

A Philosophical Analysis of Scientific Meanings
of Aging in Psychosocial Gerontology

by

Gary M. Kenyon

B. Comm., Loyola of Montreal, 1970

B.A.(EQUIV.), Concordia University, 1977

M. A., Concordia University, 1981

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Department of INTERDISCIPLINARY STUDIES

The University of British Columbia
1956 Main Mall
Vancouver, Canada
V6T 1Y3

Date

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ABSTRACT

This dissertation is concerned with the problem of scientific assumptions as it relates to research in gerontology. There are three major areas emphasized in the thesis. First, there is a consideration of the epistemological conditions that give rise to the problem of assumptions and meanings in science. Secondly, a number of different ways of addressing this issue are discussed and an alternative Hermeneutic approach is explicated. This approach constitutes a particular kind of philosophical analysis and is suggested by the insights of Hans Gadamer. Finally, on the basis of the Hermeneutic approach, two major characterizations of research on adult and gerontological intellectual and social competence are identified, namely, a restricted and an expanded picture. In addition, these two characterizations are further clarified by means of a discussion of the contrasting ontological orientations that are presupposed in the restricted and correspondingly, in the expanded picture.

The overall purpose of the thesis is to show that a particular kind of philosophical inquiry assists in the integration of disparate forms of research in psychosocial gerontology. In addition, this procedure provides conceptual support for a different understanding of various phenomena associated with human aging that is emerging in the field, namely, the expanded picture.

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PROLOGUE

The field of gerontology consists of something more than the scientific study of aging, per se. It is also involved with the broad study of human development and the nature of human existence. It follows that a distinct contribution may be made in gerontology by the philosophical tradition of thinking about human nature and human life.

This having been said, the purpose of the present study is to provide an example of such a potential contribution. More specifically, the intention which has guided this study is to show how a particular kind of philosophical inquiry can assist in the integration of disparate forms of contemporary research in psychosocial gerontology, and provide conceptual support for a certain understanding of the research that is emerging in this field. In this way the study should contribute to the further development of interdisciplinary collaborations in psychosocial gerontology and assist in the effort to gain some general insights and understandings about the field.

The following steps will be taken in order to achieve this objective. In Chapter 1, first, a brief history of psychosocial gerontology will be presented. The discussion will focus on a description of the major areas that have been or are of interest in this field of study. As such, this section constitutes a thematic, rather than a chronological history of the field. The purpose of this initial step is to orient the discussion and provide a link to the second part of Chapter 1, having to do

with the importance of scientific assumptions in terms of their impact on aging research and the subsequent need for a "reflective appropriation" of that research.

Chapter 2 consists of a discussion of some of the epistemological conditions which give rise to the problem concerning scientific assumptions discussed in Chapter 1, as well as a consideration of a number of approaches to the analysis of these assumptions. Chapter 3 provides an explication of an alternative approach to the problem, one which constitutes a particular kind of reflective appropriation of the research.

Chapter 4 undertakes to show that a reflective appropriation of selected research in psychosocial gerontology, based on the deliberations in Chapter 3, points to two main "pictures" of specific aspects of human aging in this literature, namely intellectual and social competence. A restricted and an expanded picture of these phenomena will be identified. Following this analysis, Chapter 5 demonstrates that these two pictures also reflect particular meanings or understandings of human aging in general and important related phenomena, which in turn point to specific ontological presuppositions. Finally, in Chapter 6 there is a discussion of the conclusions of the study, along with an indication of the implications that this study has for intervention issues.

It is important to emphasize that the primary intention of this work is to provide conceptual support for a variety of recent claims made by a number of contemporary researchers in

psychosocial gerontology. That is, the main thrust of the dissertation is to bring these emerging views together , to provide some elaboration of their thinking and to place that thinking within an explicit philosophical framework.

CHAPTER I

INTRODUCTION

History of Gerontology

The history of research in gerontology, following Philibert (1982), can be described in three stages: a first Biomedical stage; a second Social-Psychological stage; and, most recently, a "Humanities" stage. This does not mean that no stage two activity was taking place in stage one, for example, but it does mean that the predominant thrust of most of the research at each stage belongs under its associated rubric.

In the first stage, as the name implies, the concern in gerontology was for problems of a bio-medical nature, broadly speaking. Until the 1940s or even early 1950s the main effort in gerontology was to discover the causes of human aging at the cellular, tissue and physiological level on the one hand, and on the other hand, to understand the diseases of old age under the heading of "geriatrics".

The second stage of the development of gerontology can be characterized by the emergence of what has been called social gerontology. The main concern of researchers in this stage was to address, in a systematic manner, the social and behavioural problems that are connected with aging. It is interesting to note that there is a sense in which this period indicates the beginning of gerontology as a social science, in that the

preceeding stage was concerned with older people only incidentally, as the focus was always (or almost always) on the young (Tibbitts, 1960). Thus, the social science study of older people as a specific group is a very recent phenomenon.

At this time there developed more explicit concern for such things as social and economic policy regarding the elderly, social processes of aging, as well as increased research on various psychological phenomena associated with the aging process (Riegel, 1977; Oliver & Eckerman, cited in Auger, 1983).

The third stage in the short history of gerontology reflects the recent emergence of a contribution to research from the Humanities, including such fields as Philosophy, Literature, Art and History. The main reason for this occurrence appears to be the increasing sense of the relevance of these disciplines for the overall agenda of understanding human aging and older persons. It is felt that these fields may point up different ways of understanding human aging from those that have been the focus of research in the past. The present study will show that at least one of these disciplines, philosophy, is also important to the "scientific agenda" of gerontology, per se.

This cursory description of the historical development of gerontology is meant as an introduction to a more thematic analysis of that development, which in turn will lead to a discussion of the problem which forms the focus of the present study.

A Thematic History of Gerontology

Exclusive Concern with the "Decrements" of Aging

A second way of viewing the historical development of gerontology, aside from the "disciplinary" development, is that of the major metaphors or themes or interests that have become evident in the research. Until very recently, the most prominent metaphor was that of "decay" and the major theme of research was that of discovering the various ways in which human beings decline with age. Thus, biologists attempted to uncover the antecedents of cellular breakdown with age (for example, the reasons why cells cease to split and multiply with age), or to provide explanations of what goes wrong with the genetic program which results in increasing "errors" and ultimate dysfunctions and death (Shock, 1977).

Medical researchers were concerned with the diseases of aging and the reasons why older people contract senile dementia, atherosclerosis and cancer. There is really no problem with this scenario thus far, as these problems are important and this research necessary. Prime facie, it is difficult to deny that there are a number of rather deleterious phenomena connected with the aging process at the biological, physiological level. Even though one may wish it were not the case, at this point in time few would quarrel with the scientific finding that decline is the main direction at the bio-physical level.

As the next section will indicate, however, a problem

arises when one moves from these physiological dimensions to the social-psychological-personal aspects of aging. That is, it is not clear that decline is the exclusive, natural or inevitable outcome of aging at the psychosocial level. Nevertheless, a whole body of research emerged, Philibert's stage two, which attempted to specify and define variables that cause various kinds of psychological or sociological decline. With regard to the former, attempts were made to show that older people suffer from various "cognitive decrements" along dimensions such as intelligence and memory (Labouvie-Vief, 1977). In addition, personality theorists attempted to show that older people suffer from such "traits" as rigidity and depression (Thomae, 1980).

From a more sociological perspective, researchers attempted to show that older people disengage (Cumming & Henry, 1961), that they represent a poorly adapted subculture (Rose & Peterson, 1965), or that they are dependent and role-less (Rosow, 1974). During this phase in the evolution of the field human aging was characterized then, almost exclusively by losses and decrements, both from the point of view of bio-medical and psychosocial gerontological research.

In the next section, a number of criticisms of decremental psychosocial views will be considered as a second major theme in the history of gerontological research. From this point on the focus of the present study will be on the psychosocial aspects of human aging, and little further will be said about the bio-medical issues emphasized in stage one, except as they relate to subsequent stages in the unfolding history of contemporary

psychosocial gerontology.

Critiques of the Decremental Perspective

At a later point in what I have described as the second stage in psychosocial gerontological research, there emerged a body of research that seriously questioned the claims made by earlier investigators. In this connection, studies have appeared which point out that there are significant differences in observed outcomes along many dimensions when generational and cohort change (Marshall, 1983) is distinguished from ontogenetic change. The main point in this regard is that many cognitive performance declines are the result of such factors as the level of formal education achieved by a particular group of older subjects, and not the result of inevitable biological changes.

In addition, criticisms of decline studies have addressed a variety of other issues. For example, it has been shown that there is often a sampling bias evident in decline studies, in that the tendency has often been to target samples of "frail" elderly subjects, as opposed to healthy older persons. Another example has concerned the issue of research design. It has been indicated that whereas in many cases a cross-sectional or longitudinal instrument shows apparent decline, a cross-sequential design shows stability or even improvement with age, on such dimensions as intelligence and memory. Other criticisms have focused on the fact that research in apparent support of decline views has often employed irrelevant testing materials

or, that these studies have failed to account for various psychological characteristics of older persons, such as their susceptibility to fatigue and their tendency to be especially cautious. Finally, many 'natural' decrements in cognitive functioning have been shown to be reversible through training.¹

From a social psychological perspective, similar studies have emerged which show that the notion of "universal disengagement", as defined in the Disengagement Theory, is also subject to a series of fundamental criticisms and reinterpretations. For example, the claim has been made that social disengagement is preceded by its psychological counterpart and that, therefore, disengagement is primarily a developmental phenomenon (Havighurst, Neugarten & Tobin, 1968). Or, that the notion of "disengagement" itself is seriously flawed both theoretically and empirically (Hochschild, 1976). Finally, Lemon, Bengtson & Peterson (1972) have shown that "activity" and not disengagement is a more accurate index of successful aging, and that consequently role losses after middle age must be replaced by new ones in later life.²

All the foregoing research has served to make suspect the view that there are universal, inevitable, irreversible, intrinsic, or normal decrements with age. The criticisms of decremental views mentioned in this section suggest that, on the one hand, there is a lack of universal decline of various types

¹A more detailed treatment of all these issues can be found in Craik (1982), Hultsch & Deutsch (1981) and Labouvie-Vief (1977).

²Actually, this version of the "activity theory" of aging is a more explicit formulation of an earlier position which emerged in the 1950s (McPherson, 1983).

and, on the other hand, that there is evidence of growth with age along a number of dimensions typically referenced in decline studies.

The Present Situation in Psychosocial Gerontology

Generally speaking, at the present time the field of psychosocial gerontology has moved from an earlier position that assumed exclusive decline of one form or another is normal, natural, inevitable in human aging, to the position that this view is fundamentally mistaken, and probably harmful, at least from an intervention point of view.

In addition, investigators in this field of study have recently generated new perspectives in an attempt to discover different orientations toward aging research. As examples, there is now a life-span psychology (Hultsch & Deutsch, 1981), and an interpretive sociology within gerontology (Dowd, 1980; Marshall, 1980a). Other examples are wisdom studies (Holliday, 1983; Dittman-Kohli & Baltes, 1984), along with contributions from the fields of history (Hareven, 1982; Elder, 1982), and philosophy (Philibert, 1982; McKee, 1982). All of these authors are attempting to make new contributions to the understanding of human aging and older persons.

The Problem

The problem with most of the research in psychosocial gerontology discussed in the previous sections is that it amounts to what may be called a series of "partial critiques" (Unger, 1975). That is, although each critique has targeted a particular issue or variable, whether it be intelligence, disengagement, depression, or whatever, these accounts do not help us gain a more comprehensive understanding of the field as a whole. As McPherson (1983) points out:

Thus, a greater emphasis has been given to making observations, to collecting evidence to describe phenomena, and to testing relationships between variables. As a result, the development of hypotheses or theories that more adequately and completely explain aging as a social process has been neglected (p.114).

This suggests that there is a need for more self-reflection and basic thinking in the field. To some extent this process of self-reflection is evident in the works of a number of stage three researchers, including those discussed earlier. However, this thinking is usually carried out in the context of particular disciplines, such as cognitive psychology or sociology, where the primary concern is for a better understanding of, for example, intelligence or, role behavior in the later years.

Nevertheless, researchers are becoming increasingly aware that it is important to reflect upon the basic tenets of their views. The main reason this activity is deemed important is that, in so far as it is lacking, there is a danger that we may discover we have been working with implicit assumptions that turn out to be highly suspect, both in themselves, and in their wider implications. It is important in this context to recall that in a culture that looks to science for the answers to so many of its problems, scientific findings about aging will have a significant effect on the lives of all aging persons, and especially on older persons and the quality of their lives (Tornstam, 1982). It follows that it is important to analyse the different ways in which we conceptualize aging in our scientific and practical activities.

What is meant here by implicit assumptions are the basic images, meanings or "conceptualizations" (Eisdorfer, 1983), that implicitly or explicitly guide research. As Philibert (1982, p. 321) states:

One cannot study aging independently of the images, naive or sophisticated, in which it is expressed and constituted. These images require our investigation largely through the mediation of the disparate texts that express them, comment on them or convey them.

As the ensuing discussion will show, this remark applies as much to scientific images and meanings as it does to artistic or literary ones.

The problem of implicit assumptions has to do in part with the very nature of research in the social sciences. That is, science and particularly social science does not constitute a totally self-correcting, linear activity leading to absolute truth (Chapter 2). This general problem is further exacerbated in psychosocial gerontology by the fact that there are so many relevant disciplines involved in the field, each with its own orientation. Consequently, there are few facts or laws of aging upon which there is general agreement (McPherson, 1983). Conversely, there are many diverse perspectives.

This is the case even within the more "exact" sciences such as biology. For example, is aging the running down of the genetic time-clock, or is it the result of cumulative wear and tear? This issue is even further complicated when we attempt to relate biological findings to psychological and sociological findings in the attempt to understand the "aging person". For example, does biological decline with age determine behaviour and if so, in what ways and to what extent?

The complex situation that exists in psychosocial gerontology suggests that while there is a need to pursue very specialized research, it is also important to complement this specialized work with a "reflective appropriation" of the field (Gadamer, 1976). That is, there is a need for an approach (or approaches) in which this field of study can reflect on its basic assumptions or, on how it understands itself as an area of inquiry concerned with the study of various phenomena associated with human aging. In this way it may be possible to clarify and

integrate specific scientific perspectives in the overall attempt to understand human aging and older persons. The importance of a reflective appropriation is that it can assist in bringing together disparate perspectives in the field, elaborate on them and attempt to come to some general insights about psychosocial gerontology as a whole.

The idea of a reflective appropriation refers to the activity of taking a broader look, reflecting more widely on an area of study. In the present inquiry, this activity will take the form of a philosophical analysis. In this context,

... philosophy is an activity of inquiry dealing with other activities of inquiry - thus operating at one remove from some of the activities which social science inquires into... (Braybrooke, 1965, p.17).

To sum up, a reflective appropriation of psychosocial gerontology is being suggested as a contribution to a solution to the problem of scientific assumptions as it relates to this field. In addition, a reflective appropriation is to be seen as a kind of philosophical activity that reflects on, in this case, social scientific perspectives on aging. The further clarification of the nature of the particular kind of reflective appropriation that is being proposed in this study will form the content of Chapter 3.

Conclusion

The discussion presented in this chapter suggests that there is a need for exploring, interpreting, clarifying and integrating basic assumptions in psychosocial gerontology, and that this can be achieved by means of a reflective appropriation of the field. It was indicated that it is important to address the problem of scientific assumptions for at least two reasons. First, it is evident that there are a number of different assumptions operative in the field which reflect diverse and perhaps competing understandings of human aging. These perspectives therefore require clarification in themselves. Secondly, the various understandings of aging phenomena have different implications for the quality of life of older persons.

In the attempt to contribute to a solution to this problem a particular type of reflective appropriation of psychosocial gerontology will be described in Chapter 3. By adopting this approach the attempt will be made in Chapters 4 and 5 to explicate two major assumptions concerning human aging and older persons that are contained in selected research in the field. However, prior to this step, the following chapter will provide a discussion of some of the epistemological conditions which give rise to the problem concerning scientific assumptions and meanings. In addition, there will be a consideration of a number of approaches to the analysis of meanings and assumptions in scientific research. This material will provide a background for the explication of the approach to be developed in Chapter

3.

CHAPTER 2

The ANALYSIS OF SCIENTIFIC MEANINGS OF AGING

In the discussion in Chapter 1 it was suggested that the problem concerning scientific assumptions and meanings points up a number of fundamental issues. These issues have to do with the nature of social scientific activity, the possibility of different kinds of predisposing influences being operative in social science, and the way in which these matters impact on the study of aging in psychosocial gerontology.

The present chapter provides some basic thinking regarding the epistemological conditions that give rise to the problem of assumptions or influences in social scientific activity. It also presents a discussion of a number of different approaches to the analysis of assumptions that have been or could be undertaken.

Natural Science and Social Science

The starting point for the discussion of the analysis of assumptions and meanings in science is the observation that scientific activity is less straightforward than has sometimes

been believed in the recent past.' This 'straightforward' view of science, or the "orthodox consensus" (Giddens, 1982) originates in the belief that natural science is a linear, cumulative activity that progresses toward absolute truth. Scientific activity is carried out by means of an emphasis on, if not an exclusive concern with, observation statements, verification and prediction. This reliance on method allows reality or truth to be "read off" from phenomena.

As Gould (1981,p.21) points out,
 ...science itself is an objective enterprise, done properly only when scientists can shuck the constraints of their culture and view the world as it really is.

The second and most important point for present purposes, is that the orthodox consensus also holds that the social sciences should be modelled after this description of the natural sciences. Giddens (1982,p.2) suggests that,

The object was to produce what Radcliffe-Brown once called a 'natural science of society'.

The expected outcome of the use of scientific methods and procedures was, then, to attain a presuppositionless or value-neutral position from which to get at the "bare facts of the matter", whether the object under study be neutrons, Canadian

¹This version of the nature of scientific activity is generally held to originate, at least in its contemporary form, in the logical positivism of authors such as Carnap, Hempel, and Nagel (Giddens, 1982).

society or, depression in older subjects.

This orthodox consensus, "naive philosophical realism" (Riegel, 1973a) or, logical empiricist view of science, has in recent times come under a great deal of renewed criticism. The general thrust of these criticisms is that there are more factors involved in scientific activity than are explicated by the orthodox consensus and that consequently,

Facts are not pure and unsullied bits of information... Theories moreover, are not inexorable inductions from facts (Gould, 1981, p.22).

The discussion that follows will focus on these issues as they relate to the social sciences and in particular, psychosocial gerontology. The discussion of the ways in which these considerations impact on our understanding of the natural sciences will be treated only in passing.

Approaches to the Analysis of Assumptions

1

If one allows that the social sciences may be vulnerable to certain kinds of predisposing influences, the crucial issue for present purposes is to discover ways to understand those influences, and the implications they have in the context of studying aging and older persons in psychosocial gerontology. In other words, the task is, in Gadamer's terms, to develop viable reflective appropriations of the field.

In what follows, three different types of reflective

appropriation or, approaches to the analysis of assumptions will be considered. First, there is what is called the 'strong programme' (Hollis, 1982) in the sociology of knowledge, which is reflected in the views of such authors as Auger (1983) and Barnes and Bloor (1982). Secondly, the weak programme in the sociology of knowledge as discussed in the works of Estes (1979), Horowitz (1961) and Simonds (1978) will be treated. Finally, in Chapter 3, a hermeneutic approach to the problem of scientific assumptions will be explicated. This approach is suggested by the works of Gadamer (1975, 1976, 1981). Again, the starting point for the discussion of these three orientations is the view that it is plausible to consider that there may be other factors involved in the understanding of social scientific activity, beyond those allowed for by the orthodox consensus.

2

One of the ways that has been suggested as a possible approach to understanding the place of assumptions and biases in social scientific activity and, a fortiori, psychosocial gerontology, is what has been called the 'strong programme' in the sociology of knowledge. This position corresponds to the first orientation just mentioned. The major claim of this view is that all knowledge is socially constructed or socially produced. That is, the generation of scientific knowledge is a function of a consensus reached by a particular group of researchers as to what is to count as truth.

It would appear that this position, in contradistinction to the orthodox consensus, in effect, argues that there are no "facts of the matter" at all. In the orthodox consensus, the tendency is to disregard "extratechnical" (Estes, 1979) sources of empirical and theoretical development in social science, such as cultural and epistemological biases and assumptions.

Conversely, the strong programme is characterized by an attempt to disregard any possible "technical" (Estes, 1979) sources of knowledge generation, such as research methodology and empirical findings. In other words, the strong programme tends to claim that there are only opinions and biases to be analysed. Or, minimally, these technical sources are no more than epiphenomena in the sense that what is really producing scientific knowledge is the social context per se, that is, social forces exclusively "cause" forms of thought (Simonds, 1978). Borrowing from Hollis (1982),

Here, 'the social construction of reality' refers to human handiwork. The actors create social, indeed perhaps all, facts (p.81).

One of the consequences of this view is that "anything goes" with respect to knowledge, that is, whatever a group of people believe is the case, is the case.

An illustration of the strong programme is evident in attempts that have been made to link the sociology of knowledge to an action sociology in gerontology (Auger, 1983, MacKeracher, 1982). The claim arising from these studies is that theories of aging are essentially the product of the

deliberations of a group of professional scientists. On the basis of an approach that is consistent with the strong programme, these studies attempt to show that professional gerontologists "know" very little about what aging is really like to older persons. That is, gerontologists, as a social group, have constructed a reality about aging that is totally different from the reality expressed in the views of older people.

Although this research represents an attempt to address the issue of scientific assumptions in gerontology, in an important sense it goes too far. The problem with this view is that it implicitly suggests a position that argues for the complete relativity of rationality (Hollis & Lukes, 1982). That is, one can ask how it is possible to go about comparing and contrasting beliefs in any particular context. Moreover, how are rational and irrational beliefs to be distinguished, if all knowledge is the product of group consensus. It would seem that one has to have a basis for various beliefs, if the purpose is to understand either the views of older people or, those of a group of gerontologists. Minimally, rationality must constitute something more than group consensus, particularly in the scientific arena, if there is to be any development of knowledge of any kind. In this context and with regards to the strong programme,

What set off as an insight into the construction of social objects ends as the sceptical destruction of reality (Hollis, 1982, p.83).

A related point is that this issue of the total relativity of rationality creates serious internal problems for the strong programme. That is, while it is held that all beliefs are socially constructed or socially caused, yet the beliefs of the 'strong programme' itself "... lay claim to a scientific status" (Hollis, 1982, p.81). The tendency in the strong programme is to attempt to prove, to verify empirically, that all knowledge is socially caused and thereby to debunk various kinds of heretofore accepted scientific knowledge, or, at least social scientific knowledge. However, this is to be done by means of the scientific method, that is, the method of the orthodox consensus, or a similar approach. It is this state of affairs that prompts Habermas' (1971,p.303) comment that

Historicism has become the positivism of the cultural and social sciences.

This analysis suggests a paradoxical situation , if not a contradiction. One is claiming, in essence, that X is false on the basis of the claim that X is true. Or, that all X's (propositions of social science) are false on the grounds that some X's are true. If this is not so, then what could possibly be the meaning of such things as objectivity and verifiable information in this context.

The foregoing analysis indicates that there are serious difficulties with the strong programme in the sociology of knowledge as an approach to the analysis of scientific assumptions.

However, in addition to the strong programme, there is also

what is called the 'weak programme' in the sociology of knowledge. The most important distinguishing characteristic of this position as an approach to the analysis of assumptions and biases is the claim that,

... the social influence on mental activity consists essentially in giving directions (Stark, 1967, p.477).

The key words here are "influence" and "directions", in contradistinction to "cause" and "determinations". This orientation makes it possible for there to be "facts" without denying that these facts may be subject to limiting conditions, that is, sociocultural or contextual constraints.

As a consequence, under this view, it is not the case that gerontologists or other groups of researchers somehow decide what is to count as knowledge or, that knowledge is exclusively constituted by a particular social group or social context. Nevertheless,

Because social scientists, as well as policy-makers and other elites, contribute to social constructions of reality, the production of gerontological knowledge and its role in public policy deserves careful study (Estes, 1979, p.7).

The weak programme in the sociology of knowledge acknowledges that there are such things as assumptions and biases in social scientific activity that contribute to what is considered to be knowledge. Nevertheless, this position does not reduce that

knowledge to these phenomena alone, as does the strong programme.

The weak programme does not make as strong a claim regarding the social construction of reality as does the strong programme. However, proponents of the former position such as Horowitz (1961), require that whatever is studied about this issue is to be approached on the basis of empirical methods. That is, the search is for the ways in which such things as the interests of particular social groups "cause" a given ideology to predominate (Simonds, 1978). The tendency is, therefore, to seek "explanations" of the thinking of different social groups; moreover, explanations that employ statistical or experimental methods. In other words, the tendency is to equate "knowledge" with "method", as does the orthodox consensus.

The issue of what constitutes scientific knowledge is complex and difficult and more questions have been raised in the present discussion than answers have been provided. Nevertheless, the expected outcome of the analysis of these approaches to the problem of scientific assumptions is a general clarification of these views, which also serves as a background for the discussion of an alternative hermeneutic approach, to be described in Chapter 3.

Conclusion

The purpose of this chapter has been to explore some of the epistemological grounds and conditions that underly the problem of assumptions and biases in social science activity, and their relevance to psychosocial gerontology. In addition, two approaches to the analysis of these assumptions and biases were discussed. In the next chapter, there will be a consideration of an alternative approach to this problem, one that will be seen to have much in common with the weak program in the sociology of knowledge, and yet differ in an important way from that view.

CHAPTER 3

A HERMENEUTIC APPROACH TO THE ANALYSIS OF ASSUMPTIONS

In this chapter, an alternative approach to the analysis of assumptions and biases in social scientific research will be explicated. In addition, this approach will form the basis for the analysis of selected research in psychosocial gerontology, in Chapters 4 and 5. The present chapter is divided into two main sections. The first will deal with the nature of this alternative approach and its epistemological and ontological foundations. The second section of the chapter will consist of an explication of the procedural aspects of this approach.

1

One of the major premises of the "Hermeneutic" approach to the analysis of assumptions is that science is both an empirical phenomenon or activity and a socio-historical phenomenon.¹ It follows that scientific knowledge neither reflects presuppositionless "bare facts", as the orthodox consensus holds, nor totally socially constructed beliefs with no lasting truth value, as is implied in the strong programme in the

¹The term Hermeneutic is written in upper case in order to indicate that it refers to the specific approach being discussed in this inquiry.

sociology of knowledge. According to this view, then, there are facts in science which are themselves constrained by socio-cultural and historical influences. This much corresponds to the weak programme in the sociology of knowledge. However, the Hermeneutic approach differs from the weak programme on procedural grounds, broadly speaking.

The Hermeneutic approach to the analysis of scientific assumptions draws its major insights from the works of Hans Gadamer (1975, 1976, 1981) and in particular, from his notion of "philosophical hermeneutics". According to Gadamer (1981) first,

By hermeneutics is understood the theory or art of explication or interpretation (p.88).

And secondly,

Now, interpretation refers not only to the explication of the actual intention of a difficult text. Interpretation becomes an expression for getting behind the surface phenomena (p.100).

These quotations point to a different way of addressing the problem of scientific assumptions. That is, all the previously discussed approaches have in common the tendency to rely on a "method", as in "instrument" or "technique", on the basis of which one may analyse, for example, a particular text or, a group of researchers. This is true for the earlier discussed sociology of knowledge views, as well as for traditional hermeneutical approaches, in so far as the attempt is made to design techniques to determine such things as the background

motivations of various authors or, the philological significance of language presented in a historical text (Gadamer, 1975).

However, there are questions that arise as to whether the employment of empirical methods is the only way to accomplish the task of providing a reflective appropriation of a research tradition. That is, the question may be asked whether it is important to do some serious thinking about the very approach that a particular tradition has taken toward its research. In other words, perhaps it is necessary to step back from the usual procedures employed in that tradition in order to explicate its basic assumptions. The tendency to seek causal explanations may, in this case, contradict the purpose of the enterprise (Simonds, 1978).

The foregoing discussion points to the distinguishing feature of Gadamer's notion of philosophical hermeneutics and the Hermeneutic approach. That is, the goal of philosophical hermeneutics is to get at what "method misses". In the scientific context, this approach is meant to be complementary to the work undertaken by an ongoing research tradition. To paraphrase Gadamer (1975, 1981), it is a process of distinguishing what is undecided from what is effectively held, in order to assist in separating out true and false presuppositions by referring to the broader context of meaning or, the connection of scientific literature to total human experience.

The task of the Hermeneutic approach is, then, to reflect on and question the way in which a research tradition

understands itself. That is, it considers the ways in which different fields of study orient themselves by virtue of the perspective that they take up on their research, implicitly or explicitly. The phrase "total human experience" indicates a central concern for such things as the epistemological and ontological issues that arise from the analysis of a particular tradition that researchers find themselves in. In this sense,

Hermeneutics is the reflective element of the continuous appropriation of tradition in which we engage as historically existing beings (Misgeld, 1976, p.169).

The idea that one always "finds oneself" engaged in a particular tradition is central to the Hermeneutic approach. That is, in agreement with Gadamer, prejudices or assumptions are not necessarily negative phenomena. They arise inevitably out of man's perspectival situation in the world, and his subsequent inability to gain a value-neutral or transcendental position from which to observe his world and himself. Consequently, human beings understand their world inevitably from a particular point of view. It is not, therefore, a situation in which if all biases could be eliminated, "the" truth would become evident. It should be emphasized that this does not necessarily imply a subjectivist understanding of perception and knowledge. Rather, it suggests a position that claims that human beings both constitute and are constituted by their world, in a kind of circular causality (Merleau-

Ponty, 1962).¹

It follows from this discussion that the notion of absolute truth as presupposed in the orthodox consensus, is untenable. Furthermore, in the Hermeneutic approach there can be no such thing as a neutral "observation language". That is, the search for truth is not an attempt to specify a set of sense-data statements which could be translated into universally valid knowledge statements. This procedure becomes implausible since any knowledge statement that could be formulated "already" contains theoretical considerations. Truth in general and in science reflects,

... the inevitable and intricate relationship between scientific knowledge and the context-personal, historical and ideological-- from which such knowledge emerges (Labouvie-Vief & Chandler, 1978, p. 183).

From the point of view of scientific language, this means that,

There are no privileged occasions for the use of terms - no 'simple perceptual situations' - which provide the researcher with 'standard meanings' uncomplicated by cultural variables (Barnes & Bloor, 1982, p. 38).

¹A detailed discussion of this point, in the context of Merleau-Ponty's views, let alone other authors, is beyond the scope of this study. The intention is simply to indicate in a general way the position I am adopting on this issue and how it fits in with the overall approach of the inquiry.

This perspective suggests that the activity of questioning assumptions and meanings is an integral part of the ongoing scientific enterprise (Braybrooke, 1965; Gadamer, 1981; Giddens, 1982; Schroots, 1982).

Biases, assumptions and meanings are an intrinsic part of what constitutes scientific knowledge. They become problematic only when they are not made explicit. That is, on the one hand, as long as we ignore the possibility that they are operating, albeit often tacitly, then a vulnerable situation is created in which, as discussed in Chapter 1, questionable assumptions may be discovered after the fact. On the other hand, even though total clarity may never be attained in this matter, by acknowledging these biases and explicating them we are at least proceeding in the right direction.¹

Recently, a similar point has been made by Birren & Hedlund (1982) and Schroots (1982) with regard to the issue of metaphors in aging research. According to their analyses we are always operating explicitly or implicitly with metaphors. That is, "perceived reality" which gets expressed, or more correctly gets constructed through language is partially metaphorical. These ontological and epistemological considerations indicate that there may be a variety of starting points for understanding any particular aspect of reality.

¹Total clarity is of course impossible in principle for someone like Gadamer since the situation is always perspectival and dynamic. Gadamer disagrees with Habermas (1971), for example, on this point in that the latter holds that ideal communication is at least in principle a possible end point.

As Chapter 1 pointed out, it follows that it is crucial to identify and analyse the content of various metaphors or basic assumptions that may be contained in a particular scientific discipline, since they influence the directions of the research. In other words, they guide the research towards a particular perceived reality, both at the individual level and at the level of the "collective intellect" (Marton, 1981), or "collective mind" (Scheler, 1980). It is important to analyse assumptions and metaphors for the additional reason that it may be possible to entertain alternative assumptions or starting points in research.

The first section of this chapter has comprised an attempt to describe the characteristics of the Hermeneutic approach to the analysis of scientific assumptions, and to distinguish it from the positions discussed in Chapter 2. In this regard, a number of the epistemological and ontological issues that underly this approach have been identified. The next section will consist of a further clarification of this approach as well as a discussion of how one goes about applying it to the field of psychosocial gerontology.

2

The impetus behind the Hermeneutic approach to the analysis of scientific assumptions is to provide a reflective appropriation of a research tradition (Chapter 1). Such an

approach operates at a broad, meta-empirical level. Borrowing from Simonds (1978), the task is to formulate a "characterization of a total situation". However, as the previous section indicated, the way that one goes about doing this does not necessarily involve "causal" mechanisms or methods. That is, an alternative procedure can be suggested as a way to deal with the general problem of scientific assumptions or, what has also been termed, the relationship between (scientific) thought and its existential base (Simonds, 1978).

In the Hermeneutic approach the attempt is being made to perceive what is globally "questionable" in research, whether the questions pertain to cultural, social, epistemological or empirical considerations. There are four steps in the Hermeneutic approach. The first step is to identify an initial idea or tentative characterization, from perusing the empirical literature of a tradition. That is, one attempts to identify a persistent theme in a considerable number of studies. Second, one proceeds to explicate, elaborate on, refine and clarify the original insight, and continuously determine whether it is developing along the original lines of thinking.

In the case of psychosocial gerontology, the initial idea is that there appear to be two characterizations identifiable in the literature: a restricted picture and an expanded picture. In the attempt to begin to refine this idea, the second step consists in delineating a manageable segment of the literature in the field. A consideration of the major positions on intellectual and social competence will serve this purpose. The

reasons for this choice are that, in the first place, the major perspectives are identifiable in the literature, and secondly, these concepts point to significant phenomena in the study of aging from a psychosocial perspective.

The third step in the Hermeneutic approach is to examine statements, findings and methods contained in selected views to discover commonalities in the meanings of various phenomena. In this inquiry, the activity is directed to identifying commonalities in the meanings of intellectual and social competence, with the general ideas of restrictedness and expansiveness in mind.

Having arrived at a further clarification of the initial characterization of the research, the fourth and final step in the Hermeneutic approach is to place the findings in the context of what was earlier termed, total human experience. This step is accomplished by reflecting on the epistemological and ontological presuppositions that are contained in the selected literature. The claim here is that at this broad level the selected research constitutes an answer to a particular question as to, for example, the nature of man. This is what Gadamer (1981) means by

... the broader context of meaning encompassed by the question and deposited in the statement (p.106).

In the present study this broad questioning exercise is to be directed to the characterization of the research on intellectual and social competence that was achieved in step 3. An important aspect of this last step is the analysis of the

meanings of related phenomena. That is, a further refinement of the characterization of psychosocial gerontology can be had by clarifying the meanings of aging, the older person, and death and dying, that are contained in the literature.

The result of viewing the literature of psychosocial gerontology through the Hermeneutic approach is, as discussed earlier (Prologue and Chapter 1), a further clarification, elaboration and legitimation of an issue that a number of researchers are already struggling with in the field. The distinguishing feature of the Hermeneutic approach in this connection is that it attempts to explicate an overall picture or, understanding of the field, without reducing the process to any single explanatory framework, such as those discussed in Chapter 2.

The Hermeneutic approach, as a more "philosophical" inquiry, (Chapter 1) has been indicated to be an important aspect of scientific activity, in the broad sense of that term. However, beyond this, a possible objection to this procedure is that, under such an open-ended view one could essentially "do anything". In answer to this, although the approach is somewhat open-ended, involves a certain amount of intuition, and may produce works that are to some degree idiosyncratic, this does not lead to the conclusion that "anything goes". The findings of the Hermeneutic approach are, by design, not verifiable or testable in the usual scientific sense, that is, by means of statistical or experimental procedures. However, they are subject to the canons of reason, and to considerations of

interest, effectiveness, adequacy, consistency, and usefulness . The same point has been made with regard to the idea of metaphors discussed earlier (p.31), namely, that,

... there can be no routine method for (1) detecting metaphors when they appear ... or (2) unpacking the metaphor once it is known to be one ... (Cohen, 1978, p.9).

Nevertheless, metaphors can be evaluated as to their usefulness, effectiveness and adequacy. There is an element of detective work in this approach; however, there is good detective work, along with bad.

Furthermore, even though the Hermeneutic approach does not constitute a "method", as a "thesis of explication" (Braybrooke, 1965), it is subject to counterexamples and criticism from viable alternative explications. Such an approach to the analysis of assumptions and meanings allows for both an analytical dimension and a creative one, by means of which it may be possible to gain some general insights into our understanding of aging and older persons, in psychosocial gerontology.

Conclusion

In this chapter there has been presented an alternative approach to the problem of the analysis of scientific assumptions and meanings, one which provides the perspective from which to view the empirical literature of psychosocial gerontology in Chapters 4 and 5. This position is somewhat open-ended and flexible while still adhering to familiar forms of philosophical inquiry and reasoning. In addition, a number of reasons have been indicated in support of the claim that the Hermeneutic approach is particularly suited to providing a reflective appropriation of psychosocial gerontology.

CHAPTER 4

RESTRICTED AND EXPANDED PERSPECTIVES ON GERONTOLOGICAL INTELLECTUAL AND SOCIAL COMPETENCE

The analysis presented in Chapter 3 has provided a particular rationale for taking a broad look at the literature of psychosocial gerontology. This rationale is based on the procedure of explicating meanings of phenomena central to the field which are "deposited" (Gadamer, 1981) in statements, findings and methods in various studies and perspectives.

The present chapter will consist of an investigation of this literature based on the guidelines set out in Chapter 3. Specifically, this chapter corresponds to the third step of the Hermeneutic approach. That is, there will be an attempt to characterize the research by identifying commonalities in the meanings of intellectual and social competence in selected perspectives, with the original insights regarding restrictedness and expansiveness as reference points. In general, the restricted picture reflects an understanding of intellectual and social competence that emphasizes universal, youth centered, age related and biologically based explanations, that almost always result in a decremental conclusion regarding advanced human aging. In contrast, the expanded picture contains an understanding of these phenomena that emphasizes contextual, gerontological or life-span centered, process related views, that allow for the possibility of incremental as

well as decremental conclusions to be drawn regarding human aging.

Selected Restricted Perspectives

As indicated in Chapter 3, the concepts of intellectual and social competence were selected to represent an appropriate focal point for the analysis of the psychosocial gerontological literature. To repeat, this is the case because these areas of study concern phenomena that have been and are of central concern to researchers in this area. Furthermore, one can initially identify the major perspectives that deal with these phenomena. The views which have been chosen for analysis are illustrative of the issues of concern, that is, illustrative of competing perspectives on intellectual and social competence. The selection of perspectives is a necessary step since it is not possible to be exhaustive in such a wide-ranging field as psychosocial gerontology.

A further point of clarification is that, consistent with the Hermeneutic approach, these perspectives are viewed as presenting a particular theme rather than as members of a strict typology. That is, the selected perspectives exhibit characteristics of restrictedness in different ways and to varying degrees and can be identified and discussed on this basis.

Intellectual Competence

Psychometric Intelligence. As a starting point for the explication of the restricted picture of aging in psychosocial gerontology, consider the research on gerontological (and adult) intellectual competence. This research can be divided into two main streams or approaches; the psychometric tradition and the Piagetian or cognitive developmental tradition. The work of Wechsler (1958), Horn (1978) and Horn and Donaldson (1980) have been chosen as examples of the psychometric approach, as these perspectives contain the main elements of this position. To begin with Wechsler (1958), consider the following claim:

The peak age varies with the ability in question, but the decline occurs in all mental measures of ability, including those employed in tests of intelligence (p.135).

And, in referring to certain psychologists, there is ...the refusal...to accept the indicated decline of intellectual ability with age and by implication of intelligence (p.138).

These quotations are indicative of the theme of restrictedness in Wechsler's position in the following ways. First, with regard to the meaning of intellectual competence that is contained in this view, there is virtually an isomorphism between age, intellectual performance, intellectual competence, and even intelligence itself as a unidimensional,

"real" faculty, and finally, an explicit assumption of universal decline. For Wechsler, what is measured by the tests represents "intelligence", at least to a significant degree. Moreover, this faculty is in the head of the person. In other words, intelligence is something "which one has" (Fischer, 1973). Finally, this faculty declines with age, a process that begins somewhere between 18 and 25 years of age.

With these assumptions and meanings in place, Wechsler proceeds to view the many possible objections to his position as "anomalies" to his 'correct' view of intellectual competence. Thus, for example, the work of Bayley and Oden (1955) which shows improvement on intelligence tests or lack of decline beyond age 25, is seen as a special case due to superior samples. Improved performance is viewed by Wechsler as being a function of higher initial ability or, as the result of a practice phenomenon which enables these people to do better on various tests. No other questions are asked.

Similarly, Wechsler refers to the notion of "sagacity" as the ability to deal with life's situations in terms of past experience (p.143). However, for him this sagacity is not equivalent to intellectual ability or general intelligence. In other words, what intelligence really "is", is that which is measured by the tests which in turn is something inherent, intrinsic, unitary, perhaps inherited, but certainly biologically based and subject to irreversible, inevitable decline. Sagacity or practical wisdom in this context is nothing more than an epiphenomenon, that is, a wispy remnant of

the past by means of which adults and older persons stumble their way through life on the basis of past habits. This conclusion is not an exaggeration of Wechsler's position, in so far as there appears to be for him, no "intelligence" component in "sagacity".

The same restricted picture of intellectual competence may also be seen in the works of Horn (1978) and Horn and Donaldson (1980). However, there are some important differences between their work and Wechsler's. For one thing, their view makes certain assumptions more explicit than does Wechsler's, especially with regard to the biological bases of intellectual competence. In addition, the meaning of intelligence is more complex in this perspective. Rather than trying to specify a number of primary mental abilities or a reified faculty (Spearman, 1927) measured by a composite score on intelligence tests (Wechsler, 1958) which gives a measure of intelligence per se; Horn (1978) develops a set of second-order abilities which, in effect, measure two different types of intelligence.

The dyadic theory of intellectual competence employed by Horn and Donaldson distinguishes the notions of fluid and crystallized intelligence. According to Horn (1978) there is no pure measure of either component since,

Each of these abilities is a conglomerate of several abilities indexed by many measures (Horn, 1978, cited in Hultsch & Deutsch, 1981).

Nevertheless, although there is no pure measure of fluid or

crystallized intelligence, some tests are "relatively pure measures of one or the other" (cited in Hultsch & Deutsch, 1981, p.100).

With regard to the nature of these two kinds of intelligence, the fluid type is seen as referencing those abilities that are culture-fair (Labouvie-Vief, 1977). That is, this type of intelligence has little to do with learning and socialization and represents the genetic, maturational, biological component of this phenomenon.

However, whereas for Wechsler the tendency is to understand intelligence as being based exclusively on this bio-maturational component, Horn and Donaldson claim that it is also important to consider crystallized intelligence. This second type of intelligence references those abilities that presuppose learning and acculturation. Abilities associated with crystallized intelligence are measured by culturally relevant materials and represent such things as stored information and manipulated knowledge of word meanings. The important point for present purposes is that, prime facie, this perspective presents an understanding of intellectual competence in which there is at least the possibility that certain aspects of adult and gerontological intelligence are modifiable or, not subject to universal, inevitable decline. This is the case since dimensions of crystallized intelligence are based on one's experience and environment. Although fluid intelligence is subject to progressive decline with age due to its intimate connection with a biological substrate, crystallized

intelligence may remain stable over the life-span and even improve in certain cases.

However, a closer look at this perspective will show that it contains the same major assumption as the previously discussed view. That is, even though Horn and Donaldson allow for some incremental performance with age, in this perspective intelligence remains ultimately tied to a biological substrate in the strong sense of that term. Specifically, according to Horn (1970) crystallized intelligence evolves out of fluid intelligence and eventually declines; it just happens later in the life-span (Cited in Labouvie-Vief, 1977).

Intellectual competence, in toto, then, does decline, either as a result of the biological time-clock running down or as a result of outside assaults on the central nervous system (CNS) such as illness and or injury. Fluid and crystallized intelligence are not, therefore, discrete concepts but are both causally related to biological aging. (This issue will be discussed in more detail in Chapter 5).

In conclusion, both of the representative perspectives discussed in this section contain an understanding of intelligence that indicates that there is a strong connection between age, intellectual performance, intellectual competence and universal, biologically based decline. In fact, if one looks at Horn and Donaldson (1980) one can see a new attempt at the development of a "G" (general intelligence) factor based on ability intercorrelations. Presumably, in so far as they are successful in this attempt, there would be further 'evidence'

for age-related decrements in intellectual competence that are biologically, physiologically, neurologically and genetically based.

As a final remark, the claim could be made that "crystallized intelligence", like Wechsler's "sagacity", does not represent what is "real" about intellectual competence for Horn & Donaldson, but rather some sort of past-constituted ability that carries one through adulthood and old age. One is reminded of the aphorism that once you have learned to ride a bicycle, you never forget; or, more precisely, it takes longer to forget.

The analysis presented in this section, following the procedure developed in Chapter 3, of questioning and explicating the meaning of gerontological intellectual competence in the psychometric tradition, has provided a preliminary characterization of that research. In the next section, attention will be directed to the cognitive developmental tradition for the purpose of showing that the same basic assumptions regarding intelligence are evident.

Piagetian Intelligence. The works of Hooper, Fitzgerald and Papalia (1971) and Papalia (1972), have been chosen as representative instances of the cognitive developmental or Piagetian approach to intellectual competence in adulthood and old age.

As with the views discussed in the previous section, the present perspective will be shown to argue for inevitable,

irreversible and normal decline with age, with respect to cognitive 'development'. In fact, in this view there is an explicit attempt to connect Piagetian measures of adult cognitive development with the fluid intelligence measures in Horn's theory (Papalia, 1972, p.238). These views will also be seen to be similar in the sense that adult cognitive functioning is taken to be causally related to a neural, maturational base.

The distinctive feature of Papalia's position is the thesis that in adulthood and old age there is a return to childhood in logical functioning. That is, persons are portrayed as losing certain abilities acquired in young adulthood and furthermore, this regression is assumed to retrace the same law-like path by means of which one originally acquired these abilities or structures. Thus, formal operations are thought to be the last to appear and the first to go, followed by certain concrete operational structures, and so on. These structures are indexed by various conservation tests which are thought to reference different levels of cognitive functioning. For example, conservation of volume is generally held to be an index of formal operational ability, whereas conservation of number is thought to be associated with concrete operations. Older people are thought by Papalia et al to fail these tests in the order of their difficulty, that is, the most complex tests are failed first as one progresses across the life-span.

A further elucidation of this perspective can be had by examining the following quotations:

Ajuria Guerra and his colleagues noted the

disintegration of object permanence, time concepts, and conservation of physical quantity with advanced age and accompanying senility (Papalia, 1972, p.231).

And,

. . . disintegration of logical operations abilities is thought to be an indication of neural decrement and, perhaps impending death (p.241).

This last remark regarding "impending death" presents a clear instance of a decline metaphor in this approach. The reference here is to the "terminal drop" argument (Riegel & Riegel, 1972). The claim of this study is that certain decrements in intellectual functioning can be seen as normal when they occur near death, that is, there is a steep decline in the last few years of life. When this steep decline is confounded with overall scores, then it appears as though more ontogenetic decrement is taking place than actually is the case, except for those persons who are, after the fact, seen to have been close to death.

However, these findings are interpreted by Papalia as indications that if an older person is showing cognitive decrement, for example, loss of formal operational structures, that is, failure on conservation of volume tests, then he or she is on the way to senility and death.

Despite the claim of Papalia and her colleagues, there are reasons to raise questions concerning the appropriateness of

using tests of formal operations as a way of indexing general intelligence. This issue has been addressed in at least three important ways. One way has been to show that it is possible that few persons of any age have achieved the formal operational level (Dulit, 1972). This is significant since one of the basic premises of Papalia's position is that older people who are claimed to have lost this level of functioning did in fact once have it. Since one cannot lose that which one has never had, the question is how can failing these conservation tests necessarily indicate decline. A second argument has centered around the attempt to show that formal operational functioning may contain educational or experiential components and that therefore the observed 'regression' is a function of generational and not ontogenetic change (Labouvie-Vief, 1977). Third, the suggestion has been made that the formal operational level lacks ecological validity, that is, it does not reflect the way that older people go about their world making decisions and solving problems. In this context, it has been argued that mature intelligence involves paradoxical, dialectical thinking and not an abstract consideration of formula-like alternatives in vacuo (Chandler, 1975).

A further clarification of this perspective can be had by examining the Hooper et al (1971) study. In the discussion of animistic and egocentric thinking among the elderly (p.8), it is claimed that there is a return to childhood concepts in senescence, a point already considered. However, in addition, the claim is made that,

This change is presumably due to the decline in mental ability which accompanies senility (p.8).

It is important to point out that Hooper et al are not referring only to groups of senile elderly persons. The claim is a normative one, that is, the assumption here is that senility is an expected outcome of human aging.

In summary, there is in this perspective, similar to the discussion of the psychometric position, an understanding of adult intelligence that reflects a very strong connection among age, cognitive functioning, decline, and even approaching death. Moreover, this state of affairs is seen as inevitable and irreversible since it is biologically produced, that is, it is part of the human time-clock.

In concluding to this point in the chapter, the application of the approach developed in Chapter 3, which permits an investigation of statements and findings contained in selected perspectives, has shown that there are certain understandings or meanings of intellectual competence common to all the foregoing research. Moreover, this common understanding reflects what is being termed a restricted picture of intellectual competence in the later years. The next section will consist of a similar analysis of gerontological social competence.

Social Competence

A second major domain relevant to the explication of the restricted picture in psychosocial gerontology is that of social competence. There is included in the general notion of social competence, a certain amount of psychological as well as sociological material and, consequently, the discussion under this heading centers around the issue of gerontological psychosocial competencies. As with the previous section, the intention here is to identify selected perspectives as "restricted", by explicating the special meanings of social competence contained in these studies.

The literature in this area presents an even greater selection problem than does the intelligence literature and is basically comprised of a highly amorphous body of information. Consequently, a number of central perspectives that have emerged in research will be considered as selected examples of these positions.

Disengagement Theory. What has been referred to as "disengagement theory" (Cumming, 1964; Cumming & Henry, 1961; Henry, 1965), deserves considerable attention in the present context since it is in many ways the quintessential restricted perspective in the area of social competence. As was the case with the previously discussed perspectives in the area of intellectual competence, it will be shown that there are very strong presuppositions within disengagement theory which connect the phenomena of age and disengagement with irreversible,

inevitable, biomaturational, universal, normative, decline and death.

That this is so can be seen by examining the argument set forth by Cumming & Henry (1961, pp.210-218). The basic argument which they present can be summarized in the following five points. First, despite individual differences, "the expectation of death is universal and decrement of ability is probable, therefore a mutual severing of ties will take place between a person and others in his society" (p.211). According to this view, death is the only total disengagement, but "this side" of death, total disengagement refers to "basic life functions".

The second major point is that since the person is assumed by Cumming and Henry to be socially constituted, that is, since social norms "found" personality and since with age, these norms become less structured, a process is set in motion by means of which the older person disengages socially and psychologically due to the freedom from social control and increasing eccentric or interior behavior (pp.211-212).

Third, it is assumed that disengagement may be initiated on the one hand by an individual who sees that he is declining in "knowledge and skill" (p.213), that is, who is failing on production-oriented competencies (Chapter 5). On the other hand, in an industrialized society disengagement may be initiated by "organizational imperatives" based on age-graded mechanisms which allow for a kind of planned obsolescence and replacement. It is not that such a procedure is meant to insult older people, it is just that they have reached a certain age,

the obsolete age. Disengagement, according to Cumming and Henry, is consequently seen as being built in, like maturation (p.213).

A fourth and related point is that the only situation in which real problems occur for older persons is if society wishes to disengage them and they do not want to. In other words, as long as one conforms to the larger picture, for one's own and society's good, an overall equilibrium is maintained. In any case, disengagement is not so bad, these authors claim, since there are hobbies, leisure, and "...satisfaction with what has been, rather than a pride in what is" (p.216). The assumption of this perspective is that social competence reflects an ability to "wait" for the ultimate disengagement (death).

The fifth and final point which these authors make is that disengagement, like fluid intelligence, is a "culture-free" phenomenon, although it will take different forms in different cultures, unlike the latter. Disengagement is culture-free presumably because it is ultimately tied to a biological base, that is, the physical man tends to be the whole of man in young and old (p.221). Thus, in disengagement theory, there is agreement with the view discussed in the previous section, that there is a "regression to infantile behavior" in the old person.

In this section attention has been focused on the original formulation of the disengagement theory, as proposed by Cumming & Henry (1961). Later versions of the theory, by Cumming (1964) and Henry (1965) do not reflect substantial changes in the theory. Although certain problems or anomalies have been

pointed out in the intervening years, the authors maintain the basic tenets of their original position. This is the case even though Cumming (1964) states that

The additions to the theory are untidily grafted onto the original formulation without regard to whether or not these contradict it or shift its focus (p.18).

The second view that deserves attention in this section is the sometimes called psychological disengagement theory (Havighurst, Neugarten & Tobin, 1968; Neugarten, Havighurst & Tobin, 1968). This perspective is similar to the position set forth by Cumming and Henry in the sense that the thrust of their work was to determine the mechanisms of disengagement. That is, the purpose was to show that disengagement is initially a developmental phenomenon that precedes social disengagement. In this view, disengagement is a function of lowered ego-energies in later life and not primarily a function of social factors. In this way the theory attempts to separate the notion of "activity" from the notion of "engagement". That is, one can be active but not engaged, not investing ego-energy in social activities. As a result, one can get a better assessment of disengagement by making this distinction than by simply counting the number of roles or interactions a person is involved in.

It should be pointed out that although this perspective provides

...convincing evidence of decline in both social and psychological engagement with increasing age (Havighurst, Neugarten & Tobin, 1968, p.171).

it does indicate that there are different styles or ways of aging and that the uniformity of disengagement, and what it means to any particular person, must be questioned. In particular, this view does not assume that there is an isomorphic relationship among activity (that is, social roles, or lack of social roles), engagement, and life satisfaction or happiness.

In this version of the psychological disengagement theory, the focus shifts from the outcome of social disengagement to the processes which influence personality factors in aging. It is claimed that these factors are the products of lifelong development, and determine to a great extent, the pattern of successful aging by a person (See also Reichard, Livson & Peterson, 1968). Social competence, in this perspective has to do with how one disengages successfully from such things as mainstream social life and work, and success depends on one's personality; something which in turn, appears to be largely, a "given".

To recapitulate, disengagement theory in all of its several manifestations, argues that there are mechanisms by which society and the individual mutually part company when the individual attains a certain age. Moreover, this process is seen as normal, and is thought to be good for the individual and for society. As Hochschild (1976) points out,

The independent variables are the individual's age (with its implied relation to death) and society's stance toward disengagement. The dependent variable

is disengagement (p.59).

On the side of the equation representing the individual, there are various intrinsic processes which are thought to take place at a certain age, such as loss of object cathexis and a lack of a central task in life. These phenomena are ultimately linked to biological, maturational processes including impending death. In psychological disengagement theory these processes are seen to involve personality factors including life-long character patterns. On the societal side of the equation, there is mandatory retirement which facilitates a 'natural' disengagement and completes the cycle.

There are two important criticisms of the disengagement theory that have emerged which will assist in the further characterization of this perspective on social competence. The first of these criticisms has to do with what Hochschild (1976, p.55) calls the "escape clause problem". Essentially, the claim is that, on the one hand, disengagement is seen to be universal, inevitable and intrinsic, and on the other hand, the "form" and "timing" of disengagement is thought to vary, depending on the culture and or individual under consideration. Consequently, when particular groups of people do not appear to disengage, this is seen by Cumming and Henry (1961) and Henry (1965), as an anomaly due to the presence of some biological or psychological elite group. Or, conversely, it is assumed that these people have not "successfully" disengaged. There is always a disengagement or decline explanation proffered, and no real counterevidence is possible. This fact supports the claim that

there is a "decline" bias in the disengagement theory in that other questions are simply not asked. In other words, there are different ways to "interpret" counterevidence, but only one way is considered.

The second important criticism of the disengagement theory centers around the "omnibus variable problem" (Hochschild, 1976, p.59). In effect, this means that, as was discussed in the context of intelligence, the attempt is being made to reify disengagement as a unitary, one-dimensional process, which actually exists in the real world.

The analysis of the foregoing perspectives indicates that they reflect the restricted picture of gerontological social competence. That is, as with the discussion of intelligence, the assumption is that social competence in the later years is to be understood as universal, age related, biologically based decline.

Activity Theory. The disengagement theory, discussed in the previous section, and the related notion of "activity theory" (Lemon, Bengtson & Peterson, 1972) to be considered in this section, have in common the idea that successful aging amounts to an adjustment to changes in an individual's role structure. These views specify various biological, psychological and social characteristics that best account for this adjustment. Social competence, then, is seen to be equivalent to successful adjustment as indexed by various instruments such as life satisfaction and morale scales, role counts and responses to the Thematic Apperception Test. In the

disengagement theory, social competence reflects a strategic decline in interaction between the individual and his or her society; a decline which moreover, reflects a declining person.

By contrast, what is called activity theory argues that the loss of social roles that sometimes accompanies aging is negatively correlated with life-satisfaction or adjustment. The claim is that older persons are a homogenous group in the sense that their needs and wants are similar to persons in middle age, and that the society pulls away from the older person, against his wishes. According to activity theory, then, the process of disengagement is not mutual, as it is portrayed as being in classical disengagement theory. In fact, withdrawal in this view is seen as dysfunctional and the older person should optimally develop substitute role systems that approximate those of middle-age, that have been withdrawn, in order to remain socially and psychologically adjusted. A new equilibrium must be restored at the level previously held in middle age.

The logic of the activity theory is as follows. First, activity (interpersonal-formal and informal, and solitary) provides role support. Secondly, role support constitutes the self-concept of the person. Therefore, increased activity leads to a stronger self-concept, provides high life satisfaction, successful adjustment to old age and indicates social competence. In addition, the most important type of activity is the interpersonal type; solitary activity does not improve the self-concept significantly, due to the fact that there is only a "symbolic" audience.

An example of formal interpersonal activity is that which takes place in the work environment. Informal activity refers to such things as interactions with friends and family. Solitary activity refers to, for example, reading a book. For activity theory, the last of these kinds of activity is least conducive to successful aging, since it does not involve actual social interaction, but only a vicarious interaction through the authors that one reads.

Activity theory reflects the restricted picture in that all older people are held to a standard set by gainfully employed middle-aged persons. As such, they must struggle against impending decline in social competence brought on by factors such as mandatory retirement, which are externally imposed on them. The assumption of this view is that in so far as older persons are unable to replace their occupational roles (formal interpersonal activity), they will have a difficult time remaining socially and personally competent. This is the case since both younger and older persons are regarded as essentially social beings. (This issue will be discussed in more detail in Chapter 5). Under these conditions, decline is the expected outcome.

A Life Course Perspective. Another perspective that deserves attention in this section is represented by the works of Neugarten (1969), Neugarten & Datan (1973) and Neugarten & Hagestad (1976). This view may also be seen to reflect the restricted picture, although in a different manner from the perspectives previously mentioned. The distinguishing feature

of this version of the Life Course view is that it attempts to deal explicitly with the "intersection" of personality and social variables as they bear upon the problem of social competence, and consequently does not view older persons as exclusively social beings. However, it is still a restricted view since it presumes both personal rigidity and a static society. This interpretation can be supported in the following way.

In the Neugarten et al perspective there is a presumed intersection between biological time, social time and historical time. Biological or "lifetime" is divided up into socially relevant units and,

Lifetime becomes translated into social time, and chronological age into social age (Neugarten & Hagestad, 1976, p.35).

In addition, individuals are assumed to be regulated by this social age as a function of the fact that they internalize a social clock "...that tells them whether they are on time or off time" (1976, p.35).

Although the particular behaviors that are prescribed by society differ by culture and historical time, there are thought to be identifiable modal patterns of behavior that are normative for that society. Neugarten (1969,p.122) maintains, for example, that in western culture older persons should begin the "...yielding up of a sense of competency and authority...", and ought to "...maintain a sense of integrity in terms of what one

has been, rather than what one is...". The basic assumption contained in these statements is that biological age determines appropriate social behavior. The further assumption is that human beings decline biologically to the point that the expected outcome, at least in western culture is best described as obligatory disengagement.

The foregoing analysis notwithstanding, there are a number of statements contained in this perspective that might lead one to question the present characterization of Neugarten's views. For example, there is discussion in her work of the fact that the person, and especially the adult person,

...is a self-propelling individual who manipulates the environment to attain his goals (Neugarten, 1969, p.123).

And,

In addition to cohort and other group differences, there are wide individual variations and idiosyncracies in the timing of role transitions (Neugarten & Hagestad, 1976, p.50).

There is also the claim that in a complex society, the age-norms and expectations can change rapidly and there may even be a movement toward an age irrelevant society.

These statements cannot be reconciled easily with other central assumptions of this perspective. That is, it appears contradictory to state that, on the one hand, social age

"regulates" a person fundamentally (that is, "constitutes" the person) and, on the other hand, to maintain that people have choices. It is also difficult to understand what is left of the idea of an "...ordered and predictable life course..." (1976, p.45) in a society that may be becoming age-irrelevant. Despite this apparent contradiction, however, the dominant meanings and assumptions contained within this perspective argue for the appropriateness of classifying it as still another instance of what is described here as the restricted picture of aging.

A Life-Event Perspective. The final perspective to be considered in this section is the life-event framework that has been developed by Hultsch & Deutsch (1981). It is this and related approaches to life-span development that McPherson (1983, p.125) has in mind when he calls the life-span perspective a "normative" view. However, not all life-span research falls into this category and some exceptions will be discussed in the next section. Nevertheless, it is instructive to explicate the characteristics of this version of the life-span approach.

Support for the position that the Hultsch and Deutsch life-event perspective reflects an understanding of social competence that is similar to those views already discussed comes from its emphasis upon potentially "universal" stages in the life-cycle (Levinson, 1978, cited in Hultsch & Deutsch, 1981, p.229). There is also an emphasis on past personality as a determinant of present behavior (p.239), and a description of "coping strategies" which portrays them as debilitating experiences (p.245), particularly for older persons.

Another indication of the restricted picture contained within the Hultsch and Deutsch position is their assumption that theories such as Erikson (1963) are "elitist", on the grounds that few people are thought to attain higher levels of integrity and wisdom (Hultsch & Deutsch, 1981, p.316). This conclusion is both unwarranted and biased. It is unwarranted since it is not possible at the present time to know how many people do or do not attain these higher levels, since it is not obvious how one is to assess these levels. Second, the conclusion is biased in that it assumes that a decremental direction is more truly representative of development. But even if it were to prove to be the case that most people are not "wise", however we measure wisdom, this does not necessarily imply that this "should" be or must be so.

The Hultsch and Deutsch life-event perspective points out a number of important aspects of psychosocial behavior. The problem is that it interprets these phenomena in such a way that there is little room for other things to happen or other questions to be asked. On the whole, some attempt is made to accomodate the "diversity" of developmental trajectories vis a vis adult and gerontological social competence; however, the underlying image is one of universal, age related decline.¹

¹This critique of Hultsch & Deutsch (1981) is appropriate despite their inclusion of Riegel's (1975) perspective on the same issue as part of their framework. I shall suggest in the next section that Riegel's perspective presents a different understanding of this matter.

Conclusion

The foregoing analysis, which reflects the approach outlined in Chapter 3, supports the claim that all the views summarized contain common meanings or understandings of intellectual and social competence. These common meanings center around a restricted picture of aging as a process of universal decrement and decline. The next section will provide a characterization of a number of alternative perspectives emerging in the literature of psychosocial gerontology which present a significantly different understanding of intellectual and social competence in the later years.

Selected Expanded Perspectives

The same rationale will be followed in this section as was employed previously. That is, there will be an attempt to explicate a number of emerging perspectives that contain similar meanings of intellectual and social competence. As was the case in the previous section, these perspectives are also selected views. Further, as the following exposition will make clear, there are degrees of "expansiveness" in these selected perspectives. In this connection, a number of views to be discussed first, will be seen to clearly possess characteristics unlike those explicated earlier; yet, they remain in some ways restricted relative to other still more extreme expanded views. For purposes of explication this family of moderately expanded

views will be referred to as "partially expanded" perspectives.

Intellectual Competence

Adult Intelligence: Partially Expanded Views. The following perspectives on intellectual competence are placed in this section since, on the one hand; they reflect an attempt to understand adult and gerontological intellectual competence in its own right, rather than viewing it in relation to youth. In addition, they argue for the possibility of intellectual growth throughout the life-span. On the other hand, these views all suffer from conceptual and theoretical difficulties which tend to make them somewhat restricted. Specifically, the reference here is to authors such as Arlin (1975), Flavell (1970), Kohlberg (1973), Riegel (1973b) and Schaie (1982).

These partially expanded views have as their starting point the assumption that there are different stages of cognitive (or moral) development that reflect competencies which are unique to adults and older persons. Thus, Arlin (1975), for example, proposes a 5th stage of cognitive development termed a "problem-finding" stage which goes beyond Piaget's formal operational level. Although this account involves an initial attempt at including such things as creative thinking in its characterization of adult intellectual competence, and consequently comprises an example of "new heuristics in adult thought" (Arlin, 1975, p.606), this view nevertheless suffers from the theoretical deficiencies that characterize certain restricted views.

That is, it is not clear that one can postulate this 5th stage, which presupposes the attainment of the formal operational level, if, as discussed in the previous section (p.48), the universal or even usual attainment of the formal operational level is itself questionable. In addition, this view deals with young adults (college seniors) and becomes problematic when generalized to older adults, since it describes older persons only "by analogy".

Similarly, the issue of cognitive developmental stages in adulthood has also been addressed by Flavell (1970). Flavell's main point is that whereas childhood is characterized by biological, maturational development with all that this implies in the developmental framework (that is, universality, unidirectionality and irreversibility) adulthood may be characterized by more environmental, experiential factors. For Flavell, there is nothing developmental, strictly speaking, about adulthood. This indicates that, in agreement with the earlier discussion, the post-Piagetian conceptual framework does not lend itself to an understanding of adult development.

This conclusion is supported by Flavell's assertion that an organismic, or more maturationally based approach provides an appropriate model for child development, but a more mechanistic, or situationally based model is required to understand adulthood. Flavell's approach conflates two very different ways of understanding and thinking about this issue, that is, it mixes paradigms or world-views. Such an orientation does not lend itself to a coherent understanding of adult intellectual

competence, particularly if one is interested in a life-span perspective.

The most adequate and useful perspective on adult development that has its roots in the Piagetian tradition is that of Riegel (1973b). More will be said about this perspective presently. Before turning to a consideration of Riegel's work, however, there is another issue that deserves attention. The issue concerns those difficulties inherent in any stage theory of gerontological intelligence.

The view expressed by Kohlberg (1973) exemplifies the nature of these difficulties and represents another attempt to specify certain more positive and specifically adult cognitive competencies. Kohlberg's postulated 7th stage of moral reasoning is thought to require considerable life-experiences and particularly experiences with moral dilemmas and reflects a "cosmic" attitude or wisdom of old age (Kohlberg, 1973).

Although this perspective reflects an attempt to identify a positive and interesting way of understanding adult and gerontological intellectual competence, it also suffers from serious theoretical deficiencies. As Kohlberg himself points out, there is no single stage 7 structure, that is, the instantiation of this stage is both culturally relative and relative to individual life histories. Again, the difficulties with the cognitive developmental framework become apparent when it is placed in the gerontological context. In so far as these views must acknowledge the characteristics of the cognitive developmental paradigm or presuppose them, they appear to

generate problematic accounts of gerontological and adult cognitive competence.

There is a different kind of stage theory of life-span development that does not appear to be based on as strict conditions as the foregoing views. According to Schaie (1982), there are qualitatively different developmental tasks at varying points in the life-span and these tasks reflect or depend on different forms of intellectual competencies. Thus, for example, the "task specific skills" required for the adolescent or young adult at college are different from the "meaning-oriented" skills required at the "reintegrative" stage of the older adult. Consequently, "...common psychometric tests of intelligence are likely to prove inadequate..." (Schaie, 1982, p.267) at the later periods of applying or interpreting life situations, for assessing intellectual competence. This is particularly the case with older people who may pay "...selective attention to cognitive demands that remain meaningful or attain new meaning" (Schaie, 1982, p.268).

For Schaie, this view requires rather drastic revisions in test items and demands that test materials be high in ecological validity. This perspective more clearly reflects the expanded picture than the other views so far considered; however, there is a cautionary note to be made. One must be very careful not to reify the stages proposed. In this connection Schaie acknowledges the contribution by Neugarten (1969) to his theory and the latter has been described earlier as an example of a position that reflects the restricted picture

in that it presumes universal, normative stages of adult development.

As mentioned earlier, the final perspective to be considered in this section is that of Riegel (1973b). Riegel's perspective on adult intellectual competence has a good deal of theoretical content, in that he shows, within the context of Piaget's framework, that there is a level of cognitive functioning beyond the formal operational level. This higher level, termed "dialectical operations", emerges from earlier levels of functioning. "Dialectical operations" refers to such things as a capacity to live with contradictions and an ability to synthesize knowledge, as a result of greater life experience.

On the basis of his analysis, Riegel claims that formal operations cannot represent the measure of mature intelligence. The notion that thinking at any age is essentially dialectic and not equilibrium-oriented leads to a positive interpretation of cognitive aging, in that older people may not do well on formal operational measures but may do well on dialectical measures. The claim is that perhaps older people "should not" do well on formal operational tests since these tests are designed to assess an earlier level of intelligence that may no longer be dominant in older persons, since it has been superseded by the dialectical level.

This perspective ties in with Schaie's (1982) view that understanding intelligence in adulthood involves more than the consideration of task-specific skills which are highlighted at the formal operational stage of children or adolescents. For

Riegel,

...factors of interests and motivations, practical and social significance codetermine operations, originally thought of as being universal qualities (Riegel, 1973b, p.21).

Conversely, formal operational functioning is seen to represent a process of increasing alienation of thought (Riegel, 1973b).

In summary, this section has considered a number of perspectives which, despite certain theoretical deficiencies, suggest that intellectual growth is possible throughout the life-span, and that there are phenomena unique to the intellectual development of older persons. In the following section attention will be turned to a number of perspectives on intellectual competence which even more clearly reflect the expanded picture. These views build on some of the insights of the positions considered in the present section, particularly those of Riegel and Schaie.

Life-Review. An interesting example of an expanded view of gerontological intellectual competence is Butler's (1982) notion of life-review. Contrary to the more common claim that reminiscence in the elderly reflects senility and approaching death, Butler sees the life-review as a "...naturally occurring, universal mental process..." (Butler, 1982, p.221). Prime facie, there would seem to be a conceptual link between this phenomenon, Schaie's (1982) "reintegrative" stage and Erickson's (1963) "integrity" stage.

The assessment of the nature and content of this life review is seen by Butler to be a function of the present experiences of the person and the "... lifelong unfolding of character" (Butler, 1982, p.221). Moreover, the measurement of whether a particular person's life-review is seen to be successful or not involves the consideration of such things as the meaning that a person has placed on his experiences and not only the experiences themselves. In other words, a phenomenological dimension must be included in the analysis and one must attempt to find out certain things from the person him or herself, as a basis for perhaps more generalizable claims.

The life-review approach is very different from the search for developmental stages, in that although Butler suggests that this process is a universal phenomenon, there is no predetermined outcome of the life-review. That is, there may be growth or decline as a result of the life-review process or even some of each; it depends on the person and his past and present circumstances. In this regard, the life-review perspective reflects the expanded picture to a greater degree than, for example, that of Schaie (1982), in that the latter view suggests a more definite characterization of the "reintegrative" stage of intellectual functioning.

Wisdom. A second example of the expanded view of adult intellectual competence which is presently emerging is that of Dittman-Kohli and Baltes (1984). This view presents the idea that adult intelligence can best be characterized by a notion of

pragmatic wisdom. It is proposed that this concept, as a prototype of intellectual competence, will allow for a more comprehensive understanding and assessment of growth and decline in functioning in this area.

Wisdom in this perspective is defined as an "...ability to exercise good judgement about important but uncertain matters of life" (Dittman-Kohli and Baltes, 1984, p.1). Underlying this formulation of adult intelligence is the assumption that,

In each individual life course, a pattern of general ontogenetic, social-structural, and idiographic conditions jointly define the form of intellectual aging (Dittman-Kohli and Baltes, 1984, p.3).

The important point here is that, as with Butler's life-review perspective, the understanding of adult intellectual competence presupposes the consideration of the person's past and present circumstances. The suggestion is that in this way it may be possible to interpret observed decrements as often involving the measurement of skills and abilities that are superfluous or irrelevant to the further development of a particular person. Or, abilities that although subject to decline, are compensated for in a variety of ways by different persons.

The notion of wisdom, like the notion of life-review is more a heuristic concept, than a "reified" universal developmental end-point, and in this way reflects a different understanding of intellectual competence from the positions discussed in the first part of this chapter. That is, the

postulation of a general concept does not mean that all persons become wise or that people are wise in the same way.

One can specify certain general characteristics of adult intellectual competence within a certain range but this is a very different conceptualization of the problem from that which postulates the definition of adult intelligence. For example, one can specify that fluid intelligence is likely to decline more than crystallized intelligence, or that there is a great deal of variability in intellectual development in adults. There are observed structural regularities; however, these regularities play themselves out in a myriad of ways in practice. The regularities are guidelines and not reified reflections of reality.

A possible objection to this perspective on wisdom is that it seems to be based on a previously discussed restricted view of adult intellectual competence, namely, the fluid-crystallized distinction of Horn and Donaldson. Specifically, if wisdom is an outgrowth of crystallized intelligence, which in turn has evolved out of a biologically based fluid intelligence, then in the final analysis, this putative expanded view is really a restricted perspective.

In response to this objection, Dittman-Kohli and Baltes (1984,p.22) make it explicit that in their view the dimension of crystallized intelligence is a co-equal with fluid intelligence and that the former is not necessarily derived from the latter. (This issue will be treated in more detail in Chapter 5).

A final remark about this perspective has to do with the

issue of wisdom related tasks or, the basis of measurement strategies of wisdom. The emphasis is on such things as expertise, contextual richness, pragmatics of life, uncertainty and relativism. The focus then is on the complexity of the problem and the crucial importance of situational conclusions.

A second approach to the study of wisdom is that of Holliday (1983). In attempting to identify a more positive starting point for the understanding of adult cognitive functioning, that is, one which would allow for the possibility of growth in aging, this perspective suggests that

...the word "wise" references a different set of psychological attributes than does the word "intelligent" (Holliday, 1983, p.13).

The insight behind this study is that, by starting from the way that the term "wisdom" or "wise person" is used by people in the social, or ordinary language context, one may generate a prototype which reflects ideal members of the category wise. This procedure, it is claimed, can be a rich source of information about the "attribute structure" of wisdom. In addition, such an analysis can serve as a first step in the "...systematic investigation of the nature and function of wisdom" (Holliday, 1983, p.78).

This perspective organizes and clarifies much history and diverse tradition connected with the notion of wisdom and provides some interesting results and questions for further research. The most interesting result for present purposes is

the characterization or attribute structure of wisdom that emerges from the study and how it corresponds to the previously discussed view of Dittman-Kohli and Baltes (1984).

In general, the meaning of wisdom refers to such things as (1) proper behavior, (2) basic competency related to the conduct of life; (3) social adeptness, interpersonal judgement and (4) the capacity to take a more panoramic view of issues. In connecting the phenomenon of wisdom to adult development, the theme emerges again that mature intellectual functioning has to do with the insertion of more traditional intelligence-type skills within a larger social, contextual framework. A major assumption of this view is that it remains an open question as to how well one must perform on these various traditional test-specific skills in order to be considered wise.

Finally, the perspective does not assume that wisdom is a universal developmental end point. Wisdom is neither exclusively an old age and death related phenomenon (Erikson, 1963) nor is it necessarily part of every person's developmental trajectory. It reflects rather, a significantly different understanding of adult cognitive functioning that deserves further attention. As Holliday (1983, p. 200) points out,

Viewing wisdom in terms of a movement toward greater integration does not, however, imply that there is any normative inevitability in becoming wise. Adults become many things, one of which is to become wise.

Self-Construction. Another perspective that contains many of the same basic assumptions regarding adult cognitive development is that of Birren and Hedlund (1982). In this view, the general dimension of self-construction is closely related or perhaps even presupposes a certain kind of intellectual competence. That is, in adult and gerontological intellectual functioning there is, along with the hereditary and environmental factors that influence a person's development, a dimension of choosing or, "doing something with what one has." A comprehensive understanding of intellectual competence, in order to account for these three influences, must acknowledge both the culture and society in which a person lives, and the ways in which different persons live that culture.¹

Wisdom and self-construction are connected in the sense that

The wise person is able to understand the environment well enough to know the limits of its plasticity so that she/he does not upset the balance of the system (Birren and Hedlund, 1982, p.70).

This means that wisdom as intellectual competence includes the capacity to discern appropriate action in a particular context. The measurement or assessment of this kind of

¹The work of R.W.White (1973,1975,1976a) is also an excellent example of an attempt to understand this aspect of human development. More will be said about White's views in the section on social competence.

competence or "intelligence" requires an evaluation that is highly contextual and relative.

This section of the inquiry has presented an explication and characterization of a number of emerging perspectives on gerontological intellectual competence. On the basis of this analysis, which utilizes the approach developed in Chapter 3, that is, an inquiry into meanings and assumptions contained in the literature, it has been indicated that these emerging perspectives reflect very similar "understandings" of the nature of intellectual competence in the later years. In the next section, attention will be directed to selected perspectives which reflect this same expanded orientation upon the issue of social competence.

Social Competence

Riegel's Life-Event Perspective. A clear example of a perspective which reflects the expanded picture in the area of social competence is that of Riegel (1975, 1976). In this view the study of social competence includes an explicit consideration of, broadly speaking, a changing person in a changing social structure. Thus, Riegel advocates a shift away from universal claims about one aspect or another of social competence which result in an oversystematized order being placed on the life cycle, to more context-specific claims about the concrete actions of individuals in a concrete social world

(Riegel, 1976).

For Riegel, this change in emphasis allows for the possibility that the entire person-environment situation is "workable", in that both the person and the society are viewed as changeable through physical, psychological and social intervention. Furthermore, a comprehensive understanding of social competence is seen to presuppose the consideration of all these aspects.

According to this perspective, there are progressions along different types of events in the life cycle. First, individuals develop along an inner-biological progression (including maturation, and the experience of sensory-motor deficiencies in late life) which gains its social significance in the normative, age-graded system of any particular society. Second, there is an outer-physical progression which involves such things as earthquakes, accidents and the death of a spouse. Third and fourth are, in turn, the dimensions of individual-psychological and cultural-sociological progression which involve the "readiness" for a person to interact in particular social situations and the society's expectations for behavior at different points in the life cycle and at different historical periods.

For Riegel, what is "interesting" about social competence and human development in this context is that there is not a smooth transition from stage to stage in the interaction between the person and the social structure, or at least there is no single prescribed transition route to "adjustment". Rather,

development occurs through the "asynchronies" among the four dimensions listed above. These asynchronies create crises and catastrophes for individuals and society. Furthermore, these crises should be seen as "...meaningful phases in one's life. This is true for incapacitations and even for death" (Riegel, 1976, p. 693).

The different ways that different persons resolve these crises and exhibit social competence must be understood in a highly situational manner and one must attempt to determine the positive value or meaning of conflict and disruption in human development. In commenting upon viewpoints less interactive than his own, Riegel (1976) points out that,

Without any debate it has been taken for granted that a state of balance, stability and rest is more desirable than a state of upheaval, conflict and change (p. 690).

Under his own contrasting interpretation, change and crisis can be seen as positive developmental phenomena, and whether a particular instance of a crisis is positive or negative for a particular person requires a contextual assessment that includes the meaning of the event for the person as he or she sees it. On a broader level, if certain asynchronies are dysfunctional for a group of people, for example, older persons who do not want mandatory retirement, then one can attempt to adjust the person or the environment and, more importantly, the person can make certain choices himself.

Personality as Process. A second important perspective in the context of social competence is that of Thomae (1980). This view is important for at least two reasons. First, it provides a concise critique of decline perspectives by indicating various deficiencies in sampling, testing and by providing studies that indicate the reversibility of decremental outcomes. Since much of this has been discussed earlier, it will not be repeated in detail. However, it is useful to indicate in summary form the dimensions considered by Thomae. These are: activity-disengagement, depression, life satisfaction and morale, adjustment, interior behavior, rigidity, anxiety and cautiousness.

Thomae's general claim is that trait oriented perspectives which attempt to make universal, age-related claims on the basis of largely cross-sectional or longitudinal methods; and which usually end up showing decline with age, are open to serious question. For example, the view that depression is basic to the aging personality can be shown to be mistaken since other studies have shown that there are no significant age differences in "depressive syndrome" (Thomae, 1980, p.288). Also, depression, even in the elderly, may be a result of altered social circumstances, and therefore itself be alterable. Another illustration is the claim that there is a correlation between age and life satisfaction (Disengagement-Activity Theories). For Thomae, life satisfaction may be far more strongly correlated with health, S.E.S.(socio-economic status) and "significant others".

The second aspect of Thomae's perspective is his emphasis on process centered approaches to the understanding of social competence. That is, in this perspective, the contextual and personal dimensions are crucial. In referring to earlier research, he points out that there has been an

...underestimation of situation-specific inconsistencies of behavior and of the discriminative facility of the human actor (Thomae, 1980, p.293).

In addition to this, Thomae, in agreement with Riegel, argues that the emphasis on the notion of equilibrium or homeostasis may be useful as a guideline in certain situations, but it leads to the danger of assuming that there is a "modal adjustment pattern" which one must live up to in order to be considered competent. Since many older people do not live up to this hypothetical pattern, they are therefore mistakenly seen as deficient or incompetent.

As an alternative to this scenario, Thomae (1980,p.302) points to the idea that there are many instances of "cognitive restructurations", which are related to adaptation to situations, that do not reflect achievement activity, external adaptation to institutions, and or aggression. More simply put, people can develop novel, creative and personal competency strategies that reflect genuine choices.

For Thomae, there is a complex relation between the perceptions of reality of older persons, coping strategies and social competence or incompetence that requires assessment in a situation. Thus, competence differs across persons, across

situations and across time for the same person. Behavior X at time T for person A does not necessarily imply behavior Y at Time T+1, for person A (nor for person B).

A final quotation which characterizes Thomae's perspective on social competence is the following:

Social competence is (sic) a global measure for the individual's capacity to meet social and biological demands and the society's capacity to meet individual needs and capacities (Thomae, 1980, p.303).

Individual Life-Patterns. The third and final perspective on gerontological and adult social competence to be discussed is that of White (1973, 1975, 1976a). This view is essentially consistent with those of Riegel and Thomae, already discussed. For White, one must abandon the idea of quietude, equilibrium and rest and acknowledge that there are always crises and catastrophes that people (and societies) must move through. Adjustment and rest are the negative end-point of what is really interesting about development. More important are questions like, "How do people accomplish things such as adjustment to retirement or loss of spouse and can they be assisted to do it better"? In addition, how could society help them do it better. According to White,

...adaptation does not mean either a total triumph over the environment or total surrender to it, but rather a striving toward acceptable compromise (White, 1976a, p.22).

A related point is that in this perspective human beings are seen as active and are not thought to maintain a personal homeostasis. That is, basic biological and cognitive functioning are necessary but not sufficient to explain human development. Human beings also attempt to attain greater and greater autonomy, which implies learning, conflict and change. Another way to state this point is to say that for White adaptation involves, in addition to the ability to derive continued information from the environment (basic intelligence) and the capacity to maintain a basic internal organization (health, self-esteem); the capacity or perception of autonomy or freedom of movement in a situation (White, 1976a).

In this regard, such things as mandatory retirement may have very serious consequences for many people since,

It can be a threat of disastrous proportions to discover in the midst of life that all avenues are blocked to further personal development (White, 1976a, pp.23-24).

An important aspect of White's perspective is his emphasis on the notion of individual life-patterns. People grow and develop towards greater autonomy in highly idiosyncratic ways. The attempt to categorize people according to traits and especially a set of traits that add up to a mature personality is therefore seen by him to be highly restrictive. Rather than putting

...the highest value on a person who, in a well-rounded fashion embodies all conceivable virtues

(White, 1973, p.6)

one must realize that each person has a finite space influenced by time, energy and the situation. Each person makes decisions and follows one path and not another, and in order to understand and assess competence, one must discover the areas relevant to that person.

One of the most salient points to be drawn from White's perspective is that if something like autonomy is a life-long intrinsic human characteristic, then one can see the constraining impact of certain social and personal crises in the later years as frustrations of that autonomy and the causes of possibly many putative age-related decrements.

The investigation of statements, methods and findings contained in the foregoing expanded perspectives has shown that there is a common understanding of intellectual and social competence evident in all these views. This common understanding reflects the expanded picture of these phenomena and as such, emphasizes context-specific, life-span, process related interpretations that allow for both decline and growth to take place in human aging.

Conclusion

In this chapter, following the procedure outlined in Chapter 3, it has been shown that there are two broad characterizations of research on intellectual and social

competence in gerontology, namely, a restricted and an expanded picture. The restricted picture is youth centered and tends to emphasize biologically based, age related understandings of the phenomena of aging. As a result, advocates of this view reach decremental conclusions regarding human aging. In contrast, the expanded picture is life-span and gerontological centered, and includes process related views that allow for an understanding of aging that involves growth and decline.

This part of the inquiry may be seen as a preliminary step toward reaching the purposes of the study mentioned in the prologue. That is, it brings together a variety of disparate views in one place, discusses them in a unified fashion and elaborates on their thinking. The next chapter, which corresponds to step 4 of the Hermeneutic approach discussed in Chapter 3, will consist of a refinement of this activity. Specifically, the discussion will shift to a broader level and there will be a further consideration of the basic assumptions that are contained in all the perspectives discussed under the restricted picture and, correspondingly, under the expanded picture. This clarification will be carried out by means of an explication of the contrasting ontological presuppositions that may be seen to underly these two characterizations of the research.

CHAPTER 5

VITAL EXISTENCE AND PERSONAL EXISTENCE

In the previous chapter two major characterizations of research in psychosocial gerontology were explicated. Specifically, selected perspectives on intellectual and social competence were seen to contain meanings of these phenomena that reflect, in different ways and to varying degrees, either a restricted or an expanded picture of life-span development. In the attempt to take this analysis one step further the present chapter, which corresponds to the fourth step in the Hermeneutic approach described in Chapter 3, will consist of a discussion of the contrasting ontological presuppositions that may be seen to be contained in these two characterizations.

In what follows, the term "ontological" refers to a consideration of basic images or understandings of human nature that can be explicated in the scientific literature. As discussed in Chapter 3, the intention is to interface identifiable scientific meanings of various phenomena with a conceivable wider context of total human experience. This goal is assisted by questioning the research as to its understanding of the nature of man, the nature of human aging and the meaning of death and dying, along with the meanings of intellectual and social competence considered from this broader perspective.

The purpose of this step is to provide a further clarification of the way in which psychosocial gerontology

understands itself as a field of study by explicating its basic assumptions. It is worth repeating here that the primary intention of this inquiry is not to explain "why" this self-understanding has emerged, but to clarify "what" appears to be happening.

Human Nature as Vital Existence

The restricted picture characterized in the previous chapter reflects a general understanding of human nature as vital existence. "Vital existence" refers to the tendency to view human beings as essentially bio-physical entities. That is, as the Disengagement Theory phrases it, the physical man tends to be the whole of man (p.52). In addition, in the restricted picture human beings are not only viewed as predominantly bio-physical beings or organisms, they are also seen as biologically determined entities.

This determinism manifests itself in the view that human cognitive and psychosocial functioning are understood as being controlled by the physical state of the organism. There is a one way relation between the mind and the body and to a significant extent, the body determines the mind. A further clarification of these basic assumptions about human nature presupposed in the restricted picture can be had by reflecting again on the meanings of intellectual and social competence.

In the restricted picture the tendency is to understand intellectual and social competence as an ability to maintain a

"global homeostasis". That is, competence or incompetence has to do with a capacity for self-preservation. The maintenance of this global homeostasis becomes an increasingly difficult task as one ages since the assumption is that there is a net, biologically produced decline in biological, cognitive and social functioning.

This understanding is evident in the restricted picture of intelligence in that the tendency is to claim that in the later years and often in adulthood, little new learning is possible. One should rely on cumulative or habitual knowledge (sagacity, crystallized intelligence) which requires little effort, to maintain everyday activities. Similarly, from the point of view of human social competence, the concern in the restricted picture is for maintaining an acceptable number of social interactions (informal or formal), and therefore a healthy self-concept, despite significant changes in the person's social structure (Activity Theory). Or, conversely, one should relinquish most social activity and emphasize emotive-leisure pursuits to ensure a successful disengagement (Disengagement Theory).

The same understanding is evident from a psychosocial perspective. The main point here is that human beings attempt to maintain an emotional equilibrium in spite of increasing 'natural' anxiety, depression and rigidity. As a result, concern with what one has been, is encouraged (Neugarten). In all these elements of the restricted picture the tendency is to view the older human being as an inevitably declining biological

organism. This organism struggles to maintain necessary biological, cognitive and social functioning or, a global homeostasis. It would not be hyperbolical to suggest that "what" ages in the restricted picture is essentially a biological organism with various short-lived epiphenomenal cognitive and social competencies.

This analysis suggests that human aging in the restricted picture has to do with early maturity followed by gradual but significant decline to probable senility, and death. Human aging, at all levels reflects,

... a moment of optimal functioning bracketed by immaturity on the one hand and infirmity on the other (Labouvie-Vief & Chandler, 1978, p.200).

It should be emphasized that in the restricted picture the cognitive and psychosocial aspects of human aging are subject to these conditions since the assumption is made that there is a physical substrate which determines what will occur in higher areas of human functioning.

The understanding of human nature as vital existence is also evident in the image of human death and dying that emerges from the restricted picture. As has been pointed out in a similar context, "death" here refers to "the functional demise of a machine" (Fastiggi, 1982; Kenyon, 1980; Marcel, 1956). Again, the focus tends to be on the bio-physical aspects of this phenomenon in that death is viewed as the biological termination of a member of a species. The restricted picture, given this

understanding of human nature, suggests that the only proper or appropriate attitude to dying and eventual death would be resignation to a "fait accompli".

It is important to include the issue of death and dying in this discussion since the meanings of aging, dying and death are closely linked in the restricted picture. In this view an aging person is, in an important sense, a dying person, or one who is "nearly dead". Kastenbaum (1979,p.84) sums up this point by saying that, from this perspective, (1) there is no point in being dead, since death is annihilation, (2) there is little point in dying and, (3) there is no point in being old.

A last issue that points to the understanding of human nature as vital existence in the restricted picture centers around the nature of the person and in particular the older person. In addition to the points already made on this topic, in this picture, the human being is viewed as an individual, egoistic and reactive entity. As individuals, people are interchangeable and the emphasis is on species-wide claims. (The distinction between an individual and a person will become evident in the next section).

Consequently, within certain ranges all older people are seen as being similar in the restricted picture. In addition, human beings are seen as entities that are egoistic in that, as discussed in Chapter 4, they function cognitively and socially apart from an environment. That is, cognitive development is seen as taking place in the head of the person apart from situational factors. Moreover, socially people are seen as

being determined by the social structure, without in turn being able to affect it.

In this way, older individuals are viewed as being over against a social structure and not as an integral part of it. In the restricted picture the older individual reacts to this social structure. As Marshall (1980b,p.96) puts it, the individual is viewed as ... nothing but a bundle or summation of roles. Furthermore, these roles are "constitutive" of the self (Marshall,1980a). Finally, the older individual simply reacts to inevitable changes in his or her biological and psychosocial make-up.¹

The purpose of this section has been to show that by reflecting on the meanings of various important phenomena that are contained in the restricted picture discussed in Chapter 4, one can identify an understanding of human nature or, an ontology that has to do with vital existence. In the next section, a different set of ontological presuppositions will be explicated on the basis of the expanded picture presented in Chapter 4. It will be suggested that this alternative view reflects a more comprehensive understanding of human nature and human aging, per se.

¹It is not the case that all the restricted perspectives (Chapter 4) assume that the older individual is reactive in every way. However, each view understands the older individual as being reactive in at least one way, that is, either biologically, psychologically or socially.

Human Nature as Personal Existence

The life of personality is not self-preservation as that of the individual but self-development and self-determination (Berdyayev, 1960, p.56).¹

The picture of human nature presented in the previous section may be necessary to an understanding of older persons; however, it is not sufficient. That is, the emphasis on aspects of vital existence tends to present a limited and one-sided or restricted picture of human nature. In contrast, the expanded picture discussed in Chapter 4 reflects different ontological presuppositions, and as such, a different understanding of human nature and human aging; moreover, one which deals more comprehensively with total human experience. The discussion in this section will follow the same order as the previous one. That is, there will be a general discussion of the way in which the expanded picture views the human being, followed by a consideration of the meanings of competence, aging, death and dying, and the older person.

In the expanded picture the consideration of human beings as biological entities provides only a necessary starting point for understanding human nature. That is, in addition to the physical man, there are psychological, social and personal aspects of human existence which are irreducible to physical explanations. Consequently, a full understanding of human

¹The term "personality" refers to the philosophical notion of the nature of the person and not to its referent in "personality" psychology.

nature must account for these specifically human qualities. In this sense man,

... can only be understood through the higher and not through the lower (Berdyayev, 1960, p.46).

Further, whereas in the restricted picture human beings are seen as biologically determined, the expanded picture presupposes an interactive mind-body position. This means that the body or biological component of human nature influences the mind, but does not determine its operation, at least not on a one to one basis. Paraphrasing White (1976b, p.153), biological considerations such as genetic endowments are predispositions that facilitate the development of certain human qualities rather than others. However, they do not impose a precise destiny on human development.

The expanded picture presents a significantly different starting point for the task of understanding human nature, human beings and human aging. This different ontological orientation is evident in its understanding of intellectual and social competence. As discussed earlier, the assumption of this view is that there are psychological and social explanations for aging phenomena that are not ultimately reduced to a biological referent. With this different basic assumption in place, it becomes coherent to discuss a number of other possibilities which take one beyond the notion of vital existence or global homeostasis discussed in the previous section.

For example, whereas intelligence was seen as an essentially biologically based phenomena in the restricted

picture, in the expanded picture there are specific psychological and even social components to intelligence. The assumption is that it is neither known to what degree the body influences the mind, nor how much the mind influences the body. Furthermore, the assumption is not made that the body declines in the ways that it is said to in the restricted picture. The expanded picture presents a view of human nature that deals with what people do after basic needs or requirements for self-preservation are taken care of. But more fundamentally, it acknowledges that there are other aspects of human nature to be considered in their own right.

On the whole, unless a person is ill (Birren, 1963, cited in Labouvie-Vief, 1977) the body is not assumed to be a powerful determinant of cognitive behavior. In the expanded picture intelligence has to do with such specifically human or personal dimensions as a concern for autonomy or self-determination (White, Birren & Hedlund), making sense of one's life (Butler) and achieving wisdom (Dittman-Kohli & Baltes, Holliday).

When it comes to social competence, in the restricted picture one is competent either by successfully acquiescing to the loss of middle-aged roles or by replacing them with surrogate middle-aged ones. In addition, all persons are assumed to age socially in a similar way. But more than this, the meaning of social competence has to do with "social" activity per se, whether formal or informal, that is, activity that involves other people. As discussed earlier (p.58), solitary activity with its "symbolic audience" is not thought to

be conducive to a properly adjusted, equilibrated successful aging or, to global homeostasis. A second point is that 'emotive-expressive' activity, which is often solitary, is thought to be an appropriate indication of gerontological social competence since it reflects a declining, disengaging being.

In contrast, the expanded picture presents an understanding of activity that allows for many things to count as gerontological social competence. Solitary activity, for example, may at any age indicate a considerable amount of personal strength in resisting the social pressures of conformity, particularly in our culture. All persons need not be seen as politicians, executives or civil servants in order to be assessed as socially competent. Solitary activity may indicate spiritual development, a life-long habit, or a temporary or long-term dysfunction due to illness or grief.

A similar point can be made with regard to the notion of emotive-expressive behavior. In the restricted picture, this kind of activity is seen as a substitute for main-line activity. However, this formulation leaves out entirely the consideration of human dimensions such as creativity, personal development, serious philosophical deliberation and the value and meaning of the activity of religious orders. Idiosyncratic behavior may be the key to mental and social health and not a sign of incompetence, in many or even most cases.

A related point is that social competence does not mean "adjustment" in the expanded picture. "Being older" does not refer (or only refer) to a period of life that is necessarily

characterized by quietude, rest, serenity and thoughts of the past. In addition to some of the more positive things just discussed, Butler (1975) has pointed out that there can be much going on in later life; poverty, illness, grief, chronic discomfort and lowered self-esteem from diminished social and personal status. Under such conditions one can observe that,

The strength of the aged to endure crises is remarkable, and tranquility is an unlikely as well as inappropriate response under these circumstances (Butler, 1975, p.10).

Under this more expanded view, gerontological psychosocial competence neither reflects an image of, on the one hand, a "disengaged organism", nor on the other hand, an "equilibrated sage". Particularly in western culture, with its emphasis on biological reproduction (family) and economic productivity (work and materialism), it is possible that many older people are facing serious existential issues once they do not have the societally imposed social obligations and constraints. These existential issues regarding life and death and what constitutes meaningful activity, are seldom included at all in the restricted picture. Borrowing Cole's (1983) phrase, in this sense the restricted picture reflects a series of "existential evasions". In contrast, the expanded picture advocates the explicit consideration of these aspects of human nature and human aging as a component of psychosocial competence.

The issue of psychosocial competence provides another area where one can see significant differences between the restricted

and expanded pictures. In the restricted picture it was indicated that older persons must attempt to deal with increasing incidents of such things as 'natural' depression, anxiety and rigidity. These "traits" are expected outcomes of normal aging given the biological happenings underpinning and determining gerontological development. The restricted picture may be seen to represent an answer to the question, "What are the specific causes of universal, biologically based depression in older subjects"? In contrast, the expanded picture represents an answer to the question, "Why are there observed instances of depression in some older persons"?

These questions reflect two very different orientations. The first assumes that if one observes depression and anxiety, it is a normal, expected outcome of aging and the attempt is made to assist older persons in maintaining vital psychosocial functioning in spite of these inevitable failings. The second orientation assumes much less about the nature of depression and anxiety, the reasons for its occurrence and the meaning it has for any particular older person. As with the understanding of activity, the tendency in the restricted picture is to ignore this last aspect of the problem.

In the expanded picture depression in an older person may indicate the presence of pathology as can decrements in intellectual functioning, but it may also indicate a natural reaction to crisis; for example, the loss of one's spouse or mandatory retirement (Riegel, Thomae, White). In fact, depression may even indicate personal development. As

Dabrowski, Kawczak and Piechowski (1970) suggest, depression and anxiety may indicate the beginning of a self-questioning that will lead to further psychic development. This development can occur at many levels and may include an existential level, *per se*. In this case, an individual feels a need to arrive at a philosophy concerning the ultimate realities of life, the meaning of living, the meaning of development, etc. (Dabrowski et al, 1970, p.53).

The point here is that depression, as an instance of psychosocial functioning does not necessarily indicate decline or growth, absolutely speaking. It is also not necessarily the case that depression is a natural, biologically produced outcome of human aging.

The discussion of various aspects of competence in the expanded picture indicates that it contains an understanding of human nature as personal existence. That is, it acknowledges that there are several related but irreducible aspects of human competence. As a result, in the expanded picture psychosocial competence is not the dependent variable in a relation in which biological functioning is the sole independent variable.

In this view, older human beings as a group are neither understood as declining biological organisms, nor as "equilibrated sages". Human aging in general is seen as a multifaceted phenomenon. Moreover, the assumption is not made, as it was in the restricted picture, that psychological and personal maturity correspond to biological maturity. In the

expanded picture maturity takes place on many levels. Moreover, cognitive, psychosocial and perhaps spiritual maturity may or may not occur in the young and old.

The discussion in the previous section indicated that in the restricted picture there is a strict connection made between the aging or older person, and dying and death. Moreover, death is understood as the demise of a biological organism or machine. In the expanded picture an aging person is not a dying or nearly dead person except either in the self-evident, but not trivial sense that we are all dying, or, in the sense that some older people and some younger people are de facto, dying.

In the gerontological literature, the distinction between aging or being older and dying can be supported by a consideration of the "terminal drop" phenomenon. Research in this area has shown that there are marked declines in intellectual functioning (Riegel & Riegel, 1972) and psychosocial functioning (Lieberman and Coplan, 1970) within a few years prior to actual death.¹ The suggestion is that there may be a period of actual dying which has little to do with normal aging itself.

A similar point has been made in the biomedical context with regard to the notion of the squaring of the mortality-morbidity curve (Fries, 1980). The assumption here is that normal human aging, given medical discoveries and certain alterations in the social structure, will come to resemble an

¹It was shown in Chapter 4 that the restricted picture understands the terminal drop phenomenon as an indicator of closeness to death.

essentially healthy life-span, with a short but steep decline to death in very old age. All the foregoing supports the claim that the meaning of aging and being older are not equivalent to the meanings of dying, and death. To conclude, a major difference between the restricted and the expanded picture on this issue is that there is a clear distinction made between, on the one hand aging, and on the other hand, dying and death.

A related difference centres around the meanings of death and dying themselves. In the expanded picture human death does not refer to simply the termination of a member of a species. In the expanded picture death and dying become existential issues in the sense that there are different conceivable ways of relating to these phenomena in the human context. The relevant question for human beings is,

How can we orient ourselves throughout life both to the immediate challenges of being "here today" and to the mind-bending prospect of being "gone tomorrow" (Kastenbaum, 1981, p.318).

Under this interpretation, death and dying become distinctly human phenomena which may provide opportunities for growth and development through the acceptance of what cannot be avoided. In this way the expanded picture reflects a view that allows for there to be a possible "value" to human dying and death. This is not to suggest that there is one way to view death so that it has value. There can be many differences in orientation toward, and meanings of death, that is, within persons and between persons (Kenyon, 1981). It follows that it

may be totally inappropriate, in agreement with Kastenbaum (1975), to view death as anything like a "normative life crisis". The latter view is implied in the restricted picture in so far as death is seen as a stage through which all persons pass through virtually in the same way; that stage is biological termination.¹

The meaning of death and dying that emerges from the expanded picture also accommodates the notion that mental health and competence do not always amount to adjustment, equilibrium or serenity. That is, whereas in the restricted picture,

We do not picture the mentally healthy person as ill or tormented as burdened, stressed or forced to the absolute limits of capacity (Kastenbaum, 1981, p.319)

in the expanded picture, the prospect of death is seen as something that may initiate powerful reactions, such as fear, anxiety and depression. Furthermore, combinations of these reactions may be experienced at different times by any particular person. Yet, these occurrences do not necessarily imply that there is serious mental illness or psychosocial incompetence, except perhaps as a temporary problem. The same person may at another time relate to death and dying with serenity and acceptance, having grown through a period of

¹A more flexible version of a stage-type theory of the place of death and dying in the life-span is Marshall's (1980a) view of aging as a "terminal status passage". The important point in the present context is that there is an active, personal component to this stage.

understanding his or her own death.

In this regard, it has also been suggested that it is possible to develop a "floating" position with regards to the prospect of one's own death (Kenyon, 1981), by means of which one attempts to leave the question open. To recapitulate, the understanding of death and dying contained in the expanded picture reflects the ontology of personal existence in that it views these phenomena as possessing distinctly human aspects.

The final issue by means of which it is possible to identify the ontology of personal existence contained in the expanded picture is that of the nature of the human person and older person. One of the most important differences between the restricted and the expanded pictures concerns the distinction between an individual and a person. As has been discussed, in the restricted picture the human being is viewed as an individual organism in nature, an instance of a species, and largely replaceable by any other member. In addition, the individual is an egoistic and reactive being.

In contrast, ontologically, the expanded picture acknowledges that there is something different about the nature of human beings. That is, human beings are not simply another part of nature, like all the others. As Berdyaev (1960, p.46) states it:

Man is not merely a product of the natural world, although he lives in it and participates in the processes of nature. He is dependent upon his natural environment and at the same time he humanizes it and

introduces a new principle into it.

This quotation indicates that human beings are entities who, as part of nature, are embodied and finite. That is, human beings are born, grow and die. However, it also suggests that human beings are entities who "find" themselves in this situation, they are self-aware. This issue can be clarified by considering, as examples, Heidegger's (1962) notion of "Dasein", Sartre's (1956) "en-soi,pour-soi", and Merleau-Ponty's (1962) "tacit cogito".

The salient insight of these views is that human beings are entities who exist in situations, that is, they are fundamentally relational creatures in that they are connected to other persons and to a physical environment. It should be emphasized that this is not the same thing as saying that human beings are reactive social creatures. Rather, since human beings are self-aware, they, in effect, are interpersonal entities with social and personal aspects. Another way to say this is that people can make choices, one of which may be to not actively choose.

In the expanded picture, as mentioned earlier, the person is not understood as a biologically or indeed, sociobiologically determined entity. This is due to the fact that there are specifically "human" dimensions or capacities that make our situation different from that of animals. Human beings are not totally instinctual, driven creatures. They have the capacity to think about their instinctual heritage, both individually and

as a human species. This may be true even at the genetic level. Singer (1981, p.169), for example, claims that:

Understanding how our genes influence us makes it possible for us to challenge that influence. The basis of this challenge must be our capacity to reason.

When it comes to being an older person this means that one is constrained and influenced by biological, social, cultural and psychological forces. However, as De Beauvoir (1973,p.240) suggests, there is an "inner aging" by means of which older persons feel not very different from when they were young. That is, our image of our own aging is something that to some extent, comes from the "outside" aspect of my relation to other persons,

Yet our private, inward experience does not tell us the number of our years; no fresh perception comes into being to show us the decline of age.

The expanded picture views the older person and human aging as paradoxical phenomena in that, on the one hand, human beings are subject to many influences and constraints. However, on the other hand, human beings can relate to situations in a variety of ways. There is an element of choice which makes the situation workable, both on the individual and at the societal level (Birren & Hedlund, Riegel, White).

In sum, the expanded picture reflects the ontology of personal existence in that it understands the older human being as a person rather than an essentially biological or reactive

social organism. Moreover, there is an attempt to accommodate the view that older human beings as a group are just that, that is, they are not children, not middle-aged persons and not dying persons.

In this chapter it has been shown that the restricted and expanded pictures explicated in Chapter 4 reflect contrasting ontological presuppositions. These presuppositions center around understandings of human nature as vital existence and personal existence. The contrasting basic assumptions about human nature were identified by reflecting again on the meanings of intellectual and social competence, along with aging, death and dying, and the nature of the person contained in the two pictures.

CONCLUSION

In Chapter 1 of this inquiry there was a consideration of the historical development of the field of gerontology, including a discussion of where the discipline stands at the present time. In addition, the history of gerontology was discussed from the point of view of a basic direction that has been taken in research. That is, from a thematic viewpoint, it was seen that there has been, until very recently, a virtually exclusive emphasis on, and search for the decrements of human aging, so that "aging" had increasingly come to be understood as a process of universal decline.

Chapter 1 also pointed out that a serious problem arises in connection with this orientation, in that such a conclusion may be rooted in a number of factors other than scientific facts, strictly speaking. That is, it appears that there are epistemological, cultural, social and perhaps other kinds of prejudices or assumptions operative upon the scientific gerontological understanding of human aging which have contributed to such a one-sided direction in research. In addition, it was suggested that a reflective appropriation of the field might contribute to a solution to this problem.

By way of an initial clarification and evaluation of the problem of scientific understandings of aging, Chapter 2 demonstrated some of the important reasons for questioning such unreflected scientific meanings, assumptions and biases. Also, there was a consideration of several extant ways of proceeding

with this line of thinking. Then, in Chapter 3, an alternative Hermeneutic approach was suggested as a possible useful additional alternative.

Chapters 4 & 5 consisted of a discussion of the way that such a Hermeneutic approach can be applied in an examination of the gerontological literature. That is, in Chapter 4 an initial selection and classification of central perspectives was undertaken and restricted and expanded pictures were identified. These two pictures were explicated on the basis of an analysis of the meanings of intellectual and social competence evident in findings and statements contained in selected views. This was followed in Chapter 5 by an explication of contrasting ontological orientations that were seen to be contained in the same perspectives. In the next and final chapter, there will be a consideration of the results of the study, as well as anticipated contributions and limitations.

CHAPTER 6

RESULTS, CONTRIBUTIONS, SPECULATIONS

There are four main results of the study. First, a further clarification of why it is important to raise the question of scientific assumptions and biases in gerontology has been provided. In addition, some of the difficulties associated with this procedure were addressed. Secondly, a different approach to the problem of assumptions, namely, the Hermeneutic approach, was outlined in its application to gerontology. Third, this new approach has assisted in the further clarification and understanding of the different meanings of gerontological intellectual and social competence in the field. The analysis has indicated that two main pictures or, ways of understanding these phenomena can be identified, a restricted and an expanded view. Finally, a further analysis of these two pictures has resulted in an explication of some of the philosophical underpinnings of the scientific research. Specifically, it has been shown that there are different ontological orientations presupposed in the restricted and expanded pictures. Namely, an understanding of human nature as vital existence in the instance of the restricted perspective and as personal existence in the case of the expanded picture. This result suggests that the differences between these two pictures are more than methodological.

Contributions and Significance of the Study

In point form, the following contributions are anticipated.

1. The study provides an effective way of facilitating cross-disciplinary "conversations" and enables one to come to some general insights and understandings about the field of gerontology. In addition, it assists in the clarification of how psychosocial gerontology understands itself as a field of study.
2. The analysis of scientific meanings has contributed to the effort to bring together diverse approaches to research in gerontology on, for example, adult intelligence and cognitive and social competencies and represents a modest step towards the integration of the field at a conceptual level.
3. The study builds on what has been done, that is, it remains close to the literature in the field and may be seen to have assisted in the effort to develop cumulative knowledge in psychosocial gerontology.
4. The study has attempted to increase the understanding of implicit and explicit images, meanings and conceptualizations of aging contained in the scientific literature. In addition, it may suggest new ways of viewing aging and the older person as a result of the activity of thinking critically about how the empirical literature reflects and relates to general meanings of aging and the nature of the older person. As mentioned in the prologue, scientific gerontology is enriched by a contribution from the study of human development and human nature in general.

5. Finally, the study constitutes an instance of the way in which philosophy, as part of stage (iii) in Chapter 1, can contribute to the further development of basic knowledge in psychosocial gerontology. This is true from the point of view of the further clarification of the epistemological foundations of scientific gerontology and also in the context of the discussion of the ontological considerations that are connected to the scientific literature.

Limitations

The study represents a type of research that is increasingly being seen as important in the field of gerontology. Nevertheless, it is a new approach in that it attempts to alter the boundaries of several traditional disciplines. This makes for a situation in which there are not always clear guidelines to follow, both from a methodological point of view and from an assessment perspective. Consequently, there are limitations as to how much one can relate this study to mainstream research in individual disciplines. As a result, this work must be evaluated to a greater extent on its own merits as to such things as coherence and usefulness.

A second limitation is that the thesis suffers to some extent in depth for what it gains in breadth. That is, on the one hand, as an attempt at a new approach, much energy is devoted to the explication of a number of basic connections among several fields, in particular, philosophy, psychology and

gerontology. In this sense, the study sets out some groundwork. On the other hand, it is not possible to provide exhaustive detail of a number of important issues that are raised in the study.

For example, the study does not solve the problems that are created by the shift to the view that science is not value neutral. Nevertheless, the study does deal with some of the important ramifications of such a position vis a vis the scientific study of aging. Another example is the discussion of different approaches to the analysis of assumptions in Chapter 2. This area could provide the basis for a dissertation in itself. The same can be said about the discussion of ontology in Chapter 5. These areas were not developed any more than they were in order that the overall purpose of the study could be achieved.

Implications for Intervention

The major issue that arises from this study with regard to the problem of intervention, whether it be policy, research, treatment or education is that one must be very careful about making generalized statements about older persons. It would appear that a contextual or situational orientation is warranted in gerontology, since human aging is such a multivariate and multidimensional phenomenon. It follows that the training of both researchers and practitioners should reflect this orientation and that more emphasis should be placed on critical

thinking and learning how to work with various conceptualizations of aging and older persons. In this way one becomes more aware of one's own assumptions and other possible assumptions, a procedure which in turn facilitates scientifically and ethically responsive intervention. Such an approach to training would emphasize exposure to many different perspectives and methods, some of which are traditionally found only in one particular discipline. This is not to advocate that everyone undertake interdisciplinary research, but it is to advocate that a broad background tends to make for a better command of the problems found in gerontology.

Concluding Remarks and Future Research

From a personal point of view, the time and effort spent engaged in this research has provided me with the basic training and knowledge required to pursue a career in the field of gerontology. Although in a way, the study has raised more questions about the nature of human aging and the scientific study of this phenomenon than it has provided answers, I regard this as a positive outcome in that it indicates that there is much work to be done. In this connection, my future interests are to address the problem of the construction of theories of aging, an area that requires that one come to terms with such things as a contextual understanding of science. Another question that is of interest to me is that concerned with the distinction between endogenous and exogenous factors of aging.

That is, what can be said to be intrinsic to the aging process and what is only associated with this process. The present study has indicated that there are no quick answers to these questions, particularly when it comes to human aging. A final area of interest is the problem of providing appropriate intervention strategies and decisions or, what one "ought" to do when dealing with particular older persons or groups of the same, given the difficulty in determining what "is" the case about those persons.

REFERENCES

- Arlin, P. (1975). Cognitive Development in Adulthood: A 5th Stage?. Developmental Psychology 11 602-606.
- Auger, J. (1983). Gerontological Knowledge and its Role in the Social Production of Agedness. Unpublished Doctoral Dissertation, Univ. of British Columbia, Vancouver.
- Barnes, B. & Bloor, D. (1982). Relativism, Rationalism and the Sociology of Knowledge. In M. Hollis & S. Lukes (eds.), Rationality and Relativism. (pp.21-47). Cambridge, Mass.: M.I.T. Press.
- Bayley, N. & Oden, M. (1955). The Maintenance of Abilities in Gifted Adults. Journal of Gerontology, 10 91-107.
- Berdyayev, N. (1960). The Destiny of Man. New York: Harper & Row.
- Birren, J. & Hedlund, B. (1982, June). The Metaphors of Aging and the Self-Constructing Individual. Paper Presented at the Invitational Research Symposium: Metaphors in the Study of Aging. Univ. of British Columbia, Vancouver.
- Braybrooke, D. (ed.). (1965). Philosophical Problems of the Social Sciences. New York: MacMillan.
- Butler, R. (1975). Why Survive? New York: Harper & Row.
- Butler, R. (1982). The Life-Review: An Interpretation of Reminiscence in the Aged. In P. McKee (ed.), Philosophical Foundations of Gerontology. New York: Human Sciences Press.

- Chandler, M. (1975). Relativism and the Problem of Epistemological Loneliness. Human Development 15.
- Cohen, T. (1978). Metaphor and the Cultivation of Intimacy. In S. Sacks (ed.), On Metaphor. (pp.1-10). Chicago: Univ. of Chicago Press.
- Cole, T. (1983). The 'Enlightened' View of Aging: Victorian Morality in a New Key. Hastings Centre Report. 13 (3).
- Craik, F. (1982, June). Aging and Competency: Changes in Cognitive Processes. Paper Presented at the Invitational Research Symposium, Metaphors in the Study of Aging. Univ. of British Columbia, Vancouver.
- Cumming, E. (1964). New Thoughts on the Theory of Disengagement. In R. Kastenbaum (ed.), New Thoughts on Old Age. New York: Springer.
- Cumming, E. & Henry, W. (1961). Growing Old: The Process of Disengagement. New York: Basic Books.
- Dabrowski, K., Kawczak, A. & Piechowski, M. M. (1970). Mental Growth Through Positive Disintegration. London: Gryf Publications.
- De Beauvoir, S. (1973). The Coming of Age. New York: Warner Paperback.
- Dittman-Kohli, F., & Baltes, P. (1984). Toward a Neofunctionalist Conception of Adult Intellectual Development: Wisdom as a Prototypical Case of Intellectual Growth. In C. Alexander & E. Langer (eds.), Beyond Formal Operations: Alternative Endpoints to Human Development.

- Dowd, J. J. (1980). Stratification Among the Aged. Monterey, California: Wadsworth.
- Dulit, E. (1972). Adolescent Thinking a la Piaget: The Formal Stage. Journal of Youth and Adolescence, 1 (4).
- Eisdorfer, C. (1983). Conceptual Models of Aging: The Challenge of a New Frontier. American Psychologist, (pp.197-202). 38(2).
- Elder, G. H., Jr., (1982). Historical Experiences in the Later Years. In T. K. Hareven & K. J. Adams (eds.), Aging and Life Course Transitions : An Interdisciplinary Perspective. (pp.75-107). New York: The Guilford Press.
- Erikson, E. (1963). Childhood and Society. Second Edition. New York: W. W. Norton.
- Estes, C. (1979). The Aging Enterprise. San Francisco: Jossey-Bass.
- Fastiggi, R. (1982). Aging, Death and the After Life. In F. Tiso (ed.), Aging: Spiritual Perspectives. (pp.195-219). Lake Worth, Florida: Sunday Publications.
- Fischer, C. T. (1973). Intelligence Contra I.Q.: A Human Science Critique and Alternative to the Natural Science Approach to Man. In K. Riegel (ed.), Intelligence: Alternative Views of a Paradigm. (pp.8-20). Basel: Karger.
- Flavell, J. (1970). Cognitive Changes in Adulthood. In L. Goulet & P. Baltes (eds.), Life-Span Developmental Psychology: Theory and Research. New York: Academic Press.

- Fries, J. F. (1980, July). Aging, Natural Death and the Compression of Morbidity. The New England Journal of Medicine, (Special Article).
- Gadamer, H. (1975). Truth and Method. New York: Seabury Press.
- Gadamer, H. (1976). Philosophical Hermeneutics. Berkeley: Univ. of California Press.
- Gadamer, H. (1981). Reason in the Age of Science. Cambridge, Mass.: M.I.T. Press.
- Giddens, A. (1982). Profiles and Critiques in Social Theory. Berkeley: Univ. of California Press.
- Gould, S. (1981). The Mismeasure of Man. New York: Norton.
- Habermas, J. (1971). Knowledge and Human Interests. Boston: Beacon Press.
- Hareven, T. K. (1982). The Life Course and Aging in Historical Perspective. In T. K. Hareven & K. J. Adams (eds.), Aging and Life Course Transitions: An Interdisciplinary Perspective. (pp.1-26). New York: The Guilford Press.
- Havighurst, R., Neugarten, B., & Tobin, S. (1968) Disengagement and Patterns of Aging. In B. Neugarten (ed.), Middle Age and Aging. Chicago: Univ. of Chicago Press.
- Heidegger, M. (1962). Being and Time. New York: Harper & Row.
- Hempel, C. (1966). Philosophy of Natural Science. New Jersey: Prentice-Hall.

- Henry, W. (1965). Engagement and Disengagement: Toward a Theory of Adult Development. In R. Kastenbaum (ed.), Contributions to the Psychobiology of Aging. New York: Springer.
- Hochschild, A. (1976). Disengagement Theory: A Logical, Empirical and Phenomenological Critique. In J. Gubrium (ed.), Time, Roles and Self in Old Age. New York: Human Sciences Press.
- Holliday, S. (1983). A Psychological Analysis of the Concept of Wisdom. Unpublished Doctoral Dissertation, Univ. of British Columbia, Vancouver.
- Hollis, M. (1982). The Social Destruction of Reality. In M. Hollis & S. Lukes (eds.), Rationality and Relativism. (pp.67-86). Cambridge, Mass.: M.I.T. Press.
- Hollis, M. & Lukes, S. (eds.). (1982). Rationality and Relativism. Cambridge, Mass.: M.I.T. Press.
- Hooper, F., Fitzgerald, J. & Papalia, D. (1971). Piagetian Theory and the Aging Process: Extensions and Speculations. Aging and Human Development, 2 3-20.
- Horn, J. (1978). Human Ability Systems. In P. Baltes (ed.), Life-Span Development and Behavior. Volume 1. New York: Academic Press.
- Horn, J. & Donaldson, G. (1980). Cognitive Development II: Adulthood Development of Human Abilities. In O. Brim & J. Kagan (eds.), Constancy and Change in Human Development: A Volume of Review Essays. Cambridge: Harvard Univ. Press.

- Horowitz, I. (1961). Philosophy, Science and the Sociology of Knowledge. Springfield, Ill: Charles Thomas.
- Hultsch, D. & Deutsch, F. (1981). Adult Development and Aging: A Life-Span Perspective. New York: McGraw-Hill.
- Kastenbaum, R. (1975). Is Death a Life Crisis? On the Confrontation With Death in Theory and Practice. In N. Datan & L. Ginsberg (eds.), Life-Span Developmental Psychology: Normative Life Crises. New York: Academic Press.
- Kastenbaum, R. (1979). Exit and Existence: Society's Unwritten Script for Old Age and Death. In D. Van Tassel (ed.), Aging, Death and the Completion of Being. Univ. of Pennsylvania Press.
- Kastenbaum, R. (1981). Death, Society and Human Experience. 2nd Edition. St. Louis: C. V. Mosby.
- Kenyon, G. M. (1980). The Meaning of Death in Gabriel Marcel's Philosophy. Gnosis, Montreal, Concordia Univ. 2 (1) 27-40.
- Kenyon, G. M. (1981). Human Death: A Philosophical Analysis. Unpublished M. A. Thesis. Concordia Univ., Montreal.
- Kohlberg, L. (1973). Stages and Aging in Moral Development: Some Speculations. Gerontologist, 13 497-502.
- Labouvie-Vief, G. (1977). Adult Cognitive Development: In Search of Alternative Interpretations. Merrill-Palmer Quarterly, 23(4).
- Labouvie-Vief, G. & Chandler, M. (1978). Cognitive Development and Life-Span Developmental Theory: Idealistic

- vs Contextual Perspectives. In P. Baltes (ed.), Life-Span Development and Behavior. Volume 1. New York: Academic Press.
- Lemon, B., Bengtson, V., & Peterson, J. (1972). An Exploration of the Activity Theory of Aging: Activity Types and Life Satisfaction Among In-Movers to a Retirement Community. Journal of Gerontology, (pp.511-523). 27(4).
- Lieberman, M. & Coplan, A. (1970). Distance from Death as a Variable in the Study of Aging. Developmental Psychology, 2 71-84.
- Lukes, S. (1982). Relativism in its Place. In M. Hollis & S. Lukes (eds.), Rationality and Relativism. (pp.261-305). Cambridge, Mass.: M.I.T. Press.
- MacKeracher, D. (1982). A Study of the Experience of Aging from the Perspective of Older Women. Unpublished Doctoral Dissertation. Univ. of Toronto, Toronto.
- Marcel, G. (1956). The Philosophy of Existentialism. New Jersey: Citadel Press.
- Marshall, V. W. (1980a). Aging in Canada. Don Mills, Ontario: Fitzhenry & Whiteside.
- Marshall, V. W. (1980b). State of the Art Lecture: The Sociology of Aging. In J. Crawford (ed.), Canadian Gerontological Collection Volume III. Winnipeg.
- Marshall, V. W. (1983). Generations, Age Groups and Cohorts: Conceptual Distinctions. Canadian Journal of Aging. 2 (2) 51-61.
- Marton, F. (1981). Phenomenography-- Describing Conceptions of

- the World Around Us. Instructional Science, 10 177-200.
- McKee, P. L. (ed.). (1982). Philosophical Foundations of Gerontology. New York: Human Sciences Press.
- McPherson, B. D. (1983). Aging as a Social Process. Toronto: Butterworths.
- Merleau-Ponty, M. (1962). Phenomenology of Perception. London: Routledge & Kegan Paul.
- Misgeld, D. (1976). Critical Theory and Hermeneutics: The Debate between Habermas and Gadamer. In J. O'Neill (ed.), On Critical Theory. New York: The Seabury Press.
- Nagel, E. (1961). The Structure of Science. New York: Harcourt, Brace & World.
- Neugarten, B. (1969). Continuities and Discontinuities of Psychological Issues into Adult Life. Human Development, 12 121-130.
- Neugarten, B. & Datan, N. (1973). Sociological Perspectives on the Life Cycle. In P. Baltes & K. Schaie (eds.), Life-Span Developmental Psychology: Personality and Socialization. New York: Academic Press.
- Neugarten, B. & Hagestad, G. (1976). Age and the Life Course. In R. Binstock & E. Shanas (eds.), Handbook of Aging and the Social Sciences. New York: Van Nostrand.
- Neugarten, B., Havighurst, R. & Tobin, S. (1968). Personality and Patterns of Aging. In B. Neugarten (ed.), Middle Age and Aging. (pp.173-177). Chicago: Univ. of Chicago Press.
- Papalia, D. (1972). The Status of Several Conservation

- Abilities Across the Life-Span. Human Development, 15 229-243.
- Philibert, M. (1982). The Phenomenological Approach to Images of Aging. In P.McKee (ed.), Philosophical Foundations of Gerontology. New York: Human Sciences Press.
- Reichard, S., Livson, F. & Peterson, P. (1968). Adjustment to Retirement. In B. Neugarten (ed.), Middle Age and Aging. (pp.178-180). Chicago: Univ. of Chicago Press.
- Riegel, K. (1973a). An Epitaph for a Paradigm. In K. Riegel (ed.), Intelligence: Alternative Views of a Paradigm. Basel: Karger.
- Riegel, K. (1973b). Dialectical Operations: The Final Stage of Cognitive Development. Human Development, 16 346-370.
- Riegel, K. (1975). Adult Life Crises: Toward a Dialectical Theory of Human Development. In N. Datan & L. Ginsberg (eds.), Life-Span Developmental Psychology: Normative Life Crises. New York: Academic Press.
- Riegel, K. (1976). The Dialectics of Human Development. American Psychologist, 31 689-700.
- Riegel, K. (1977). History of Psychological Gerontology. In J.Birren & K.Schaie (eds.), Handbook of the Psychology of Aging. (pp.70-102). New York: Van Nostrand.
- Riegel, K. & Riegel, R. (1972). Development, Drop and Death. Developmental Psychology, 6 306-319.
- Rose, A. & Peterson, W. (eds.). (1965). Older People and Their Social World. Philadelphia: F.A.Davis.
- Rosow, I. (1974). Socialization to Old Age. Berkeley: Univ.

of California Press.

- Sartre, J. P. (1956). Being and Nothingness. New York: Simon & Schuster.
- Schaie, K. (1982). Toward a Stage Theory of Cognitive Development. In P. McKee (ed.), Philosophical Foundations of Gerontology. New York: Human Sciences Press.
- Scheler, M. (1980). Problems of a Sociology of Knowledge. London: Routledge & Kegan Paul.
- Schroots, J. F. (1982, June). Reaction to Aging Metaphors. Paper presented at the Invitational Research Symposium: Metaphors in the Study of Aging. Univ. of British Columbia, Vancouver.
- Shock, N. (1977). Biological Theories of Aging. In J. Birren & K. Schaie (eds.), Handbook of the Psychology of Aging. New York: Van Nostrand.
- Simonds, A. P. (1978). Karl Mannheim's Sociology of Knowledge. Oxford: Clarendon Press.
- Singer, P. (1981). The Expanding Circle. New York: New American Library.
- Spearman, C. (1927). The Abilities of Man. New York: MacMillan.
- Stark, W. (1967). Sociology of Knowledge. In Encyclopedia of Philosophy. Volume 7. (pp.475-478).
- Thomae, H. (1980). Personality and Adjustment to Old Age. In J. Birren & R. Sloane (eds.), Handbook of Mental Health and Aging. New Jersey: Prentice-Hall.
- Tibbitts, C. (1960). Origin, Scope and Fields of Social

Gerontology. In C. Tibbitts (ed.), Handbook of Social Gerontology. Chicago: Univ. of Chicago Press.

Tornstam, L. (1982). Gerontology in a Dynamic Society. In T. K. Hareven & K. J. Adams (eds.), Aging and Life Course Transitions: An Interdisciplinary Perspective. (pp. 183-219). New York: Guilford Press.

Unger, R. (1975). Knowledge and Politics. New York: Free Press.

Wechsler, D. (1958). The Measurement and Appraisal of Adult Intelligence. 4th Edition. Baltimore: Williams & Wilkins.

White, R. W. (1973). The Concept of Healthy Personality: What do We Really Mean. The Counselling Psychologist, 4 (2) 3-12.

White, R. W. (1975). Lives in Progress. 3rd Edition. New York: Holt, Rinehart & Winston.

White, R. W. (1976a). Strategies of Adaptation: An Attempt at Systematic Description. In R. Moos (ed.), Human Adaptation: Coping With Life Crises. (pp. 17-32). Lexington, Mass.: D. D. Heath & Co.

White, R. W. (1976b). The Enterprise of Living. 2nd Edition. New York: Holt, Rinehart & Winston.

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