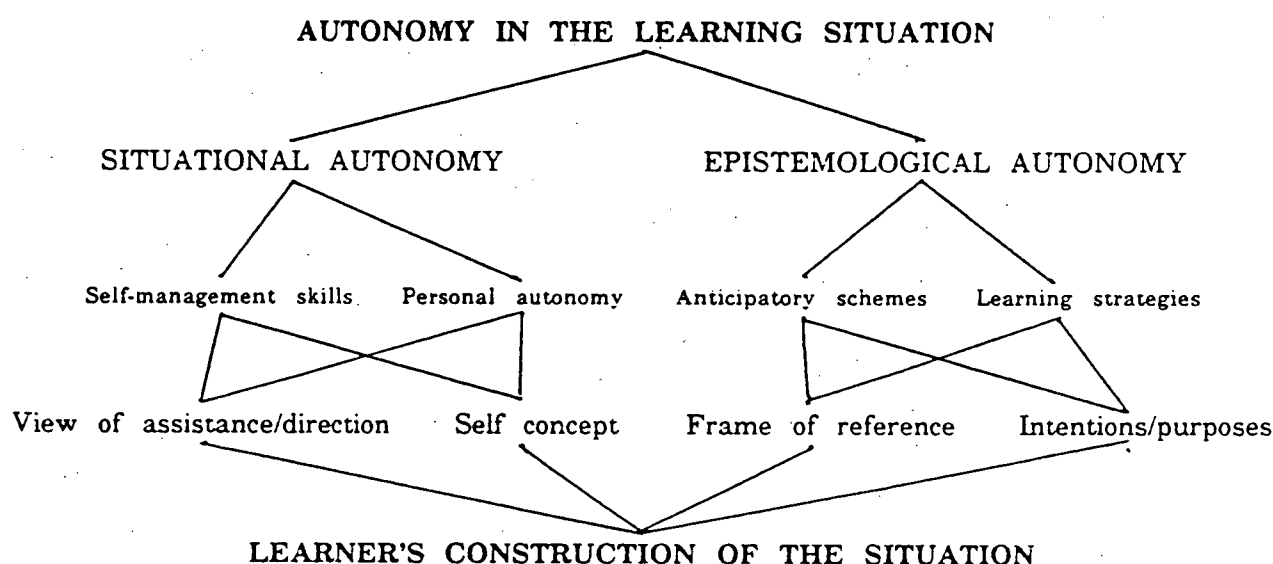
Figure 17: Schematic representation of the variables influencing autonomy in learning

It has been argued that willingness to exercise self-management skills or to exert personal autonomy are dependent on the learner's view of assistance or direction, combined with his or her self-concept as a learner in the particular situation (Goodman, 1985; Serdahely & Adams, 1979). The other two features, anticipatory schemes and learning strategies, both depend on a combination of the learner's existing frames of reference, as well as his or her purposes and intentions. All of these latter dimensions are influenced, to some extent, by the learner's construction of the individual situation.

It is argued that most research into autonomy in learning has tended to focus on the left-hand side of Figure 17 (i.e., either self-management skills or the qualities of personal autonomy), to the exclusion of either the right-hand domain of epistemological autonomy or the underlying dimension of the learner's

construction of the situation.

Finally, the last major finding of this study pertains to how learning is viewed. It has been customary to think of learning as the acquisition of quantities of information. Most research into learning has been dominated by the notion of *how much* is learned under differing regimes. This approach has extended to the study of learner-control and autodidaxy. However, *a sixth major finding of this dissertation has been that if learning is regarded not as the acquisition of information, but as the creation of personally relevant and viable meanings, and if an emphasis is placed on what is learned rather than how much is learned, researchers would gain valuable new insights into both the mechanisms of learning and the relative advantages of teacher-directed and learner-controlled modes of learning.*

In addition to these major findings of the study, it has become apparent that, if researchers accept constructivist assumptions, alternative research methodologies will be called for. The interdependence of epistemological and methodological assumptions has already been mentioned in the summary table which appears in chapter ten. In view of the importance of the topic, it was thought necessary to discuss briefly naturalistic modes of inquiry and this is dealt with in Appendix B.

Before dealing with the final conclusions to the study, it is important to make an observation about the limitations of the constructivist perspective, and more generally of the interpretive paradigm of which it forms a part. Throughout much of the literature on constructivism, and the trend is also evident in the present dissertation, there is a tendency to idealise the individual, and to adopt a romantic notion concerning just how much autonomy any one person actually

has. What becomes apparent from a reading of the literature on critical science, however, is that interpretive approaches often exaggerate the extent to which individual intentions influence action and, conversely, to underestimate the power of social and cultural factors to constrain personal freedom. In particular, issues of power and authority and ideology are bound up inextricably with questions of learner-control (and, to a lesser extent, autodidaxy) to a greater degree than is generally acknowledged in the literature on 'self-direction'. Self-concept, knowledge about learning, visions of the future, attitudes towards others, and convictions about education are all powerfully mediated by structures of class, gender, ethnicity and age.

Consequently, the findings of this study, as well as outcomes of the research into self-direction called for in this dissertation, must be treated as partial. The decision to pursue an approach emphasising individual psychology has necessarily neglected sociological and anthropological perspectives. Although it is believed that the adoption of a constructivist approach may well generate a new and valuable line of research within the psychological tradition, it is also hoped that this research will stimulate a more comprehensive and critical analysis of the social dimension of autonomy in learning.

D. CONCLUSION

Sixty years ago, Lindeman (1926) in *The Meaning of Adult Education* wrote: "We can progress not by giving attention to either organisms or the environment, but to both and in relation to each other . . . " (p. 48). It seems that for the past 60 years, many adult education researchers have tended to ignore this simple but profound observation. With regard to research into

'self-direction' there has not been any shortage of attention to the area. There are many erudite treatises on the meaning of personal autonomy; there are scores of profiles of the autonomous learner; much is known about the sorts of learning endeavours undertaken by autodidacts, including the help they receive and the resources they utilise; study after study has identified the design criteria which optimise the opportunities for the exercise of autonomy in instructional settings. But the perspective which has been almost entirely neglected is the perspective of the learner.

One of the five major purposes of this study was to examine self-direction from a constructivist perspective. In doing so, it has been shown that research into learning and learning situations from the perspective of the actor is both a respectable and worthwhile enterprise. In other contexts, it has resulted in insights and understandings which alternative research paradigms have simply failed to notice.

It has been noted throughout this dissertation, that the whole field of 'self-direction' as yet lacks a sound theoretical basis. It is contended here that constructivism may hold the promise of providing such a framework. One person who has probably done more than any other to develop a sound theory of self-direction in adult education is Moore (1973). He expresses the situation in these terms:

> The world is, above all, perplexing. At any given moment some part of my world and of yours is a source of mystery, problem, curiosity, disorder, even chaos. This is the starting point for a theory of independent learning. It is in man's restless nature to probe the mysteries and confusions of his world and to quench his insatiable thirst for understanding and for knowledge about his world.
>
> Within some part of my 'life space' exists an area of confusion and as I go about bringing order to that confusion, I am engaged in the process of learning . . . I proceed to gather information and

ideas, make hypotheses and eventually, after much testing, decide that my objectives have been met. What was confused becomes clear, what was a problem has been solved . . . (pp. 28-29)

Such a description fits well with a constructivist perspective of the learner, emphasising as it does the effort to impose structure on the complexity of the world, and to maintain some sort of personal equilibrium. It also captures succinctly the exploratory and heuristic nature of educational inquiry. It thus emerges that 'self-direction,' whether in learning or in the broader context of one's life, is an apt metaphor for the enterprise of educational research itself.

XIII. NOTES

1 Welton here is using the term 'method' in its everyday or colloquial sense, rather than the technical sense which is sometimes implied in adult education. Verner (1964) distinguishes methods from techniques and devices. Methods he defined as the "pattern of organization" employed by an adult education agency "on the basis of the institution's resources and the fulfillment of its educational objective" (p. 36). Techniques relate to the "kind of relationship . . . within the confines of the specific program . . . determined by the specific learning objectives of that program" (p. 36). The selection of techniques is a matter for the individual adult educator, and is this "an operational rather than an administrative decision" (p. 37). Devices are "various mechanical instruments, audio-visual aids, physical arrangements and materials . . . used by adult educators to augment the processes employed" (p. 37). As Verner (1964) notes, "because adult education employs a great variety of patterns of organization, a precise distinction among these three elements is essential . . . . Research studies have tended too often to compare or combine dissimilar items such as a method with a technique, or a technique with a device" (p. 37)

2 Terms used interchangeably with self-direction are: autodidactic learning (Jankovic et. al., 1979); autodidaxy (Tremblay & Danis, 1984; Jankovic et. al., 1979); independent learning (Brookfield, 1982; 1983; 1984); independent scholarship (Gross & Gross, 1983); independent study (Bonthius et al., 1957; Hatch & Bennet, 1960; Percy & Ramsden, 1980); individualized learning (Hill, 1971; Keller, 1968); learner-controlled/directed instuction (Campbell & Chapman, 1967); non-traditional learning (Cross & Zusman, 1979; Wedemeyer, 1981); open learning (Latcham, 1981; MacKenzie, Postgate & Scupham, 1975); participatory learning (Botkin et al, 1979; Geis, 1976; Wight, 1970); self-directed inquiry (Knowles, 1975; Long & Ashford, 1976); self-directed learning (Cross, 1981; Knowles, 1975; Mocker & Spear, 1982; Tough, 1979); self-directed study (Gruber, 1965); self-initiated learning (Penland, 1979); self-instruction (Johnstone & Rivera, 1965); self-education (Craik, 1866; Gibbons & Phillips, 1978, 1979, 1982; Newman, 1852; Snedden, 1930; Verner, 1964); self-learning (Macdonald, 1984) self-organized learning (Thomas & Harri-Augstein, 1985); self-planned learning (Penland, 1977); self-propelled learning (Miller, 1964); self-responsible learning (Wang, 1983); self-study (Elton, 1973; McClintock, 1982); and self-teaching (Tough, 1967). And this list does not include other educational practices such as open education, student-centred teaching, learning-to-learn and metalearning which often overlap, conceptually and methodologically with them.

3 In discussing educational attempts to develop autonomy, Dearden (1972) stresses the central importance of the moral element; "without morality, for instance, the more autonomous an agent is, the worse he is likely to be. Great criminals are markedly autonomous men . . . The rise of autonomy to prominence in education certainly does not mark the eclipse of such other values as those of morality and truth" (p. 461).

4 Dearden (1972) argues this this is not necessarily so; "Paradoxically it might be precisely a student's upbringing and previous educational experience, with relatively little freedom, which does develop autonomy" (p.452).

5 Dearden (1972) notes that, from the point of view of an outside observer, it may be impossible to distinguish the situation of the truly autonomous person from the one where "direction appears to be that of the man himself, but really it is father, teacher or nanny who is speaking from out of the past" (p. 450). This latter situation roughly corresponds with Riesman's (1950) concept of 'inner-directedness,' which turns out to be a special case of 'other-directedness,' except that the influence of the 'other' has been internalized at some early stage.

6 Even radically different political regimes, such as that of the Soviet Union, extol the value of personal autonomy as an educational goal, though one suspects that they must have in mind a rather different definition of autonomy in doing so. (Vladislavlev, 1979, p. 17)

7 The following are the tasks which Tough claims must be performed by the autodidact:
1.   deciding detailed knowledge and skills;
2.   deciding activities, materials, resources and equipment for learning;
3.   deciding where to learn;
4.   setting specific deadlines or intermediate goals;
5.   deciding when to learn;
6.   deciding the pace;
7.   estimating level or progress;
8.   detecting blocks and inefficiencies;
9.   obtaining readings, resources or equipment;
10.   preparing a room or other physical conditions;
11.   obtaining money;
12.   finding time for the learning;
13.   increasing motivation or dealing with motivational blocks.
(Tough, 1979, pp. 116-117)

8 This is not to say that they do not become aware of themselves as learners; what little research evidence is available tends to point to the fact that they do. In fact, it may be that acquiring the sort of critical reflectivity which is espoused by Mezirow (1985) and Brookfield (1985) is a developmental stage through which autodidacts pass.

9 The notion of 'the adult learning iceberg' is synonymous with Tough's work. Brookfield (1981b) even wrote an article with this as the title, in reviewing Tough's work for British adult educators.

10 This belief is axiomatic to the construct of lifelong learning, which holds that learning is a lifetime pursuit, indeed that living is concomitant with learning and vice versa. Lifelong learning is a philosophical stance which subsumes the policy of lifelong education and practices such as recurrent education (Parkyn, 1973, p. 9).

11 For a discussion of the circularity in definitions, see the section 'Adults are self-directing' in chapter five.

12 Caffarella, 1983; Chickering, 1964; Della-Dora & Blanchard, 1979; Flanagan, 1970; Ford, 1970; Gibbons & Phillips, 1979; Guglielmino, 1977; Jankovic et al., 1979; Kasworm (after Tough), 1983; Knowles, 1973; Maras, 1978; Margarones, 1965; Mezirow, 1981; Miller, 1964; Moore, 1980; Strong, 1977; Torrance & Mourad, 1978; Tough, 1979d; Tremblay & Danis, 1984; Wedemeyer, 1973. The full list of competencies appears as Appendix A.

13 This list draws on the work of several authors, including Dearden (1975); Krimerman (1972) and Knowles (1975).

14 Dr. Herbert A. Alf, Dr. B. Frank Brown, Dr. Edward G. Buffie, Dr. Arthur W. Chickering, Dr. Patricia M. Coolican, Dr. Gerald T. Gleason, Dr. Winslow R. Hatch, Dr. Cyril O. Houle (first two rounds only), Dr. Malcolm S. Knowles, Dr. Wilbert J. McKeachie, Dr. Barry R. Morstain, Dr. Mary M. Thompson, Dr. Allen M. Tough, and Dr Morris Weitman.

15 For a summary of this work, refer to Hounsell, D. J., & Entwistle, N. J. (Eds.). (1979, July). [Special issue] *Higher Education, 8*(4); and Marton, F., Entwistle, N. J., & Hounsell, D. J. (Eds.). (1984). *The experience of learning.* Edinburgh: Scottish Academic Press.

16 This point has particular relevance to adult education. Adults engaged in adult education activities have already had many years of exposure to forms of teaching which encourage their passivity, quiescence and dependence. It is not at all an easy thing to break this 'passive set.' Moreover, most adult education activities are short and discontinuous, they lack the protracted exposure to learner-control that would seem to be necessary to the development of competence and orientation towards autodidaxy. Finally, as already mentioned, there are few reliable guides as to the sort of skills, attitudes, knowledge and competence that go to make up autodidaxy, and thus there is no guarantee that simply being exposed to increased opportunites for learner-control will necessarily lead to more, or better self-initiated and self-managed adult learning efforts.

17 "The distinction between instrumental and expressive aspects of education should not be carried too far. There is some intrinsic enjoyment in almost every instrumental form of education, at least if the learner is reasonably successful; and there is some instrumental or extrinsic outcome from almost every expressive form of education. It might be more useful to assign weights between one and 100 to the instrumental and the expressive aspect of any form of education, with the total of the two weights being 100. Then one would need to recognize that a given educational experience would have different pairs of weights for each individual participant" (Havighurst, 1964, footnote, p. 18).

18 For instance, Lindeman (1926) in his classic study *The meaning of adult education,* viewed teachers as facilitators whose "function is not to profess, but to evoke—to draw out, not to pour in" (Lindeman, 1926, p. 119).

19 Knowles, M. S. (1970). *The modern practice of adult education: Andragogy versus pedagogy.* Chicago, IL: Association Press/Follett Publishing Co. The term

andragogy readily entered the vocabulary of adult education, and gained widespread popular acceptance. However, the notion of andragogy as a distinctive and unique form of adult education also became the focus of much heated debate, and this resulted in a partial recantation by Knowles when, in 1980, the book was revised and reissued with the amended subtitle 'From pedagogy to andragogy.'

20 Rogers, C. R. (1969). *Freedom to learn: A view of what education might become.* Columbus, OH: Charles E. Merrill.

21 In his 1983 work, he renamed the components: Goal setting; Implementation and Evaluation (p.164).

22 It is interesting to note, in passing, how comparatively recent is the widespread acceptance of such collaboration as a cornerstone of adult education. Freire's problem-posing education, for instance, "relies on dialogue between the teachers and learners to stimulate critical thinking, creativity and reflection upon reality. In problem-posing education, the teachers work 'with, not for' (1972, p. 33) the learners" (Conti, 1978a, p. 22). Although most adult educators would readily assent to this proposition, it first appeared a scant seven years after Coolie Verner, one of the patriarchs of the field, had pronounced that; "Adult education is a relationship between an educational agent and a learner *in which the agent selects, arranges and continuously directs* a sequence of progressive tasks that provide systematic experiences to achieve learning, for those whose participation in such activities is subsidiary and supplemental to a primary productive role in society" (Verner, 1964, p. 32, emphasis added).

23 One of the earliest was Kerlinger and Kaya's *Attitude Toward Education Scale* (1959).

24 One notable exception is O'Gorman's 1981 work on the philosophical orientations of Adult Basic Education instructors. Using Ross's Philosophical Education Inventory (RPEI, 1970) and Hadley's Education Orientation Questionnaire (EOQ, 1975), she tested a number of ABE teachers for their philosophical and educational orientations. The former instrument allowed her to classify respondents according to their philosophical orientation as Pragmatic, Realistic, Existential or Idealistic. The second instrument, on the other hand, yields a preference for andragogical or pedagogical approaches. Her findings were that; "those adult basic education teachers classified as Idealists or Realists were subject-centred, and those classified as Pragmatists and Existentialists were student-centred," and moreover, that "significant relationships existed between philosophy and teachers' educational orientations: Idealism and Realism were considered pedagogical philosophies, and Pragmatism and Existentialism were considered andragogical philosophies" (O'Gorman, 1981, abstract).

25 The concept of 'field independence' is culturally loaded, because it carries with it a whole cluster of connotations which spill over into the notion of independence *per se*; "Concepts themselves may favour male or female characteristics. For instance, Dale Spender (1980, pp. 164-165) has commented on the sexist connotations of the concepts 'field dependence' and 'field independence' in

psychology. These terms refer to the ability either to recognize an embedded figure within a field ('field independence,' more common in males) or to focus on the overall context ('field dependence,' more common in females). If these talents had been labelled 'context blindness' and 'context awareness,' the pejorative connotation would have been associated with the predominantly male talent. Science should generate concepts which do not devalue characteristics associated with either sex" (Eichler & Lapointe, 1985, p. 8).

26 "Our coaching consisted of nothing more than interrupting each session once or twice in order to elicit discussion of study tactics, and to get the students to critically evaluate their own procedures. What manner of self-direction they practiced was entirely up to them" (Campbell, 1964, p. 353).

27 The writer is indebted to Guy Claxton of Chelsea College, London, for this idea of a third dimension in what is commonly thought of as a two-dimensional diagram

28 Chickering (1964) refers to the domain of self-management skills as 'instrumental autonomy' and to the domain of personal autonomy as emotional autonomy, although in the present context, personal autonomy extends beyond emotional to include intellectual and moral autonomy as well (see chapter three).

APPENDIX A

A PROFILE OF THE AUTONOMOUS LEARNER

Researchers have identified well over 100 competencies which they have linked with successful independent learning. Below follows a composite list, with the various attributes, characteristics, qualities and competencies grouped together into 'families', based on qualititative similarities. The authors are indicated to the right, a key appears at the bottom of the table.

The learner capable of autonomous learning will characteristically:

Be methodical/disciplined

have direction;	2						
be able to focus on an area of interest;				12			
exercise self-discipline;		3					
develop individual plans for achieving goals;		3					
be able to analyse and plan the entire learning process and to manage it dynamically;			6			18	
plan learning a long time ahead;				9	11		
plan ahead;					12		20
make effective use of time;				9			20
establish personal priorities;							20
have a sense of what is important;	2						
translate needs into specifiable objectives;	1						
pay close attention to details of an ongoing project;				12			
be able to organise;	2						
be able to develop sequential plans based on clear objectives;			4	6			
maintain detailed and accurate records of the learning project;				12			

Be logical/analytical

be attuned to the whole;	2						
be able to organise his/her thoughts;			8				
form generalisations, look for principles, and find basic structures of subjects;				10			20
enjoy questioning, testing, and analysing;							20
be able to analyse and define problems;		4					
be able to develop criteria for selecting among alternative solutions;		4					
be able to break general goals down into specific objectives and define explicit criteria for their achievement;						15	
engage in logical reasoning;				10			
draw inferences and conclusions;					12		
be able to organise data;				10			
be able to analyse data and see relationships;				10	12		

	1	2	3	4	5	6	7
be able to identify underlying assumptions;				12			
be able to go beyond simple findings to see implications;				12			

Be reflective/self-aware

	1	2	3	4	5	6	7
be able to identify needs when he/she encounters a problem to be solved, a skill to be acquired or information to be obtained;					15		
decide what knowledge and skills to learn;	1						
have access to alternative perspectives for undertanding his/her situation;				13			
identify personal learning objectives;			9				
have an awareness of the constraints on their learning - including psychocultural assumptions;				13			
be able to diagnose current problems or needs;						18	
have a self-concept as an effective learner;			7				
clarify his or her values and establish goals consistent with those values;	3						
understand his or her own learning style and be willing to try others;	3					18	
know his or her strengths and weaknesses;	2						
recognise when help is needed;	2						
understand his or her own values, interests, abilities and knowledge;		4					
understand what he or she wishes to be as an adult human being;						16	

Demonstrate curiosity/openness/motivation

	1	2	3	4	5	6	7
be self-starting;	2						
be curious, with a continual need to learn;						19	
be curious about a variety of phenomena;			10		14		
be 'cognitively open' with regard to phenomena;					14		20
have a field of particular interest, and a desire to 'own' the project;				12	14		
have a taste for learning;			7 8				
be open to new learning opportunities;	2		7				
be future-oriented;			7				
discover through investigation;	2						

confront questions and problems willingly;		2										
Be flexible												
be able to learn in many situations - from conversations, by reading and by observation;					9				14			
be able to learn from listening, taking notes, reading or memorising;											18	
stick to plans - modifying as necessary;												20
be flexible in view of new evidence and changing circumstances;		2					12					
be able to modify his or her own behaviour through an understanding of behaviour modification;			4									
be able to accept or reject material;										15		
be able to achieve or abandon goals;										15		
Be interdependent/interpersonally competent												
be amiable and peaceloving;		2										
have sensitivity and competence in social interactions;								13				
have sustained relationships with faculty members;						11						
develop small, stable groups of friends;						11						
be able to work co-operatively with others, yet enjoy being on their own in learning;		2										20
be willing and able to learn from others;			3									
be willing and able to learn with others and to share ideas;			3				12					
develop group plans for achieving goals;			3									
know how and when to ask for help or direction;	1		3		9							
analyse group dynamics and become capable of using group decision-making processes;			3									
diagnose learning needs with help from teachers and peers;	1											
relate to teachers as facilitators;	1											
be able to secure co-operation, support and encouragement from advisers;							12					
relate to peers collaboratively as resources;	1											
be able to relate to people of differing ages and to assume a variety of roles successfully;				6								

…

Be persistent/responsible

be emotionally stable, objective and impartial;	12
be serious, committed and organised;	11
be self-regulating and systematic in work;	12
be able to assume academic responsibility (i.e., be syllabus free);	11
be capable of intellectual concentration;	8
have an informed acceptance of the responsibility for his or her own learning;	3 7
stick to plans - modifying as necessary;	20
renew motivation for learning as required;	1 9
have a tolerance for frustration; recognise responsibilities;	12
be able to 'stick to' a position;	2
have energy and determination at a job;	2
detect and cope with personal and situational blocks to learning;	1 9
have knowledge of social barriers facing the learner;	5
work to resolve problems;	15

Be venturesome/creative

be able to develop new conceptual frameworks;	12
be capable of original thinking;	17
be able to produce analogies;	17
be creative;	7 17
construct and develop special materials and devices;	12
have a right hemisphere style of learning and thinking;	17
be unafraid of 'being different';	20
be able to discover new possibilities;	2
be able to develop alternative solutions to problems;	4
engage in divergent thinking;	10
be intuitive;	19
be a risk-taker (but often lack confidence);	19

Show confidence/have a positive self-concept

be able to disagree;	2
be unafraid of 'being different';	20

be able to 'stick to' a position;	2										
work for his or her own satisfaction;	2										
have quiet self-confidence;	2										
know how to achieve his or her goals and objectives;										16		
pursue excellence based on personal standards;										16		
project to the world a clarity of purpose;										16		

Be independent/self-sufficient

relate to others without depending on them;	2											
have skills to study independently - reading, writing, listening reflective thinking, use of time, and self-motivation;			5									
be able to work autonomously;					8							
take initiative and work independently in learning;				7								
be able to work co-operatively with others, yet enjoy being on their own in learning;												20

Have developed information seeking and retrieval skills

intelligently select and use most relevant sources of information;							12					
identify, and know how to use, resources appropriate to different kinds of learning objectives;	1	3				10			15		18	
be able to establish feedback mechanisms for day-to-day performance;	1										18	
be able to choose relevant resources, on the basis of needs, potentialities, objectives, means and limitations;					8							
be able to 'dig up' material;	2											
know of available opportunities;			5									

Have knowledge about, and skill at, 'learning processes'

be capable of reporting what he or she has learned in a variety of ways;		3					12					
be able to decode a message - textual, auditory or visual;					8							
be able to collect information using appropriate tools and instruments;							12					
have skills and competencies required to master productive tasks;								13	15			

be able to understand learning and behaviour change;   18

be able to use basic study and problem-solving skills;   1   6 7

enjoy reading reading, writing, listening and discussing;   6   20

have developed skills in note taking, remembering and relating;   20

be able to gain knowledge and skills from resources;   1

know how to use resources for learning;   2

conduct learning activities;   9

Develop and use criteria for evaluating

be able to select what is of value from the mass of information available;   8

participate in diagnosing, prescribing and evaluating his or her own progress;   1   3   8 9

be able to evaluate the appropriateness of new skills, the adequacy of solutions or the quality of new ideas and knowledge;   15

be able to evaluate data;   10

evaluate learning activities;   9

KEY TO AUTHORS:

1	Caffarella	1983	8	Jankovic et al.	1979	15 Moore	1980
2	Chickering	1964	9	Kasworm (after Tough)	1983	16 Strong	1977
3	Della Dora & Blanchard	1979	10	Knowles	1973	17 Torrance & Mourad	1978
4	Flanagan	1970	11	Maras	1978	18 Tough (OECD)	1979
5	Ford	1971	12	Margarones	1965	19 Tremblay & Danis	1984
6	Gibbons & Phillips	1979	13	Mezirow	1981	20 Wedemeyer	1973
7	Guglielmino	1977	14	Miller	1964		

APPENDIX B

A NOTE ON RESEARCH METHODOLOGIES

In addition to the major findings of the study, it has become apparent that constructivism, by its nature, demands a different *form of inquiry* from that which is common in adult education research generally. Constructivism is based on a phenomenological perspective and, as Bogdan and Taylor (1975) state, "the phenomenologist is concerned with <u>understanding</u> human behavior from the actor's frame of reference. . . The phenomenologist examines how the world is experienced. For him or her, the important reality is what people imagine it to be" (p. 2). This perspective calls both for a shift in the sort of questions which are asked, and in the perspective from which they are asked. It also demands changes in the modes of inquiry which are used. It does this in two ways.

The first is that, because constructivism emphasises the personal meanings of research subjects, it denies the existence of a 'correct' or 'true' interpretation against which research results might be measured. It admits of the existence and utilization of tacit knowledge; it allows for situational variability; it prefers to have substantive theory emerge from the data; it emphasises the use of qualitative (non-aggregatable) realities; it endorses idiographic interpretation of data, and it allows for the mutual, simultaneous shaping of entities, including the impact of the researcher on the subjects being researched. Collectively, these features (and some others besides) form a mutually interpenetrating network of characteristics which lead to certain modes of inquiry being selected in preference to other, more familiar, modes of inquiry. The interdependence of these assumptions and characteristics means, as Lincoln and Guba (1985) point out; "that once one is selected, the others more or less follow" (p. 39). It is not possible to select some of these assumptions (such as the grounded nature of theory), and apply them in a different research paradigm, just as it is inconsistent to import into a naturalistic paradigm research methodologies derived from another set of assumptions (Koetting, 1984, p. 10).

The second reason why different modes of inquiry are demanded is the reflexivity of the paradigm itself. If one makes a constructivist assumption that people impose meaning on the events they encounter, that "conception determines perception" (Nystedt & Magnusson, 1982, p. 34) or, as Lincoln and Guba (1985) put it, that "believing is seeing" (p. 41), there is no reason to assume that researchers will be exempt from this human tendency. As has been repeatedly shown in the natural sciences, the position of the observer affects the thing being observed, and this is certainly no less, in fact it is more true, in the social and behavioural sciences. Researchers are constructivists too, and instead of opting for the impossible goal of 'objectivity,' a person espousing a constructivist paradigm is obliged to adopt modes of inquiry which do not conform to the conventional criteria for trustworthiness.

This is not to say, however, that constructivist research cannot be audited or evaluated, but rather that the conventional canons of internal and external validity, reliability and objectivity, are supplanted by substitute criteria of credibility, transferability, dependability and confirmability (Lincoln & Guba, 1985, p. 43).

The sort of research methods sanctioned by a constructivist approach are naturalistic methods, which "attempt to present 'slice of life' episodes documented through natural language, and representing as closely as possible how people feel, what they know, how they know it, and what their concerns, perceptions and understandings are" (Wolf & Tymitz, 1976/7). Clearly, conventional questionnaires, observation schedules and structured (or even semi-structured) interviews do not qualify.

Central to naturalistic modes of inquiry is the 'human instrument' (usually the researcher himself or herself), "because it would be virtually impossible to devise *a priori* a non-human instrument with sufficient adaptability to encompass and adjust to the variety of realities that will be encountered" (Lincoln & Guba, 1985, p. 39). This means that the researcher must adapt his or her line of inquiry to the responses and other evidence as they emerge, and must constantly evaluate, assess, and monitor the research process and make adjustments accordingly. As Merriam et al. (1983) observe; "While other instruments such as surveys, tests or inventories might be used for support, the human investigator possesses several characteristics that can lead to understanding behavior as it occurs in its natural setting" (p. 261).

This gives rise to the second general characteristic of naturalistic inquiry modes, which is that "the researcher physically goes to the site, the group of people, the institution, 'the field' to collect data" (Merriam et al., 1983, p. 261). Basic to constructivism is the context-bound nature of construing and, so as far as possible, research methodologies based on constructivist assumptions should take place with the "entity-in-context for fullest understanding" (Lincoln & Guba, 1985, p. 39).

Naturalistic inquiry rests on the dual assumptions that "human behaviour is integrally related to the context in which it occurs, and that this behaviour cannot be understood without knowing its meaning for the participants" (Merriam et al., 1983, p. 261). Despite its apparent appropriateness for understanding the phenomena subsumed under the rubric 'self-direction,' however, relatively few studies into autodidaxy or learner-control have made use of these methodologies: "In our search for generalizable knowledge, we tend to treat everyone or every situation as the same. We fail incessantly to honor uniqueness in our fervor to understand commonness" (Wolf & Tymitz, 1976-77, p. 7).

There are, however a few studies in this domain which have made use of naturalistic inquiry modes. For autodidaxy, exemplary studies of this type include: Danis & Tremblay (1985), Leean (1981), Nolan (1981), Peters, Johnson & Lazzara (1981), Spear & Mocker (1981, 1984) and Taylor (1979, 1980). In the field of learner-control, excellent studies include: Abercrombie & Terry (1978), Boud & Prosser (1980), Marton & Säljö (1976b), Millar et al. (1985), Ramsden (1979), Thomas & Harri-Augstein (1983), Torbert (1976, 1978) and Zubir (1983). Each of these studies has the unmistakeable imprint of real people speaking about their world; what Merriam et al. (1983) would describe as "the ring of reality which is a product of its grounded nature" (p. 265).

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