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Aging as an Individual Process: Toward a Theory of Personal Meaning*

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The exponential increase in research activity on aging in the past two decades has prompted this review of the state of theory and search for direction toward future theory building. The ontogenic or maturational perspective has come under critical scrutiny as attempts to extend it to the entire life span (e.g., Neugarten, 1969) did not lend itself to high-level predictability. The usefulness of the mechanistic and organismic metamodels of life-span development was also questioned, precipitating a crisis with respect to the aims of traditional scientific research to explain, predict, and control human behavior (Gergen, 1980).

The emerging crisis has been intensified by an increasing emphasis on the capacity of the human organism to influence the environment in significant ways, as opposed to merely reacting to it. Such a view makes precise prediction and control problematic. This has led Gergen (1980) to suggest that the major function of theory ought to be "not as that of enhancing prediction and control, but as a means of rendering intelligible and communicable one's

*This research was supported by a Leave Fellowship (451-85-0040) from the Social Sciences and Humanities Research Council of Canada to the first author, and in part by a Strategic Research Grant (Population Aging) from the SSHRC to both authors.

experiences of the world" (p. 32). In a similar vein, Neugarten (1984) calls attention to a different philosophy of science, an interpretive social science, as a way of diversifying our means of comprehension and our methods and techniques of study. According to Neugarten (1984), the goal of interpretive social science is "to explicate contexts and thereby to achieve new insights and new understandings" (p. 292). Kenyon (1985; this volume) and Moody (this volume) exhort social scientists to move beyond a restricted traditional view of aging toward a more expansive, comprehensive personal existence perspective.

An example of this new interpretive perspective is the resurgence of research on the whole person through biographical studies, historical narrative, and the life-span construct approach (Birren & Hedlund, 1987; Freeman, 1984; McAdams, 1985; Starr, 1982–1983; Whitbourne, 1985). There is also a revival of Murray's (1938) personology in current works of personality theorists (e.g., Atwood & Tomkins, 1976; Carlson, 1982; Runyan, 1982); developmental psychologists (e.g., Levinson, 1978); and sociologists (e.g., Bertaux, 1981). The appearance in 1978 of the first volume of *Biography*, a new journal which focuses on biography as a form of art and science, adds an interdisciplinary flavor to the current trends of interpretive research.

The general populace, too, seems to have become increasingly receptive to reading biographies and autobiographies. Freeman (1985) noted that, all across the continental United States, there exists an enormous reading appetite for people's lives, historical and contemporary. For example, in 1971, 944 biographies and autobiographies were published; by 1983, the number of original works had risen to over 2,000.

How is one to account for what appears to be a widespread interest by social scientists and the general public in the study of whole persons and how they live their lives? Biographies may tell a completed story—a life with a beginning, a middle, and an end. By learning more about how other people have lived their lives, one gains some understanding of how to live one's own life. Cole (1984), a cultural historian, has pointed out that the spectacular gains in longevity through scientific and technological progress have been accompanied by "widespread spiritual malaise . . . and confusion over the meaning and purpose of human life—particularly in old age" (p. 329). Perhaps biographies and autobiographies provide useful insights on the meanings that attribute to human existence.

The purpose of this chapter is to incorporate certain aspects of the interpretive social science approach in formulating a view of personal meaning with respect to aging. We will first discuss the interpretive social science perspective and present the case that this new approach qualifies as science. In the second section, we will elaborate on the nature of personal meaning as conceptualized by Frankl (1963) and Maddi (1970). We will propose a personal meaning system that is closely tied to societal and personal values. This will be followed by a description of the development of personal meaning. In the third section,

we will examine how personal meanings are constructed and reconstructed across the life span and how notions of time perspective, religiosity, and death attitudes provide continuity and give meaning to life. In the fourth section, we will present a number of measurement approaches deemed suitable to the explication of contexts within an interpretive world view. In the final section, we will consider the implications of our view of aging for research, allied disciplines, and public policy.

THE INTERPRETIVE SCIENCE PERSPECTIVE

In the last twenty years, a number of investigators from psychology and sociology have contributed to the development of what may be termed interpretive science (Rabinow & Sullivan, 1979). Regardless of whether it is called "symbolic interactionism" (Blumer, 1969), "phenomenology" (Keen, 1975; Kelly, 1955), or "humanistic science" (Chein, 1972), proponents of this new approach share at least two common premises.

First, humans are regarded as conscious, active, purposive, self-reflecting organisms capable of symbolization and symbol manipulation. Symbolization enables the human organism to *represent* the environment, not merely to respond to it (Kelly, 1955). The internal representation may or may not map objective reality. However, only internal representation is considered to be effective reality in that it directs subsequent behavior (Kelly, 1955; Thomae, 1970).

Self-constructions are as real to the individual as the environment itself. They are not epiphenomena. What is construed may not exist, as in the case of a highly developed delusional system, but the perception does.

The ability of humans to represent their experience symbolically has given them the power to transcend time boundaries of past, present, and future; to reminisce; to anticipate; to give meaning to existence. As a result, the individual has acquired tremendous flexibility *in the interpretation* of all life events. Gergen (1980) states the implication of this most eloquently:

> In particular, the possibility for multiple symbolic translations of the same experiential conditions, and for singular translations of multiple and varying conditions, enable the individual to move in any number of directions at any time (or conversely to remain stable over a variety of seemingly diverse circumstances). (p. 43)

As the individual passes through time, he or she constructs and reconstructs "reality." Self-construction individualizes the aging process, giving the person the power to accommodate and transcend both personal and societal limitations (Birren & Hedlund, 1987). Within an interpretive perspective, aging may

be viewed as a process of change in personal constructions over time, resulting from the reciprocal interplay between the biological and psychological processes of the organism and the social, cultural, and historical contexts in which the individual is embedded.

Second, personal meanings attached to objects and events are more significant realities for investigation than the physical attributes of the natural world. "The meaning that things have for human beings are central in their own right. To ignore the meaning of the things toward which people act is seen as falsifying the behavior under study" (Blumer, 1969, p. 3).

Meanings are both subjective and intersubjective in that they derive from interactions and one's interpretations of these interactions. Personal meanings constitute a reality that is self-evident to both the individual and others who share the same reality of everyday life and with whom one communicates and interacts (Berger & Luckman, 1966).

In short, interpretive science no longer recognizes the physical world as the only reality for scientific investigations and acknowledges the existence of several realities. The symbolic reality of meanings, images, and feelings is far more important than physical reality because symbols have a much more direct and pervasive influence on human behavior.

In this chapter the term *meaning* has broad implications. It includes the value that individuals place upon the events and flow of life. Meaning also embraces the connotations and denotations of what is conveyed when individuals speak of their lives and the significance they attach to their existence.

Guardians of orthodox views of science may question the legitimacy of both the premises and the methods of interpretive science. However, a case may be made that the new science has many of the same ingredients of traditional approaches.

Traditional versus Interpretive Science

It is generally acknowledged that traditional science deals with empirical knowledge. Scientific inquiry presupposes the existence of phenomena that are observable and describable. Inferences made about such phenomena are tested against the "real world" by scientific methods, which typically involve observation, prediction, and control.

In the traditional scientific enterprise, observation consists of describing singular events in physical terms. Events are accepted as facts only when they meet the criteria of intersubjective testability and intersubjective agreeability. That is, events must be open to public inquiry and must be observable and describable by more than one person. Second, there must be a high degree of agreement among different people to ensure that what is being described or measured is objective and reliable.

Prediction is based on the discovery of scientific laws and formulation of

scientific theories. Laws are summary statements of regularities in terms of general characteristics of a class of events and relationships between classes of events. Theories consist of a set of constructs that are operationally defined and propositions that are testable by empirical means. Theories enable us to understand the nature or underlying processes of empirical laws. Deductions can be made from these theories to make predictions about new situations.

Control implies the isolation and manipulation of variables to produce certain predicted results. In experimentation, control typically requires eliminating aspects of nature unrelated to the variables under investigation, and the use of control groups to eliminate confound and rival hypotheses. Thus, "reality" in the traditional scientific perspective is limited to what can be observed and described in physical terms, found regularly or consistently, and verified through observation and experimentation.

From the perspective of interpretive science, we maintain that facts of empirical science exist not only in the physical world of nature but also in the phenomenological symbolic world of consciousness. For example, the presence or absence of meaning can be regarded as an empirical fact because it meets the criteria of intersubjective agreement and testability. When one describes the emptiness of a life without meaning, such a description is readily understood by others who share a common language and culture. Lack of meaning is communicated through symbols and metaphors, yet it can have as high a degree of intersubjective agreement as descriptions of physical entities. The absence of meaning in an individual also meets the criterion of intersubjective testability because different people, through interacting with this person, can come to the same conclusion that the person lacks meaning in his or her life.

Therefore, facts include phenomenological experiences that can be communicated in terms of symbols, images, and feelings, and their existence does not necessarily depend on the use of operational definitions. As long as subjective experiences are communicated in a way that can be understood by others, they have the status of empirical facts. Self-reports of the pain of jealousy or rejection are just as objective and empirical as self-report of pain due to electric shock or lesion. In short, the interpretive science perspective broadens the scope of experiences and events that are admitted as facts for scientific investigations.

In terms of scientific laws, the new approach departs from the traditional science in several significant ways. First of all, certain laws are considered self-evident truths—they cannot be contradicted by data, and their truthfulness or verity rests on common human experiences. For example, certain human rights, such as the right to pursue freedom and happiness, are accepted as self-evident truths in Western democratic societies because they accord with our own experiences and the fundamental conception of human beings as autonomously functioning individuals. A challenging task, from the perspective of

interpretive science, is to discover from the vast literature of human experiences those verities that are rooted in human nature and are compellingly self-evident.

Second, empirical laws can be studied in qualitative terms or typologies. Since laws refer to regularities, then the existence of certain patterns or types has the status of empirical laws. In our recent investigation of reminiscence, we have discovered different types of reminiscence. For example, integrative reminiscence refers to reconciling past conflicts, resolving discrepancies between achievements and aspirations, and achieving a sense of continuity among past, present, and future. Obsessive reminiscence refers to preoccupations with failures, shame, and guilt. Different people examining the contents of reminiscence can readily identify these two types of reminiscent orientations.

Third, empirical laws can include relationships between classes of phenomenological events. Our preliminary evidence that links integrative reminiscence with personal meaning in life is a case in point. Such a relationship, where established by empirical means, qualifies as an empirical law.

Fourth, empirical laws can be idiographic. If we can establish the patterns and relationships of various classes of events pertaining to one individual, as in the case of clinical observations, then we have discovered the empirical laws that govern the behavior and psychological reactions of this particular individual. Here the empirical laws do not necessarily have to deal with universals as in traditional science. However, when many similar cases are observed, idiographic laws have the potential to become nomothetic laws.

With regard to theorizing, the interpretive-science perspective again adopts a less rigid stance. The hypotheticodeductive model is no longer regarded as the only or the best way to theory building. Conceptual frameworks may be constructed in terms of images and metaphors to provide insights into human behavior and guidelines for empirical investigations. In the traditional scientific approach, issues that are uniquely human or significantly relevant to everyday living are often lost in various machine and animal models of human behavior. Furthermore, low-level mini-theories that are characteristic of contemporary psychological theorizing tend to be limited to a restrictive domain and based on a limited data set. We propose that the total image of personhood, the qualities of a life that confer individuality, are more likely to emerge when we paint with bigger brushes on a larger canvas.

The interpretive-science approach also encourages greater latitude in methods. It no longer accepts the doctrinaire views on the rules of science. Detailed descriptions of subjective life experiences become just as important as experimental control in a laboratory. Qualitative analysis is no longer treated as inferior to quantitative analysis. Personal documents, such as the life history narrative (Freeman, 1984), the life review (Butler, 1963), and guided autobiography (Birren & Hedlund, 1987), are accepted as legitimate sources of data.

Qualitative analyses in terms of life drawing techniques (Whitbourne & Dannefer, 1985–1986) and typological analyses are also considered valid methods.

In sum, the interpretive-science perspective has the essential ingredients of traditional science and yet takes a much more liberal approach with respect to the rules of scientific conduct. This liberated view enables us to explore the inner recesses of subjective experiences that are declared out of bounds by the traditional sciences (Neugarten, 1984).

THE NATURE OF PERSONAL MEANING

Conceptual Issues

Personal meaning, as distinct from definitional meaning, is concerned with the meaning in life. It is related to such constructs as value, purpose, coherence, and belief system. When we ask, "What is the meaning in life?", we are asking; "What is worth living for? What is the purpose in life?" Such questions call for value judgments and cannot be answered apart from one's belief system or world view.

Perhaps one way to clarify the concept of personal meaning is to recognize that it is a multidimensional construct with at least three related components: cognitive, motivational, and affective.

The *cognitive component* has to do with making sense of one's experiences in life. We postulate that each individual constructs a belief system, a world view, to address a number of existential concerns such as: "Is there an ultimate purpose in human existence? Is there order and purpose in the universe? What is the total meaning in life?"

The belief system deals with not only "cosmic meaning" (Yalom, 1980) but also existential understanding of specific life events. In this respect, the individual seeks to understand the value and purpose of various encounters. Thus, from the cognitive perspective, meaning is an explanation or interpretation of one's life (Weisskopf-Joelson, 1968).

According to Frank (1977), belief systems are essentially a moral and cognitive map of the universe, which helps individuals "select from and make sense of the welter of their experiences" (p. 555). Another major function of belief systems is to provide an antidote to ontological anxiety, "the prospect of disappearing into nothingness, which all humans must face" (p. 557).

The *motivational component* of personal meaning refers to the value system constructed by each individual. Values are essentially guides for living, dictating what goals we pursue and how we live our lives. Values are determined by our needs, beliefs, and society. Both the process of pursuing selected goals and the eventual attainment give a sense of purpose and meaning to one's existence. It is the worthwhile ends one cherishes that keep one going in spite of the obstacles and setbacks.

Finally, there is the *affective component*. Although the pursuit of individual happiness may not result in meaningfulness, the realization of personal meaning is always accompanied by feelings of satisfaction and fulfillment. Whatever is meaningful must also provide satisfaction to the pursuer. "Without subjective satisfaction, meaning is incomplete" (Baird, 1985, p. 119).

Thus, personal meaning may be defined as the cognizance of order, coherence, and purpose in one's existence, the pursuit and attainment of worthwhile goals, and an accompanying sense of fulfillment. This view of personal meaning may be represented by a triangle, as shown in Figure 11-1, which indicates the hypothesized structure of personal meaning with the cognitive component as the cornerstone.

A proper understanding of personal meaning requires both a bottom-up (elemental) view and a top-down (holistic) view of life. Hocking (1957) puts it this way:

> In the one direction, meaning ascends from the parts to the whole: life has meaning if it contains a goodly number of these satisfying spots—their worth colours the frame in which they are set. In the other direction, meaning descends from the whole to the parts: human life has meaning if (and only if) there is total meaning in the world in which it can participate. (p. 112)

According to the elemental view, it is not meaningful to talk about life as a whole as having meaning; life only *contains* meanings—a series of meaningful activities, quests, and goals. However, such a view may be an inadequate antidote to ontological anxiety. One also needs a vision, no matter how dim, of some ultimate purpose or total meaning. To achieve an enduring type of personal meaning, specific activities need to be integrated into a larger and higher purpose. Our definition of personal meaning incorporates both the elemental and holistic views of meaning.

Theoretical Perspectives

The importance of personal meaning in life has been stressed in the writings of a number of theorists (e.g., Frankl, 1963, 1978; Klinger, 1977; Maddi, 1970; Yalom, 1980) and researchers (e.g., Battista & Almond, 1973; Fisk, 1980; Reker & Peacock, 1981; Reker, Peacock, & Wong, 1987). Notable among the theorists are the seminal contributions of Frankl and Maddi.

Frankl (1963) asserts that the "will to meaning" is a significant and universal human motive. Loss of meaning leads to "noogenic neurosis," characterized by boredom, hopelessness, depression, and the loss of the will to live. For Frankl, an ultimate meaning and purpose already exists in the world, but it must be personally discovered. Through the exercise of responsibility, commitment to self and others, and the acceptance of future potentialities, the individual

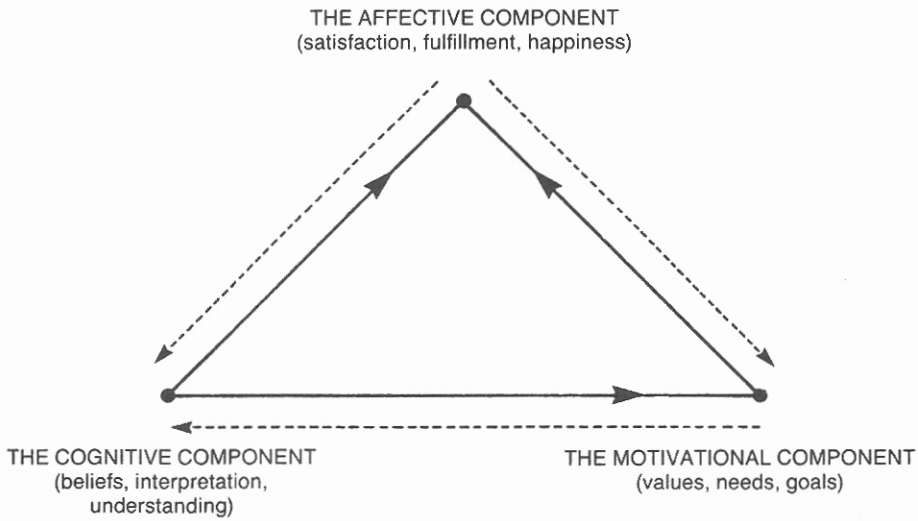

FIGURE 11-1. The structure of personal meaning. Solid arrows represent the direction of influence; dashed arrows represent feedback.

moves toward a self-transcendent state and the discovery of a deeper sense of meaning and purpose.

Maddi (1970) describes the failure in the search for meaning in life in terms of *existential sickness*, the extreme form of which has the cognitive, affective, and conative properties of meaninglessness, apathy, and aimlessness. Unlike Frankl, however, Maddi does not envision an ultimate meaning. Rather, individuals create their own meanings through the mental processes of symbolization, imagination, and judgment. Klinger (1977) perceives these characteristics as components of inner experience, the integration of which provides a sense of meaning.

Our approach is to fuse aspects of Frankl's and Maddi's conceptualizations of personal meaning with the cognitive approach of Kelly (1955). Our *fundamental postulate* is that every individual is motivated to seek and find personal meaning in existence. In fact, "part of what it means to be human is to wonder about what it means to be human" (Baird, 1985, p. 117). To search for meaning implies that there is some kind of meaning "out there" to be discovered. Thus, we agree with Frankl that there is some ultimate purpose or meaning that is obtainable by individuals who are willing to pay the price to search for it.

To postulate that ultimate meaning can be discovered does not necessarily negate Maddi's (1970) view that meaning can be created. Individuals discover meaning from the givens, such as the existence of the universe, the existence of

life. Individuals also create meaning through making choices, taking actions, and entering into relationships. For example, Baird (1985) has pointed out that "part of what it means, then, to be fully human is to create meaning by establishing depth relationships, by committing ourselves to projects, that give order and purpose to our days, and by placing our lives in the context of meaning-creating stories" (p. 123). Thus, meaning is created in commitments, achievements, and relationships.

From the Kellian perspective, personal constructs provide the internal structure of personal meanings. More specifically, one's belief system and value system dictate what goals are to be pursued and what relationships are to be established. For example, if one does not believe in immortality and eternal values, then all of one's strivings will be restricted to the temporal sphere. Beliefs, together with one's need states, determine one's value system which, in turn, provides a guide for one's pursuits and commitments.

According to our analysis, personal meaning functions as a cognitive mediating variable (see Reker, 1985) that provides an interpretation of life experiences and integrates the contradictions, conflicts, and absurdities of human existence. At the same time, personal meaning functions as an intervening motivational variable that guides, directs, and invigorates behavior.

The scientist is motivated by the postulate that there is order in the universe that can be discovered through systematic observation and experimentation. Similarly, we postulate that there is purpose and meaning in human existence, which can be discovered, not by traditional scientific methods, but by individual experiences, religious or philosophical insights, and perhaps a different level of consciousness.

Sources of Personal Meaning

Our definition suggests that both beliefs and value systems give rise to meaning. In this section, we want to develop a taxonomy of personal meaning through a detailed analysis of values and beliefs.

Academic psychology has been dominated by mechanism and ethical naturalism. However, recently, there is increasing realization of the importance of values in research and psychotherapy (Bergin, 1980; Braginsky & Braginsky, 1974; Feinstein, 1979; Frank, 1977). For example, Bergin (1980) has pointed out that "not only do theories, techniques and criteria reveal pervasive value judgements, but outcome data comparing the effects of diverse techniques show that non-technical value-laden factors pervade professional change processes" (p. 97). The same may be said about other domains of human activities. Values have been defined as constructs that transcend specific situations and that are personally and socially preferable (Rokeach, 1973). Values incorporate modes of conduct (instrumental values) and goals in life (terminal values), and impel one to action. As stated earlier, values function as important

guiding principles in life. Values may also be conceptualized as "incentives" (Klinger, 1977).

Values are related to personal needs. For example, bread has no value to someone who is not hungry, and water becomes more valuable than gold to someone dying of thirst. The various levels of needs postulated by Maslow (1968) give rise to a parallel set of values. Thus, physiological needs are related to survival values, and self-esteem needs are linked to achievement-oriented values.

Beliefs also contribute to the development of values. The value of self-reliance and hard work (i.e., the Protestant work ethic) has been linked to Protestant beliefs (Weber, 1905). By the same token, spiritual values are based on religious beliefs. One values worship and prayer only when one believes that there is a God worthy of praise. Conversely, the lack of religious beliefs also has an impact on values. If one does not believe in the existence of God and an eternal scheme of things, one's values will be confined to the earthly realm.

Since values determine one's objectives and aspirations, the study of values will be very informative regarding sources of personal meaning. Conversely, values are reflected in the answers individuals provide when questioned about sources of personal meaning.

Bengtson (1975) investigated the global value orientations of humanism/materialism and collectivism/individualism across grandparent-parent-youth lineages and within families. He found generational differences in collectivism/individualism but not in humanism/materialism. Grandchildren endorsed values of individualism (skill, an exciting life, personal freedom, sense of accomplishment); grandparents endorsed greater collectivism (religious participation, loyalty, patriotism, friendship). However, large within-generation variation was also found, obscuring clear interpretation of between-generation differences. When value orientations were examined within families, some evidence of family transmission emerged on the collectivism/individualism dimension, but the effect was minimal.

Of particular interest to us is the substantial degree of individual differences in value orientations and the apparent source of such heterogeneity. Bengtson (1975) suggests that global value orientations "may be more reflective of the individual's unique personal biography, or of his or her response to sociohistorical events, than to effects attributable either to family or generational factors" (p. 369). Such an interpretation is consistent with our view that self-definitions may emerge from the social definitions of values.

Allport, Vernon, and Lindzey (1951) developed a scale to measure six types of values and motives. The *theoretical* person emphasizes the discovery of truth. The chief aim in life is to acquire and systematize knowledge. The *economic* person is concerned with utilities and profits. The *aesthetic* person considers beauty and charm as the highest value. The *social* type values altruism. The

political person is mainly interested in the pursuit and exercise of power. The *religious* person tends to be mystical and transcendental.

Allport et al. recognize that their study of values does not allow for "baser" values, such as hedonic, sensuous value. Nevertheless, the six types of values have been recognized as primary by a number of other investigators.

For Frankl (1963), meaning stems from three broad sources: (1) creative, or what one accomplishes in terms of creative work, or art, or scholarly endeavor; (2) experiential, or what one derives from beauty, truth, or love; and (3) attitudinal, or what one derives from reflections on negative aspects of life such as pain and suffering.

Based on case studies, Yalom (1980) identified five general values: altruism, dedication to a cause, creativity, hedonism, and self-actualization. In a study investigating sources of meaning in life among undergraduate students, DeVogler and Ebersole (1980, 1983) identified eight categories: relationships, service, personal growth, beliefs, hedonism, expression, obtaining, and understanding. Hedlund and Birren (1984) analyzed the autobiographical essays of women between the ages of 22 and 78. They found that relationships, service, personal growth, and beliefs accounted for most of the responses.

Thurnher (1975) examined the value orientations of a cross-sectional sample of adults and identified seven sources of meaning: personal achievement, marriage and family, humanitarian-moral concerns, coping with the givens of life (e.g., earning a living, adjusting), happiness, religious life, and leaving a legacy. Klinger (1977) asked undergraduates to describe what made their life meaningful. He generated 14 different categories of activities, such as friendships, leisure time, vocational plans, religion, etc. Many, if not all, of his activities, however, overlap with the sources of meaning already described.

On the basis of prior studies of values and meaning, there seem to be a few major sources of meaning, namely: personal relationships, personal growth, success (achievements), altruism (service to others), hedonism, creativity, religion, and legacy. These are by no means exhaustive. For example, one may add that being alive or life itself is a source of meaning; cultural heritage, which gives one a sense of identity and continuity, may be an important source of meaning for ethnic minorities. Thus, several sources can contribute to an overall sense of personal meaning. Degree of personal meaning in life is defined as the total amount of meaning derived from all available sources.

On the dual premise that an individual derives meaning from several valued sources and that a greater variety of values contribute to a greater sense of meaning, we offer the *breadth* postulate: An individual's degree of personal meaning will increase in direct proportion to his or her diversification of sources of meaning.

Having stated the above postulate, we hasten to add that some of the values may be conflicting. For example, hedonistic values may conflict with the achievement of important life goals that require dedication and hard work.

The breadth postulate holds only when the individual has managed to reconcile conflicting values.

Levels of Personal Meaning

Frankl (1963) is of the conviction that the full meaning of life can be achieved only by transcending self-interests. The individual must value something beyond himself or herself. Explicit in Rokeach's (1973) system is the hierarchical nature of values in which certain values hold greater significance than others. Both of these positions suggest the need for postulating levels of personal meaning.

At the lowest level, we see self-preoccupation with hedonistic pleasure and comfort. At the second level, the person devotes time and energy to the realization of his or her potential. Personal growth, creativity, and self-actualization are examples. At the third level, the individual moves beyond the realm of self-interests into areas that involve service to others and dedication to a larger societal or political cause. At the fourth level, the individual entertains values that transcend individuals and encompass cosmic meaning and ultimate purpose.

Based on the theoretical views of Frankl and Rokeach, we formulate the following *depth* postulate: An individual's degree of personal meaning will increase in direct proportion to his or her commitment to higher levels of meaning.

Personal Meaning System Complexity

One of the hallmarks of positive mental health is the ability of the individual to cope with a variety of stressful situations, to reconcile contradictions, to incorporate personal limitations into his or her identity, and to adapt to changing conditions. Based on the cognitive complexity literature (e.g., Bieri, 1961; Reker, 1974), we assert that a highly differentiated and integrated personal meaning system is necessary to promote optimal adaptation. A complex meaning system is a flexible one; it facilitates divergent thinking and thereby alternative constructions of reality.

Our breadth and depth postulates, in combination, provide the basis for the development of a complex meaning system. Since the complexity of the personal meaning system is influenced, in part, by the range and quality of experiences encountered, we propose the following *meaning system* postulate: The personal meaning system of an individual who has available a variety of sources of meaning and who strives for higher levels of personal meaning will be highly differentiated and integrated.

The structure of the personal meaning system can be revealed through the "implication ladder" (Bannister & Mair, 1968). The degree of complexity of the system can also be determined through operational measures of differenti-

ation and integration (Reker, 1974). These procedures will be taken up in more detail in the measurement section. Having described the basis of the structure, we now turn our attention to the personal meaning context.

Personal Meaning Contexts

Phenomenologists often talk about "horizons" as the background against which experience can be described (Keen, 1975). In describing the development of personal meaning, we refer to horizons as meaning-producing contexts. We propose two kinds of meaning-producing contexts: social definitions and self-definitions.

Social Definitions

It is important to point out that how the social context is perceived by the individual is more important than the actual context itself. Interpretation of reality begins at the individual level and becomes social reality when shared with others. Widely shared social reality (i.e., across generations) forms the basis of accepted social definitions. Overgeneralized social definitions lead to social stereotypes (Hickey, 1980). In short, collective perceptions are the emergent properties of individual processes.

The individual is born into an a priori set of societal values and expectations. These are passed on through socialization from the beginning of life and provide the context for a social definition of personal meaning. They tell the individual "what is" and "what ought to be." Human development transpires within the constraints of social expectations, cultural traditions, and historical episodes. Society provides prohibitions and sanctions to establish norms for acceptable behavior. Societal institutions (e.g., family, schools) enforce these expectations through socialization practices in order to make collective existence possible. The "expectation" boundaries, however, are fairly broad, allowing for considerable latitude in individual behavior. As a member of a preestablished social order, the individual becomes a bearer of collective experiences (culture bearer), while simultaneously retaining a unique birth, death, and life course, and a personal history not shared by anyone. The implication of this is that the individual remains free, within the limits of cultural prescriptions, to choose his or her destiny.

Individuals who choose to abide by societal expectations and who incorporate the concomitant labels find meaning in shared values. They stick close to the norm and act according to what is expected of their age. They become the "foreclosed" (adoption of parental standards) identity-status young adults (Côté & Reker, 1979) or *conformists* who perceive very little choice and who find meaning through serving the dictates of society (Maddi, 1970).

Social definitions in varying degrees shape the aspirations and values of

individual members of a given community. Values vary from culture to culture, primarily because of social definitions. Thus, it is not possible to have a complete understanding of personal meaning apart from cultural contexts.

Self-Definitions

Self-definitions address the intentional and reflective capacity of the human organism. It is the ability of the individual to self-reflect, to introspect, to self-examine that gives existence to this meaning-producing context. The Socratic imperative "know thyself" provides the essential backdrop (McAdams, 1985).

Some individuals who extract meaning from self-definitions find meaning in private or idiosyncratic values. Such individuals often transcend the boundaries of societal expectations by ignoring or refusing to accept them. They can emancipate themselves from their past and discover themselves anew (McAdams, 1985). They are the achievement-status young adults (Côté & Reker, 1979), or *individualists* who perceive a great deal of choice and personal control over their lives (Maddi, 1970).

In our conceptualization, meaning-producing contexts form a continuum, anchored by social definitions and self-definitions. The individual can choose any position on the continuum, stabilize at one position, or move back and forth toward either extreme. The position taken up at any given time is the one that maintains individual equilibrium.

From this we generate our *choice* postulate: An individual chooses for himself or herself a position on the meaning-producing continuum for the construction of his or her personal meaning system.

On the premise that having both more choices and control over one's life is tantamount to increasing the range and quality of experiences, we offer our *individuality* hypothesis: The personal meaning system of an individualist will be more differentiated and integrated compared to that of a conformist.

PERSONAL MEANING ACROSS THE LIFE SPAN

We take the position that the incorporation of values precedes the formation of a meaning system in life-span development. We offer two arguments in support of this view. First, the individual is born into a preestablished value system. Second, the meaning system requires the manipulation of symbols and the ability of self-reflection. Although Frankl, Maddi, and Kelly do not discuss the early development of meaning and the meaning system, it is our view that an effective personal meaning system cannot be established until the individual has acquired the basics of language. Chronologically, this means by about the third year of life. A 3-or 4-year-old may not be able to articulate his or her meaning system when conventional research methods are used. Howev-

er, this should not lead to the conclusion that it does not exist. It simply means that we need to tailor our methods to suit the individual's level of cognitive development.

The fundamental postulate holds that all individuals, even at a very young age, are motivated to seek and to find personal meaning in human existence. Since values, shared and private, are the sources of personal meanings, once values have been incorporated by the young person, they give birth to meaning. Similarly, beliefs acquired and constructed by the individual also give rise to personal meaning. As one's belief system evolves and values change across the life span, one's personal meaning undergoes transformation as well. In fact, the only continuity or sameness is the fact of *change*. The important life-span developmental questions "are not how people *respond* to life change or *proceed through* stages, but how they negotiate and generate the reality and meaning of change, stages, and development" (Gubrium & Buckholdt, 1977, pp. 8–9).

The importance of studying an individual's perception of life changes was echoed by Neugarten (1977) in her review of personality and aging:

> . . . psychologists will probably gain enormously by focusing more attention upon the issues that are of major concern to the individual—what the person selects as important in his past and his present, what he hopes to do in the future, what he predicts will occur, what strategies he elects, and what *meanings he attaches to time, life, and death*. (pp. 639–640, emphasis added)

Personal Meaning and Time Perspective

An individual's temporal perspective, or the way he or she internally represents and partitions time into past, present, and future, has a powerful influence on a wide range of psychological processes (e.g., motivation, expectations, problem-solving). At any given moment, the individual can reminisce about the past, reflect on current concerns, or anticipate the future (Lewin, 1948; Rakowski, 1979; Reker & Wong, 1985).

Time orientation (Nuttin, 1985), or the amount of time engaged in the processes of reminiscence, current reflection, and anticipation, is affected by values, shared or private. For example, in a society that values ancestor worship, the past may be of primary concern. Eskimos, whose survival depends on the daily hunt, have a keen sense of the present. Western society, with emphasis on profits, life insurance, and savings banks, is dominated by a sense of future (Gonzalez & Zimbardo, 1985).

On an individual level, the perception of continuity of past, present, and future provides a sense of self that is stable through time. An individual who perceives the future as a continuation of the present and the past displays a high degree of temporal integration. An individual with a high degree of time

integration may be described as time-competent (Nuttin, 1985; Shostrom, 1968).

The relative importance of past, present, and future can shift over the course of a life. When an individual is young, a future orientation may predominate (Reker, Peacock, & Wong, 1987). For an aging individual, the past plays an important role in adjusting to the present as well as to the future (Birren & Hedlund, 1987; Butler, 1963; Kaminsky, 1984; Rakowski, 1979). Birren and Hateley and Butler contend that one's present and future meaning depends on a review and evaluation of one's past life.

Personal Meaning and Time Continuity

Given that one's life is irrevocably bound to the temporal dimension, we feel that a complete understanding of personal meaning is not possible without taking into account the flow of time.

Meaning from the past is discovered primarily through life review or reminiscence. Significant others in the past (e.g., parents, teachers), past achievements, major events or branching points, cultural heritage, and family roots are all fertile grounds for finding personal meaning.

Present meaning is primarily based on commitments, activities, and pursuits. The zest and vitality of goal-directed activities, the sweat of hard work and the joy of success, the excitement and satisfaction of engaging in intimate relationships, and the many personal experiences that give color, texture, and richness to the tapestry of life are the raw materials for present meaning. We create meaning through choices and actions as we move through life, but we also discover meaning from many "happenings" that come our way each day.

As we are occupied with the day-to-day business of living, we also derive energy and inspiration from what lies ahead. The basis for future meaning is optimism—the anticipation of desired events, achievements, and attainment of important life goals. For the transcendental mystics, their optimism extends beyond earthly existence and reaches out into eternity.

Thus, reminiscence, commitment, and optimism provide a constant flow of meaning that sustains and enlivens an otherwise mundane and often painful existence. The amount of contribution from these three sources will vary according to the stage of one's life cycle.

A Matter of Life and Death

Personal meaning is a matter of how a life has been lived, is lived, and will be lived. Because each individual can transcend time boundaries, he or she can construct for himself or herself a meaningful "personal timetable for living" (Hickey, 1980, p. 84). An individual timetable may or may not coincide with that of other individuals or with the societal timetable of education, marriage,

parenthood, work, and retirement. Whether it does or does not depends to a large extent on where the individual locates himself or herself on the meaning-producing continuum.

Our choice postulate advocates that an individual can shift positions over the course of a life. Through socialization, societal values and expectations may impact significantly on the early development of the personal meaning system.

What factors might prompt a move along the meaning-producing continuum? We assert that changes in personal and societal values provide the catalyst for shifting positions. If an individual's physical, psychological, and social resources become depleted with advancing age, long-cherished personal values may become dysfunctional and some reorientation must take place (Thurnher, 1975). In addition, the older person may be less likely to be influenced by societal values and expectations and become more inner-directed (Markson, 1973). When societal values are threatened by the erosion of traditional values and rapid social changes, or when culturally supported ideals of old age are nonexistent (Cole, 1984; Gutmann, 1981), the "de-cultured" individual looks toward self-generated meaning. Thurnher (1975) cites evidence for different value shifts for men and women across four life stages in terms of content and timing. In broad terms, the value curve begins with educational, occupational, and material concerns, turns toward marriage and family responsibilities, and ends with contentment and withdrawal from goal strivings.

Major value changes have implications for the structure of the personal meaning system. The system may undergo reconstruction in order to accommodate the change. The meaning system becomes temporarily suspended as stipulated by our *reconstruction* postulate: The personal meaning system of an individual who faces major value changes will become temporarily dis-integrated.

A number of life-span psychologists have theorized about the development of changing values and meanings over the life course. Most notable is Erikson (1963), who linked societal values with developmental tasks to be accomplished. Meanings for the adolescent, young, and middle-aged adult are centered on establishing a stable identity, forming intimate relationships, and being productive and creative. The task of late life is to develop a sense of integrity, an appreciation of why and how one has lived.

Buhler (1959) identified four developmental phases that emphasize changes in goal setting (personal values): expansion, consolidation, evaluation, and integration. Meaning is derived at each phase through satisfying one or more of four basic tendencies (need-satisfying, adaptive, creative, inner order). In the early phases, successes and failures in life are evaluated, and new directions for the course of one's life are contemplated. During the later years, integration becomes the primary goal.

Jung (1971) theorized about a changing set of values over the life span. The first half of life is spent in preparation for living; primary emphasis is on materialistic or instrumental values. The second half is spent in preparation for old age and death, with more emphasis on spiritual or transcendent values. Meaning in the later years is derived through an examination of the "inner" part of life, through contemplation, reflection, and self-evaluation. A large-scale series of studies, known as the Kansas City Studies of Adult Life, provide some evidence for this claim (Neugarten, 1977).

The common thread of these positions is that as the individual ages, the developmental task is directed toward integrating and transcending the experiences of a lifetime. Integration becomes a meaning-producing process. Such a theoretical view has also been advanced by others, particularly by Butler (1963), who focused on the process of life review, and Birren (1964), who focused on the processes of reconciliation and integration through guided autobiography (Birren & Hedlund, 1987). Buhler and Massarik's (1968) analysis of biographies and the cross-sectional investigations of personality (Neugarten & Associates, 1964) and life transitions (Thurnher, 1975) offer empirical support for the important role of integration in the quest for meaning by the elderly.

These observations suggest the following *developmental* hypothesis: The personal meaning system of an individual will become increasingly more integrated as a function of age.

Death, Meaning, and Religion

As one enters into the final stage of life, and the prospect of personal death looms larger, many existential questions press for an answer: Do I have a reason for living when I am confined to a nursing home or a hospital bed? Has my life been worthwhile? Is there ultimate meaning when I disappear from the face of the earth?

According to Erikson (1963), the elderly person faces the developmental crisis of integrity versus despair, attempts to assert that life has meaning and purpose, and prepares himself or herself for the inevitable end. This crisis triggers the life review process (Butler, 1963), in which the individual reevaluates the past and attempts to integrate the entire life into a meaningful whole. However, life review does not always achieve integrity. When past conflicts remain unresolved, and discrepancies in life remain unreconciled, feelings of guilt and despair may set in. In such cases, the person would have difficulties finding personal meaning, and accepting death, unless he or she has some other means of achieving integration, such as religion.

Since many of the existential issues in the last development crisis are related to religious concerns (i.e., ultimate meaning, personal destiny, and so on),

religion provides both direction and support for the elderly to put life and death into perspective (Achenbaum, 1985). For example, religious beliefs that incorporate immortality, the existence of heaven, and ultimate meaning, are effective antidotes to death anxiety. In fact, a number of studies have shown that religious elderly are less fearful of death than are their nonreligious counterparts (Faunce & Fulton, 1958; Jeffers, Nichols, & Eisdorfer, 1961; Jeffers & Verwoerdt, 1969).

There is a vast literature on the important role of religion in the discovery of personal meaning. Space will not permit a thorough review of this literature. We would quote from a few authorities to illustrate the scope of religious influence on personal meaning.

Jung (1938): "No matter what the world thinks about religious experiences, the one who has it possesses the great treasure . . . that provides him with some of life's meaning and beauty" (p. 113). William James (1902): "When we see all things in God, and refer all things to Him, we read in common matters superior expressions of meaning" (p. 475). Allport (1960): "Religious strivings . . . often originate in the desires of the body, in the pursuit of meanings beyond the range of our intellectual capacity, and in the longing that value be conserved" (pp. 107–108). Frankl (1963, 1969) also emphasizes a person's spiritual (noetic) nature and the importance of spiritual commitment as a basis for discovering personal meaning.

The weight of evidence seems to support the above views in that religion tends to be positively correlated with life satisfaction (Blazer & Palmore, 1976; Hendricks & Hendricks, 1977) and with meaning in life. Paloutzian (1981), for example, found religious converts to score significantly higher on the Purpose in Life (PIL) test (Crumbaugh & Maholick, 1969) compared to nonconverts. Crandall and Rasmussen (1975) found the religious value of salvation to be associated with higher meaning in life. Soderstrom and Wright (1977) report data associating an intrinsic religious orientation to high PIL scores.

We have shown that the shadow of death prompts the quest for meaning in life through life review and religious beliefs. There is yet another way death contributes to meaning. According to Frankl (1971), the prospect of death motivates individuals to respond to opportunities and to assume personal responsibilities. In other words, one can reduce existential despair by transforming

> . . . a given reality into a possibility, into a potentiality for accomplishing something. An apparent obstacle or a limitation in life may become a source for new personal meaning and self-realization. Thus, for Frankl, death is not the end but rather the beginning of the birth of meaning in human living. (Kovacs, 1982, p. 202)

While religious beliefs in an afterlife promote an approach-oriented acceptance in which the individual regards death as a passage to a more blessed existence (Gesser, Wong, & Reker, 1987–1988), Frankl's emphasis on commitment and responsibility promotes a neutral type of acceptance in which the individual accepts death as an inevitable aspect of life, and accepts the challenge of making the most of life's opportunities. These two types of death acceptance need not be mutually exclusive; in fact, they can be complementary to each other.

Our analysis has revealed that there are at least three channels whereby an individual can find meaning in the face of death: review of the past, commitment to the present, and belief in immortality and ultimate meaning. These three channels may work in concert to transform death into a meaningful reality. This conceptual analysis once again illustrates the importance of time perspective in the development of personal meaning.

MEASUREMENT APPROACHES

A viable, useful theoretical system requires appropriate procedures by which the concepts can be transported into the empirical arena. We will identify existing procedures and offer additional tailor-made measures for testing some of our postulates and hypotheses. Emphasis on individual processes allows us to study the characteristics of a single person in a specific situation or to aggregate over homogeneous subgroups in broader environmental contexts. The strength of this approach lies in the use of quantitative and qualitative measurements and multiple research methods (e.g., open-ended questionnaires, structured interviews, personal documents, life journals, self-report scales, in-depth observations). The merit of this approach has been demonstrated in a series of studies by Ryff (1986). Working within a phenomenological and interpretive framework, Ryff employed structured self-report inventories to explore people's personal experiences of change in values and personality as they age. This approach provides a deeper and broader understanding of the aging process.

Currently, personal documents such as the life history narrative (Freeman, 1984), life review (Butler, 1963), biographies (Buhler, 1959), guided autobiography (Birren & Hedlund, 1987), and the life-drawing technique (Whitbourne, 1985; Whitbourne & Dannefer, 1985–1986), are enjoying a revival as acceptable sources of information in understanding human behavior and development. The guided autobiographical approach, in particular, appears to be a very promising technique for investigating the development of personal meaning in life (Birren & Hedlund, 1987). An autobiographical statement is a retrospective personal account of how an individual perceives the course of his

or her life. Important information is obtained on how the individual interprets and attaches meaning to the experiences of a lifetime. An individual who constructs his or her own "story" is able to look back over the flow of past events, to relate them to the present, and to project them into the future. As such, guided autobiography can be used as a powerful tool in restoring lost meaning and in facilitating the reconstruction of the personal meaning system.

Whitbourne's (1985) life-drawing technique is a measure based on the premise "that it is the individual's cognitive and emotional construction of the life span that will ultimately determine how the individual will develop through the experiences of a lifetime" (p. 615). The life drawing, an open-ended technique, asks the respondent to draw his or her life on a blank sheet of paper that contains only a horizontal line labeled "age and/or year." Through the drawing, an individual's temporal orientation and integration of past, present, and future can be profiled. Much like guided autobiography, the life-drawing technique can trigger the life-review process, reveal changes in identity, and index sources of personal meaning through the identification of values.

Ebersole and DeVogler-Ebersole (1985) use the personal-document approach in their assessment of *types* and *depth* of meaning in life. Scripts obtained through biographical sources or provided by respondents are content-analyzed for sources of meaning. Unfortunately, these researchers do not provide a conceptual definition of meaning in life, nor is their approach guided by theory.

Self-report scales of meaning and purpose in life have also been constructed. The most frequently cited is the Purpose in Life (PIL) test, a scale designed to measure the *degree* to which an individual experiences a sense of meaning and purpose in life (Crumbaugh & Maholick, 1969). However, item heterogeneity and susceptibility to socially desirable responding have been cited as weaknesses inherent in the scale (Battista & Almond, 1973; Ebersole & DeVogler-Ebersole, 1985; Yalom, 1980).

Battista and Almond (1973) developed the Life Regard Index, a 28-item, 5-point scale designed to measure "an individual's belief that he is fulfilling a life-framework or life-goal that provides him with a highly valued understanding of his life" (p. 410). Their scale is based on the concept of positive life regard, which, conceptually, may be related more to the concept of self-esteem than to the construct of "meaningful life."

The need for additional tailor-made measures for testing our postulates and hypotheses is apparent. We have developed, or are in the process of developing, a number of suitable scales and techniques, including the Sources of Meaning Profile, the implication ladder, meaning system complexity, the life and death attitude profiles, and the Personal Meaning in Time Perspective Scale.

Sources of Meaning Profile

We have developed a scale to measure the sources and degree of personal meaning in one's life—the Sources of Meaning Profile (SOMP). The SOMP is primarily a measure of present meaning. The individual is asked to rate 13 sources of meaning (pleasurable or leisure activities, meeting basic needs, creative abilities, personal relationships, personal achievement, personal growth, religious beliefs and activities, social or political causes, service to others or altruism, acceptance and recognition by others, enduring values and ideals, traditions and culture, and legacy) in terms of the amount of meaning derived from each source. Subjects respond to 7-point Likert scales anchored by "none" (1) and "a great deal" (7). These sources of meaning can be grouped a priori into our four levels of personal meaning, and indices of variety in meaning sources can be derived. Thus, the SOMP offers a way to test the depth, breadth, and meaning system postulates.

Implication Ladder

The implication ladder can reveal the structure of the personal meaning system. In this approach, the individual is asked to identify a source of meaning and to indicate what it is about the source that makes it meaningful. This generally elicits another construct dimension, and the individual is asked once again why that construct is meaningful. For example, suppose an individual finds meaning in *personal relationships*. When asked why, he or she responds with the positive pole of a new construct, namely, *commitment to others*. When asked why for the second time, he or she responds, *affectionate bond*. When asked why for the third time, he or she says, *security*. A series of subordinate constructs are thus revealed, and the process is repeated until at least 10 constructs are elicited. If 10 constructs cannot be elicited from one source of meaning, another source is identified. The resultant ladder of implications describes the structure of the person's meaning system (Bannister & Mair, 1968).

Meaning System Complexity

The complexity (differentiation and integration) of the personal meaning system elicited by way of the implication ladder can also be measured. For each of the 10 constructs, the individual is asked to provide the opposite pole (e.g., security–*insecurity*). A 7-point scale is constructed for each construct; the positive pole is always assigned the value 7, the negative pole, the value 1. Each of the 13 sources of meaning in the SOMP are rated on the 10 constructs. The ratings can be cast into a 13×10 matrix. Alternatively, personal meaning constructs can be provided. These constructs should reflect the components of personal meaning (e.g., meaningful–meaningless, order–chaos, valuable–

worthless, significant–insignificant, fulfilling–empty, desirable–undesirable). Indices of differentiation and integration can be obtained by methods described by Reker (1974).

Life and Death Attitude Scales

The *degree* and *strength* of motivation to find personal meaning in life can be measured by the self-report attitude scale constructed by Reker and Peacock (1981). The Life Attitude Profile (LAP) is a multidimensional measure based on Frankl's (1963) meaning theory. It consists of seven dimensions: Life Purpose, Existential Vacuum, Life Control, Death Acceptance, Will to Meaning, Goal Seeking, and Future Meaning. The LAP is a psychometrically sound instrument that has been used in life-span research (Reker, Peacock, & Wong, 1987).

A complementary instrument to the LAP is the Death Attitude Profile (DAP) constructed by Gesser, Wong, and Reker (1987–88). The DAP is a multidimensional scale of the entire range of death attitudes, including Fear of Death/Dying, Neutral Acceptance, Approach-Oriented Acceptance, and Escape-Oriented Acceptance. The DAP has also been shown to be psychometrically sound. The different dimensions are sensitive to age differences and have different correlates with various personality characteristics (e.g., happiness, hopelessness, suicidal tendencies).

Personal Meaning in Time Perspective (PMIT)

Throughout this chapter, we have stressed the importance of time perspective in personal meaning. We have reiterated the conviction that at any point in time an individual derives meaning from past, present, and future. We are now in the process of developing an instrument that takes into account the temporal dimension of personal meaning.

Our strategy is to focus on reminiscence for past meaning, commitment for present meaning, and optimism for future meaning. For example, in the case of past meaning, the individual will be asked to review his or her past life as a whole; to examine major domains of life, such as achievement, relationships, and life event change; and to decide to what extent these past experiences provide meaning for his or her present existence.

Regarding present meaning, the individual will be asked to indicate the amount of meaning he or she derives from a number of present commitments, such as achievement and relationships. The measurement of present meaning will focus on both the process of pursuing and the actual realization of worthwhile objectives.

With respect to future meaning, the individual is asked to indicate the amount of meaning he or she derives from anticipation of achieving future goals, as well as from beliefs in afterlife.

The purpose of the PMIT is to determine the amount of contribution from past, present, and future to personal meaning, and the qualitative difference in meaning structure in these three time orientations. Such an instrument will be extremely useful in studying personal meaning from a life-span perspective.

IMPLICATIONS

In her review of personality and aging, Neugarten (1977) encouraged researchers to combine the phenomenological and the objective perspectives as a way of diversifying the comprehension and the methods of studying phenomena. Gergen (1980) cautioned theorists not to become committed to only one view of science, but to remain open to alternative conceptualizations. Our approach incorporates these views and provides new building blocks for theory construction and data collection with implications for research, allied disciplines, and public policy.

Implications for Research

Throughout the chapter, we have proposed a number of personal meaning postulates and related hypotheses, namely:

Fundamental postulate: Every individual is motivated to seek and to find personal meaning in human existence.
Breadth postulate: An individual's degree of personal meaning will increase in direct proportion to his or her diversification of sources of meaning.
Depth postulate: An individual's degree of personal meaning will increase in direct proportion to his or her commitment to higher levels of meaning.
Meaning system postulate: The personal meaning system of an individual who has available a variety of sources of meaning and who strives for higher levels of personal meaning will be highly differentiated and integrated.
Choice postulate: An individual chooses for himself or herself a position on the meaning-producing continuum for the construction of his or her personal meaning system.
Reconstruction postulate: The personal meaning system of an individual who faces major value changes will become temporarily dis-integrated.
Developmental hypothesis: The personal meaning system of an individual will become increasingly more integrated as a function of age.
Individuality hypothesis: The personal meaning system of an individualist will be more differentiated and integrated compared to that of a conformist.

In addition, we provide a number of appropriate measuring instruments and suggest different research methods. The retrospective methods of biography, autobiography, and the historical narrative may encourage more longitudinal studies. Personal documents are relatively inexpensive and yet provide important information on an individual's passage through life. Our six postulates and two hypotheses and the means for systematic measurement should pave the way for future theory construction and research concerning aging as an individual process.

Implication for Allied Disciplines

We began with the hope that our individualistic perspective would encourage "real" interdisciplinary collaboration. From a psychological perspective, personal meanings yield insight into an individual's perception of himself or herself as changing or unchanging over the life span. From a sociological perspective, personal meanings reveal the individual's valuation of social norms at successive life stages. We strongly believe that the derivation of personal meaning in life is a key process in successful aging that can have positive psychological, social, economic, and medical implications. Individuals are not victims of their own age. They possess personal resources and competencies. They can be active and independent and take advantage of opportunities for continued growth. In short, there is tremendous potential for intrapersonal development.

Furthermore, the information obtained by exploring the sources of meaning in individual lives can be shared with others, thus optimizing individuals' welfare and that of society. The direct benefits to society may be at the level of reducing mounting health care costs. In the medical field, the emphasis on personal meaning as a resource will help focus attention on prevention as opposed to treatment strategies. Prevention can have the dual effect of promoting a sense of high-level wellness in adequately functioning individuals and in developing the potential of individuals at risk for loss of meaning.

Personal Meaning and the Brain

Studies of personal meaning also have implications for neuroscience. If we accept the dualism premise that every subjective conscious process has its parallel counterpart in objective processes within the brain, then the personal meaning system must have its anatomical substrates within the brain. Since no one has explicitly investigated the relationship between personal meaning and brain structures, we can be only speculative.

In the case of definitional meaning of a verbal symbol or signal learning in Pavlovian conditioning, sensory input is essential. Miller (1981) postulates that this type of cognitive learning involves diffusely connected neural net-

works in which every neuron has the potentiality of influencing every other neuron. Miller also hypothesizes that omniconnected networks are located in the cerebral neocortex.

Personal meaning is further removed from sensory experiences than definitional meaning. Personal meaning involves reflections on symbolic representations of events and definitional meanings. Following Miller's reasoning, we can also hypothesize that the neocortex is involved in the construction of personal meaning.

We can also make some tentative statements about hemisphere differences in existential beliefs and meaning. Frank (1977) proposes that transcendental experiences and beliefs are mediated primarily by the right hemisphere, whereas analytic and verbal reasoning are primarily associated with the left hemisphere. Mandell (1980), on the other hand, believes that both hemispheres, as well as the limbic system are involved in transcendental experiences. Henry (1986; this volume) talks about the symbol system of myths or archetypes as being derived from neuroendocrine patterns of instinctual response. "They form the link between the emotions of our genetic inheritance and the abstract decisions of science and reason" (Henry, 1986, p. 51).

Since personal meanings are related to values and needs, brain structures involved in various physiological needs also play a part in the construction of personal meaning. The meaning assigned to existence may be related to genetically determined survival need (Clark, 1982).

Perhaps one way to clarify the relationship between meaning and brain structures is to investigate changes in personal meaning following lesions in various parts of the brain. It seems to us that meaning changes following brain damage may have more profound effects on personality and behavior than do lesion-produced memory deficits.

Implication for Public Policy

Our society is facing a future in which a larger number of aging individuals are living 20 or 30 years beyond retirement. Unless steps are taken to provide aging with a sense of meaning, the personal resources (e.g., wisdom, competence, experience) of our elderly will be lost to society. In addition, many members may become increasingly at risk for mental and physical health problems. What is needed is a "culturally viable ideal of old age [that] legitimates norms and roles appropriate to the last stage of life" (Cole, 1984, p. 329). Our society continues to be hung up on viewing the elderly as unproductive recipients of society's benevolence and mere products of historical forces. Public policy must be directed toward *increasing the options* available to the elderly in the areas of work, education, personal development, and so on (i.e., sources of meaning). Public policy needs to marshal individual meanings into a collective and in so doing give birth to renewed social meanings. The

nurturing of renewed social meanings by the social system will help provide a "new opium for the aging population."

SUMMARY AND CONCLUSION

The aim of this chapter was to generate a theory not *about* aging but about what growing old *means* to those who are experiencing it. We began by documenting the emerging trend toward an individualistic perspective, espoused by a new breed of social scientists and ordinary people.

In the first section, we introduced the interpretive paradigm as a promising approach understanding the conscious experiences of an individual. We stressed the importance of viewing the individual as an active, self-constructing, self-reflecting agent, embedded in social, cultural, and historical contexts.

In the second section, we defined personal meaning and elaborated on its nature, drawing specifically on the seminal theoretical contributions of Frankl (1963), Maddi (1970), and Kelly (1955). The search for personal meaning was offered as our fundamental postulate. We proposed a personal meaning system, closely tied to shared and personal values. We identified sources and levels of personal meaning and offered the breadth, depth, and meaning system postulates.

In the same section, we advocated two broad meaning-producing contexts, social definitions and self-definitions, and introduced the choice postulate. The choice postulate is considered the key component of our conceptualization of aging as an individual process. We argued that while the individual lives out his or her life within societal constraints, he or she has a certain amount of freedom to choose how life is to be lived. Such freedom increases choices that influence the structure of the meaning system. We offered the individuality hypothesis to test this linkage.

In the third section, we concentrated on the development of personal meaning across the life span. We argued that personal meaning is built on the foundation of experiences, values, and beliefs. We also focused on the meaning of psychological time, the life timetable, religiosity, and death, the transcendence of which provides continuity and gives meaning to existence. We noted that changing values create shifts on the social/self continuum and influence the structure of the personal meaning system in ways stipulated by the reconstruction postulate.

In the fourth section, we briefly outlined a number of measures and methods most appropriate to our theoretical position and emphasized the importance of taking into account time perspectives. These were offered to give researchers a vehicle for testing our postulates and hypotheses.

Finally, we drew attention to a number of implications of our theoretical view for allied disciplines concerned with human development, research, and

public policy. The primary goal of this chapter was to provide a conceptual analysis of personal meaning from the interpretive perspective, and to highlight the importance of meaning in providing fulfillment within the constraints of aging and dying.

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