

Exploring the functions of autobiographical memory:

Why do I remember the autumn?

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### Abstract

The purpose of this chapter is to address the question, "Why do humans remember and think so much about their lives?" More plainly, "What is the function of remembering the past?" We review the work that has been done on the functions of remembering and thinking about life both in the reminiscence and in the autobiographical memory traditions. We then point out the overlap and the distinctiveness in these hypothesized functions. Overall, the literatures converge in identification of three fundamental functions that are related to self, social, and directive concerns in life. The potential for the examination of function to bring together these two distinct research areas is discussed and considerations for future investigations of function relevant to researchers in both domains are highlighted.

## Exploring the functions of autobiographical memory:

### Why do we remember the autumn?

This is rather a wistful title to begin a theoretical chapter on memory. Then again, memory sometimes brings up wistful feelings, reminds one of happy times or opportunities missed, of how things once were. The focus of this chapter is to examine the functions of autobiographical memory (AM), that is, to ask *why* humans remember so much of what has happened in their lives. The title's poetic reference to autumn is intentionally provoking. A common image in literature is the first signs of autumn: the turning of the leaves, that smell in the air that brings back to mind the first day of school, or Thanksgiving with family. How does it serve us to remember these things? In this chapter, we do not seek to understand why we remember the autumn particularly, but in a larger sense, what functions AM serves. Of course, huge amounts of information are also forgotten, but why do humans remember so much of their lives?

Autobiographical memory is viewed here as including event-specific details and images, complete memories for particular events (personal memories, Brewer, 1996), life-time periods and life themes, and one's entire life story (Bluck & Habermas, 2000). That is, there are many levels of specificity of autobiographical memory (Conway, 1992). Reminiscence is one particularly interesting form of autobiographical remembering: we view reminiscing as an activity in which personally significant autobiographical memories are accessed. These memories are then mulled over, repeated, or interpreted and then often shared with other people. Different from some other types of AM that may serve largely informational needs, reminiscence may serve primarily psychosocial needs (Wong, 1995).

This distinction between reminiscence and autobiographical memory is not one that is only definitional. The two literatures have quite distinct roots. Reminiscence work is based in the tradition of psychodynamic theory (e.g., Butler, 1963) while autobiographical memory research comes out of an everyday approach to cognitive psychology (e.g., Neisser, 1978). A few papers have already been written that attempt to bridge these substantively similar but traditionally different literatures (Bluck & Levine, 1998; Fitzgerald, 1996; Webster & Cappeliez, 1993). These papers have had some impact and one now sees researchers in the reminiscence literature

referring to memory concepts and processes, and those in the AM literature referring not only to basic memory processes but also to interpretation and meaning-making (e.g., autobiographical reasoning, Habermas & Bluck, 2000). This is a cautious step forward: in viewing reminiscence as a type of autobiographical memory, it is crucial not to simply reduce it to cognition.

Though some interaction between these fields can be seen, there are still basic differences in the two approaches. Coming from a primarily cognitive perspective, research on AM has largely been concerned with understanding the organization of, and processes related to, storing and retrieving memories. Research in this area does however move beyond basic cognitive models to embrace emotion, self, and personality (e.g., Levine, Stein & Liwag, 1999; Singer & Salovey, 1993; Rubin, 1986, 1996; Thorne & Klohnen, 1993). On the other hand, reminiscence research and practice has traditionally focused on the use of reminiscence groups and techniques of various sorts (e.g., Birren & Deutchman, 1991) as informal interventions, particularly in later life.

We believe that the issue of memory functions is a crucial one for identifying the similarities of reminiscence and autobiographical memory work. That is, an important link between these two areas is that each requires the understanding of the functions of remembering and thinking about the past. Despite the different aims and goals of the researchers and practitioners in these two areas (e.g., building models of how memory is organized versus developing effective reminiscence practice techniques), we believe that they are faced with a common substantive problem that must be resolved for either of these fields to productively develop. More modestly, we suggest that consideration of the functions of AM could greatly enhance the theoretical conceptualizations and empirical agendas of those working in either area. AM researchers stand to benefit from an understanding of the functions of AM because this is a crucial part of elucidating the organization and processes of the memory system (which are most likely guided by the function of the system). Researchers and practitioners who develop, use, and evaluate reminiscence techniques need to understand function so as to be able to understand or predict the types of outcomes that thinking about the past might have for participants (e.g., see Bluck & Levine, 1998). In sum, benefits for each of these two areas derive

from making the functions of autobiographical memory a centerpiece of research. Of course, another underlying benefit is that these two areas are, by this common agenda, brought into closer relationship.

Before proceeding further, let us clarify the use of the term function. Function can have (at least) two meanings, connoting either use or adaptive function (i.e., functional versus nonfunctional). These two meanings are related but for now we take the simpler definition of function, that is, what do individuals use their memory of their life for? A later development in any program of research dealing with function would be to also focus on the latter meaning of function: to identify the adaptive and non-adaptive ways in which memory is used in everyday life.

In this chapter we briefly review the existing work on the functions of remembering and thinking about life both from the reminiscence and from the AM literature. Next, we point out the overlap and distinctiveness in the hypothesized functions of AM and reminiscence. Finally, considerations for future investigations of function for researchers in both domains are highlighted.

#### The Functions of Autobiographical Memory and Reminiscence

Autobiographical remembering, or reminiscing, implicitly involve thinking about the past in the present. A number of theoretical writings suggest the importance of temporal perspective, the expansion of one's perspective through an extended temporal view of self and life (e.g., Lewin, 1926; Neisser, 1988a; Neugarten, 1979). More specifically in both the AM and the reminiscence literature researchers have addressed why remembering and thinking about the past occurs in everyday life. Due to the different traditions or roots of these two research areas, as previously discussed, the nature of this work provides different angles of insight. We review work first from the AM and then from the reminiscence literature.

#### Functions of Autobiographical Memory: Theory and Empirical Evidence

Various researchers have described the benefits of a functional approach to memory (Baddeley, 1987; Bruce, 1989) and outlined the theoretical functions of the human ability to contemplate the past. While different researchers have focused on different particular

functions, or different subsets of functions, most hypothesized functions fit into one of three categories. These categories are well represented in Pillemer's (1992) formulation of AM as having self (self-continuity, psychodynamic integrity), directive (planning for present and future behaviors), and communicative (social bonding) functions. While these three functions (self, directive, social) have discrete labels they do not necessarily represent discrete categories in everyday behavior or mental life. For example, one may remember a past success (e.g., a public speaking engagement) in order to serve the directive function of preparing for an upcoming engagement. At the same time, however, that memory may serve a social function in reminding one of their acceptance within a group. For simplicity, however, and to mirror the way that most formulations have appeared in the literature, functions are reviewed here largely in discrete categories.

Many theoretical formulations emphasize the function of AM in the continuity of the self. While these share a similarity to Pillemer's (1992) "psychodynamic function" which emphasizes the psychological and emotional importance for the self of recalling one's own past, other researchers have not necessarily embraced the psychodynamic aspect of the self function. Knowledge of the self in the past, and as projected into the future, has been seen as one critical type of self-knowledge (Neisser, 1988b). Conway (1996) claims that the adequacy of autobiographical knowledge depends on its ability to support and promote continuity and development of the self. Similarly, a hypothesized function of the personal past is to preserve a sense of being a coherent person over time (Barclay, 1996) and Fivush (1988, 1998) describes how this coherent sense of self-over-time develops in young children. Autobiographical knowledge may be especially important when the self is in adverse conditions requiring self-change (Robinson's, 1986). Other self functions such as mood-regulation, and self-concept preservation and editing have also been suggested (Cohen, 1998). In short, autobiographical memory has been viewed as serving self functions.

While most researchers agree that self-continuity is maintained through the interdependent relation of self and autobiographical memory (Bluck & Levine, 1998; Brewer, 1986), the directive function of AM is also seen as important. For example, Cohen (1989;

1998) has described the role of AM to solve problems as well as in developing opinions and attitudes. AM allows us to ask new questions of old information in order to solve problems in the present, and to predict future events (Baddeley, 1987). A hypothesized function that may be seen as both directive and social, is to use our own past experience to construct models that allow us to understand the inner world of others, and thereby to predict their future behavior (Robinson & Swanson, 1990). Similarly, Lockhart (1989) has argued that the major function of AM is to provide flexibility in the construction and updating of rules that allow individuals to comprehend the past and predict future outcomes. That is, by comparing different past events, and by comparing events with developed rules, individuals are able to test hypotheses about how the world (not just the social world) currently operates, and to make predictions about the future. Similarly, in several studies individuals report remembering past events and the lessons they learned from them as useful in guiding present or future behavior (McCabe, Capron, & Peterson, 1991; Pratt, Arnold, Norris, & Filyer, 1999). Thus, the directive function of autobiographical memory, use of the past to make plans and decisions in the present and for the future, has also received theoretical support.

Neisser (1988b) claims that the social function of AM is the most fundamental function. The social function can be divided into three sub-categories: social interaction, empathy, and social-bonding. The most basic social function is that AM serves to provide material for conversation thus facilitating social interaction (Cohen, 1998). Sharing personal memories also makes the conversation seem more truthful, thus more believable and persuasive (Pillemer, 1992). Autobiographical memory also allows us to better understand and empathize with others (Cohen, 1998). For instance, sharing personal memories can engage the listener in a story and elicit empathic responses, particularly if the listener responds with their own personal memory (Pillemer, 1992). Providing others with information about one's self (self-disclosure) is another social function that memory serves in social relationships (Cohen, 1998). The importance of AM in developing, maintaining, and strengthening social bonds has been repeatedly noted (e.g., Nelson, 1993; Pillemer, 1998) and even tied to its potential evolutionary adaptivity (Neisser,

1988b). When episodic remembering is impaired social relationships can suffer, thus highlighting the importance that autobiographical memories can serve for social bonding (Robinson & Swanson, 1990). Sharing AM's with someone who was not present at the past episode provides the listener with information about the self and the world, while sharing memories with someone who was present serves more of a social-bonding function (Fivush, Haden, & Reese, 1996).

One project has examined the functions of AM empirically (Hyman & Faries, 1992). In a first study, individuals were asked to report and describe past events that they had often talked about with others. In a second study, individuals generated autobiographical memories to cue words, and then described previous times when they had thought about or talked about the memory. The first study (32 participants provided 63 memories) revealed that individuals talk about memories in order to share experiences, provide information and advice, or to describe themselves to others. The second study (19 participants provided 152 memories), which did not require that the memory had been talked about before, showed that many memories are recalled privately and not told to others. In addition, other memories were described as being shared with others and thereby used to inform others about one's self and life.

In sum, theoretical work in the AM literature supports three functions of remembering the past: self, social, and directive. Most researchers agree that the self and AM are intimately linked, and many suggest that the social function of AM is its most important or primary function. The directive function of memory is described as a way in which individuals use the past as a resource for present and future behavior. In the empirical work, self and social functions of autobiographical memory were often mentioned, but the participants in these studies did not report the directive function often.

#### Functions of Reminiscence: Theory and Empirical Evidence

As can be seen from the review above, very little empirical research exists explicitly examining the functions of autobiographical memory. In the conceptually related field of reminiscence (Bluck & Levine, 1998; Fitzgerald, 1996; Webster & Cappeliez, 1993), more empirical research on the functions of thinking about the past exists alongside theoretical

formulations (See Haight & Webster, 1995). While several theoretical articles outline the potential adaptive uses and functions of reminiscence, especially in later life, (e.g., Ebersole, 1978, Kaminsky, 1984; Liberman & Tobin, 1983), the most encompassing taxonomies are presented by Watt and Wong (1991; See also Wong & Watt, 1991) and Webster (1997).

Through content analysis of interviews with 460 individuals aged 65-95 years, the authors (Watt & Wong, 1991; Wong & Watt, 1991) arrive at a six-category taxonomy. This includes Integrative, Instrumental, Transmissive, Narrative, Escapist, and Obsessive reminiscence. Integrative reminiscence refers to life review as described by Butler (1963). Instrumental reminiscence refers to the recall of past experiences in an effort to cope with a current problem. Transmissive reminiscence refers to the retelling of past events and anecdotes as a way to pass on information to other people, especially the next generation. Narrative reminiscence refers to storytelling about the past for the pleasure of the reminiscer or the audience. Escapist reminiscence refers to daydreaming and fantasy about the past that may portray the past in an overly positive light while devaluing the present. Obsessive reminiscence refers to ongoing, uncontrollable negative memories usually accompanied by guilt or despair.

This taxonomy makes a positive contribution that is not only theory-based. The outlined functions (implicit in the categories) are based on narrative accounts by a reasonably large number of individuals. However, as has been the tradition in the study of reminiscence, the studied sample were all individuals over 65 years old. In fact there is little evidence that thinking about the past is the exclusive domain of the older adult (Giambra, 1977, Thornton & Brotchie, 1987, de Vries, Birren & Deutchman, 1990; Webster, in press).

In order to take a life-span perspective on the functions of reminiscence, Webster (1993, 1997) developed the Reminiscence Functions Scale (RFS). The validated scale, originally constructed from 710 individuals' (aged 17 to 91 years) responses to the sentence stems, "I reminisce because....", and "Others reminisce because...", identifies eight reminiscence function factors. These are Boredom Reduction, Death Preparation, Identity, Problem Solving, Conversation, Intimacy Maintenance, Bitterness Revival, and Teach/inform

Others. Boredom Reduction involves reminiscing because the environment is understimulating or the individual is unengaged. Death Preparation is using our past to create a sense of closure or calm when our own mortality is conspicuous. The Identity factor refers to reminiscing that serves to solidify a sense of who we are, while Problem Solving provides us with past strategies that serve us in the present. The Conversation factor refers to reminiscence for the sake of informally connecting with others, while Intimacy Maintenance is reminiscing about important relationships in order to maintain bonds. Bitterness Revival is reminiscing about previous unjust experiences, thus evoking negative affective responses. The Teach/Inform factor is the use of reminiscence for instruction or providing information to others.

The taxonomy has gained validity through identification of meaningful correlates of the categories. For example, women tend to engage in reminiscence more for the purpose of Intimacy Maintenance, and Conversation, older adults relate reminiscence more to Death Preparation, and adolescents more commonly use reminiscence for Boredom Reduction (Webster, 1993). Personality correlates also validate the reported functions (Webster, 1993). For example, people who score high on the Neuroticism subscale of the NEO Personality Inventory tend to engage in Bitterness Revival. Those who score high on Extraversion tend to endorse reminiscence as a conversational component.

The validation of the RFS in this manner, and the fact that it was developed using a large group and age range adds to its robustness as a measurement tool. Conceptually, the similarities to Watt and Wong's (1991) taxonomy provide convergent validity for the existence of several reminiscence functions. The two taxonomies replicate many of the same functions though they discuss them and label them in different ways. In the next section, we discuss these commonalities, and the overlap of this literature with the discussion of functions found in the AM literature.

#### Overlap and Differences in AM and Reminiscence Functions

Our focus in this section is to map the two reminiscence taxonomies onto one another and to compare them with the three theoretical functions of AM (self, directive,

social). Overall, as seen in Table 1, the data collected by reminiscence researchers basically supports the functions postulated by autobiographical memory theorists. Watt and Wong's (1991) integrative reminiscence is described in terms that map onto the self function; instrumental reminiscence can be seen as a directive function; transmissive and narrative reminiscence serve social functions, the first of passing on information, and the second largely for the entertainment of self and others. Looking at the RFS categories, again the factors fit well with the hypothesized functions of autobiographical memory outlined above. The RFS factors can be seen to represent self functions (death preparation and identity factors), a directive function (problem-solving factor), and social functions (conversation, intimacy maintenance, teach/inform factors).

In looking across research and theory in both the autobiographical memory and the reminiscence literatures we find support for autobiographical memory serving self, directive and social functions. Note, however that in all three studies in which individuals actually reported on their uses of memory, the directive function received the least support. That is, the directive function can only be seen as represented by one factor in both Watt & Wong's, (1991) taxonomy (Instrumental) and Webster's (1997) RFS (Problem-solving), and was not nominated by the participants polled by Hyman & Faries (1992). Note also that two of the functions identified in the reminiscence literature cannot easily be mapped onto one of the three AM functions. These include factors that may tend toward the psychodynamic foundations of the reminiscence literature. That is, bitterness revival or obsessive reminiscence, and boredom reduction or escapist reminiscence may be seen to serve intrapsychic functions that have not yet been fully embraced in the AM literature (cf., Pillemer, 1992). To give this comparison of overlap in functions an empirical basis, we are currently analyzing data that compares individuals self-reports concerning the three functions of AM with their responses on the RFS (Bluck, Habermas, & Rubin, 2001).

Our analysis of the functions that have been generated across these two fields is fruitful in two regards. First, it appears that researchers from both traditions, though speaking slightly different languages, both support three fundamental functions of remembering and

thinking about the past. In both literatures the three functions are differentially weighted (the directive function receives less support). This cross-field convergence is encouraging. Second, however, is the fact that they do not match perfectly. It seems that the way that researchers approach and measure individuals uses of memory may lead to different conclusions about the number and types of functions. Our view of this is that it serves a useful purpose. For example, researchers in the autobiographical memory literature can be advised of the importance of memory for such functions as death preparation, a topic not often considered by cognitive psychologists. On the other hand, those studying the function of the past from the tradition of the reminiscence literature may benefit from locating their work also within the autobiographical memory framework: we do not remember all that happens to us, sometimes we remember it inaccurately, and parts that we do remember may not be “worthy of” reminiscing about. Research in each of these traditions can be used to broaden the scope, or specify the limits, of those using the alternate approach.

Finally, this exercise in mapping the functions of reminiscence and AM is not intended to suggest that reminiscence researchers should now think in terms of only three functions. Instead our sense is that it has shown that self, social, and directive functions may be a foundation for the study of AM at a general level, and that reminiscence, a specific type of remembering, manifests those three basic functions in particular ways that are captured in the taxonomies presented here.

#### Lessons Learned: Considerations of Function in Future Investigations

Both the convergence and the divergence in views of function across the AM and reminiscence literature are useful. These two fields serve to gain from further cross-pollination, and the development of both different and complimentary approaches to this foundational topic. That is, whether one is a reminiscence researcher or practitioner, or an AM researcher, the question remains important: *Why* do humans remember so much of their lives and spend time thinking back over their past?

Of course, the above review partially answers that question. Humans remember huge amount of their lives because remembering our own past serves self, directive, and social

functions. So, for example, a memory of the autumn may provide us with continuity in our view of self across childhood and into adulthood (self), may direct us to 'get going' on projects that we want to accomplish by the end of the year (directive), or provide us with memories of harvest celebrations past that we enjoy sharing with others (social).

We have a partial answer but much work remains to be done. This review shows that there is very little empirical evidence concerning the functions of AM. We also still need to address several conceptual issues in this area. In the remainder of the chapter we identify some of the conceptual and empirical work that we feel is necessary for advancing knowledge about why people remember and think about the past. This includes a discussion of several factors that may affect how autobiographical memory is used: levels of remembering, the content of memories, and the possibility of life-span differences in functions. Other factors that we do not discuss here, such as culture, gender, and personality are also likely to play important moderating roles in how AM is used in everyday life.

#### Does Function Vary by Level of Memory?

Conway and his colleagues (Conway, 1992; Conway & Pleydell-Pearce, in press) have developed a hierarchically nested model of the organization of AM that outlines several levels of AM. It includes basic units such as event-specific knowledge, mid-level units such as personal episodes, as well as more global units such as life themes and lifetime periods. In our recent work we have extended Conway's model to also include the most superordinate unit of thinking about the past, the life story (Bluck & Habermas, 2001; Habermas & Bluck, 2000). As a result, we suggest that there are at least three levels of analysis on which individuals look back over their lives, and that should be included in a conceptualization of AM: specific events, life periods and life themes, and the life story.

For example, when individuals reminisce they may engage in review of an entire life (the life story) one version of which was suggested by Butler (1963; the life review). They may also, however, remember certain lifetime periods (e.g., when I lived in Berlin), or share particular personal episodes. Outside of the reminiscence framework, as part of the flow of AM in everyday life, personal episodes or even event-specific details (such as smells or

image fragments) may enter consciousness due to one's inner train of thought or external cueing (Bernsten, 1998).

Accepting that there are at least three different experiential and potentially organizational levels of AM, we are then challenged to grapple with whether the functions of AM outlined above are adequate to apply to all levels of memory, or if different levels of memory might serve different sets or subsets of functions. One productive direction for future research is to use self-reports of the functions of AM and reminiscence (as Webster has done) but to vary the instructions such that participants are asked to provide functions for different levels of memory. For example, in our most recent work (Bluck, Habermas, & Rubin, 2001) we ask participants to report on the frequency with which they "think back over or talk about my life or certain periods of my life" for each of 32 reasons. This follows the instruction that, "Sometime people think back over their life or talk to other people about their life: it may be about things that happened quite a long time ago or more recently. We are not interested in the times that you think back over specific events, but in when and how you bring together and connect the events and periods of your life." Thus, in this research we cue individuals to focus on life periods, or the life story, not on the more basic level of memory, the individual episode.

#### Does Function Vary by Content?

Gigerenzer (1997) has pointed out that theories of memory often suffer because of a focus on structure and organization without taking the role of memory content into account. In applying his observation to the current topic, individuals may rely more or less on recalled experiences to serve current functions depending on the context (Graumann, 1986) in which they are acting (i.e., in different life domains such as health, work, love relations).

Aside from the consideration of content in terms of life domain, the more microlevel content and valence of the memory may also be important. The outcome of a life review may depend on the valence of the events in the life lived (Shute, 1986). If one reason for thinking about the past is to maintain self-continuity, are people just as likely to maintain a continuous negative self-concept by recalling and rehearsing past negative episodes, or does the self-continuity function imply a bias toward self-consistency that focuses on maintaining a positive

view of self (e.g., see Greenwald, 1980)? At the level of memory for individual episodes, both positive and negative memories may serve the function of guiding future behavior but in different directions (Stein & Levine, 1987; Thorne & Klohnen, 1993). In social exchanges, relationships may be differentially affected by the sharing of happy memories and sad or bitter memories though both may serve different aspects of the social function (e.g., maintaining intimacy and eliciting empathy respectively).

A final consideration concerning the relation of function to content is the extent to which particular memories or life periods are seen by the individual as being autobiographical. That is, individuals have thousands of memories of their lives but only some of these are significant enough to them to be considered autobiographical or meaningful in the scope of the whole life (Bluck & Habermas, 2001).

In future research that aims to validate or further explore the functions of AM, content must be considered: the domain of life being studied, the valence of memories being recalled, and the centrality of those memories for an individual's sense of biography may all affect, or be affected by, the function of remembering the past. For example, can we consider a memory about a negative past health condition that threatened an individual's life having the same types of functions as a memory for a mildly positive relationship that lasted only a few weeks? In designing measures (e.g., choosing between labor-intensive narrative methods and more quantifiable checklists or self-ratings) the ability to include the role of content in function should be kept in mind.

#### Does Function Vary by Life Phase?

The history of the reminiscence tradition, with its focus on late life, demands that we ask whether autobiographical memory functions differently depending on one's point in the life span (Webster, 1999). Attention to the various changing and continuous contexts in which individuals lives are embedded is central to the lifespan perspective (Baltes, 1987; Baltes, Lindenberger & Staudinger, 1998). Within the reminiscence literature, Webster (1997) has begun this process by examining age differences in types of reminiscence used by different age groups.

Speculating about more general functions of AM from the work specific to reminiscence, Webster and McCall's (1999) findings suggest that the directive function is more frequent in younger adults while the social function of teaching and informing may be more frequent in older adults. Our assumption is that frequency reflects a necessary use or function. From their findings it also seems that both young and old adults may utilize the self function of AM, although possibly for different reasons (i.e. identity construction and death preparation, respectively). Cohen (1998) also suggests that the social function of AM may be more important in late life for maintaining social relationships. Contextual factors associated with aging may be related to changes in the functions of AM across the lifespan. In one study, individuals who were aging successfully or living in the community showed more integrative and instrumental reminiscence as compared to those who were not aging successfully or who were living in institutions (Wong & Watt, 1991). That is, not only age, but life context and adaptation were related to memory uses. This data from the reminiscence literature provides a basis for building a larger body of empirical work on lifespan differences in AM function.

Tying together developmental thinking about early, middle, and later life may provide researchers with clues as to the way that memory function may be related to these progressive life phases. Past investigations have demonstrated that remembering the past first begins in early childhood (e.g., Fivush & Hammond, 1990; Fivush & Haden, this volume) and adolescence has been recognized as a phase in which memory is recruited in the service of identity-building (Habermas & Bluck, 2000; McAdams, 1985). There is some evidence that individuals recall personal episodes that are consonant with the Eriksonian goals of particular life phases. For example, that when recalling their young adulthood people tend to recall memories concerning the developments of intimate bonds (Conway & Holmes, 2000).

Beyond these early life phases, Neugarten (1979) claims that middle age brings a change in time perspective when one realizes that there is more time behind than there is left ahead in one's life, and she characterizes late adulthood as a phase when one may focus more on what one has been in the past. In keeping with this view, de Vries and Watt (1996) have shown that older adults recount more past events, and younger adults more future events, when

identifying the significant events of their lives. Thus, temporal perspective, or one's vantage point in the life span, may affect the use of the remembered past.

Butler's (1963) view, in writing of the life review, was that remembering and re-examining the past in later life was possible due to the decreased demands on one's time due to retirement, and was crucial to understanding the present, and finally to accepting one's life and death. Erikson's (1968, 1982) final life stage of integrity versus despair, involves an examination of the past, and its integration with the present in order to imbue the past with the new qualities that can only be given to it by one's current vantage point in the present.

Relating life phases, roles and contexts to the use of memory remains a challenge for future research. Within age groups, particular contexts of retrieval may also be important to memory function (Winograd, 1996). Research might address both the theoretical claims of the adaptive role of autobiographical memory in later life, as well as trying to further map the functions that are consonant with earlier life phases. This is not to suggest that we expect that different life phases require us to use memory in completely different ways. Many continuities in AM will likely be found (e.g., Bluck, Levine, & Lulhere, 1999) due to the fundamental nature of such things as self continuity, directing future behavior, and maintaining social relationships.

#### Summary and Conclusions

The aim of the chapter was to identify and further explore the functions of AM by examining work across the reminiscence and autobiographical memory traditions. This analysis suggests that the various specific functions of reminiscence that have been empirically established fall fairly neatly into the three theorized functions of autobiographical memory more generally. The self and social functions are well-supported and the directive function less so. There are, however, functions of reminiscence that do not fit into the larger autobiographical memory scheme and these differences offer directions for broadening the view of autobiographical memory to encompass more emotional themes.

Further investigations into the functions of remembering and thinking about the past are foundational for the development of the two literatures. An understanding of the function of memory for the personal past would provide a useful underlay both for models of autobiographical memory and for the design of reminiscence techniques. Suggestions for future research and conceptual extensions include consideration of whether the function that memory serves may vary by the level of memory being accessed, the content of memories, and the individuals point in the life span.

Table 1

A Comparison of the Functions of Autobiographical Memory and Reminiscence

Functions of AM	Reminiscence Taxonomy (Watt & Wong, 1991)	RFS (Webster, 1997)
Self	Integrative	Identity Death Preparation
Directive	Instrumental	Problem Solving
Social	Transmissive	Teach/Inform
	Narrative	Conversation Intimacy Maintenance
Other	Obsessive	Bitterness Revival
	Escapist	Boredom Reduction

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