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Autobiographical Memory: Exploring its Functions in Everyday Life

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Abstract

This special issue spotlights research that uses a functional approach to investigate autobiographical memory (AM) in everyday life. This approach relies on studying cognition, in this case AM, taking into account the psychological, social, or cultural-historic context in which it occurs. Areas of interest include understanding to what ends AM is used by individuals and in social relationships, how it is related to other cognitive abilities and emotional states, and how memory represents our inner and outer world. One insight gained by taking this approach is that levels and types of accuracy need not always be regarded as memory 'failures' but are sometimes integral to a self-memory system that serves a variety of meaningful ends of human activity. Previously hypothesized functions of AM fall into three broad domains: self, social, and directive. Each of the contributions addresses how AM serves one or more of these functions and thereby examines the usefulness and adequacy of this trio.

The aim of this special issue is to present current empirical and theoretical work on the functions of autobiographical memory (AM). An explosion of work over the last decade in the AM literature has been concerned with the important task of examining memory performance in everyday life. The literature has been crowded with debates concerning how much we remember about, and how well we remember, the events of our lives (e.g., eyewitness testimony, repressed/false memories). The focus on function in this special issue provides another area to spotlight: the primary concern is not with how much or how well humans remember their personal past (though those features often play some role), but instead with why and how humans remember both mundane and significant life events. What functions does it serve for people to remember, reflect on, and share with others, the experiences of their lives?

Various researchers have described the benefits of a functional approach to memory (Baddeley, 1987; Bruce, 1989; Neisser, 1978). Certainly, partial accounts and embellished accounts are included when researchers examine the memories people have and the stories they inevitably tell. The functional approach, however, does not particularly attempt to label information as correct or in error, actual or biased, but instead to understand how the memory system operates during person-environment interactions (i.e., life), by understanding why individuals recall things the way that they do.

Autobiographical remembering implicitly involves thinking about the past in the present. So why do we do it? A number of theoretical writings suggest the general importance of the expansion of one's present perspective through an

extended temporal view of self and life (e.g., Lewin, 1926; Neisser, 1988; Neugarten, 1979; Staudinger & Bluck, 2002). Beyond recognizing this general utility of considering the present as framed by the past (and the future), researchers have also more particularly addressed why remembering and thinking about the past occurs in everyday life, that is, the functions of autobiographical memory.

Though researchers have identified different specific functions, or 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), communicative (social bonding), and directive functions (planning for present and future behaviors). To expand this scope a little, I refer to these three more generally as self, social, and directive functions (Bluck & Alea, 2002).

A Review of Three Functions: Self, Social, Directive

I provide here a brief review of the three theorized functions of AM to set the stage for the collection of papers that follows. Each function is presented as a discrete category for the purpose of organization. This also reflects how individuals have gone about research thus far (that is, with a focus on one type of function). While these three functions 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 talk that was well-received at a conference) in order to serve the directive function of preparing for an upcoming engagement. Concurrently,

however, that same memory may serve a social function of relationship development or maintenance as one recalls new and old relationships with those who were at the conference. It is clearly a challenge, one that sometimes emerges in the papers that follow (e.g., particularly Pasupathi's, and Pillemer's contributions) to consider the overlap between functions of memory, how they are served in combination, and if one may be said to be more fundamental, or have primacy, over the others.

Self

Knowledge of the self in the past, and as projected into the future, has been seen as one critical type of self-knowledge (Neisser, 1988). 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" that emphasizes the psychological and emotional importance for the self of recalling one's own past, AM researchers have not necessarily embraced the psychodynamic aspect of the self function. 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). Fivush (1998) describes how this coherent sense of self-over-time develops in young children, and Habermas & Bluck (2001) outline a trajectory for this continued development of biographical identity through adolescence (see also, McAdams, 1985). Most researchers agree that self-continuity through

adulthood is maintained by the interdependent relation of self and autobiographical memory (Bluck & Levine, 1998; Brewer, 1986).

Autobiographical knowledge may be especially important when the self is in adverse conditions requiring self-change (Robinson's, 1986). Regardless of challenges to the self, however, self functions such as emotion-regulation (see Pasupathi, this volume), and self-concept preservation and enhancement (Ross, 1989, 1991; Wilson & Ross, this volume) have also been suggested as useful aspects of self-regulation (Cohen, 1998).

Social

Neisser (1988) claims that the social function of AM is the most fundamental function. AM provides material for conversation thus facilitating social interaction in general (Cohen, 1998). Sharing personal memories also makes the conversation seem more truthful, thus more believable and persuasive (Pillemer, 1992) and thereby offers an avenue for teaching and informing others. This teaching function may be particularly important in certain relationships, for example, that between parents and their children (Fivush, et al., this volume).

AM 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, especially if the listener responds with their own personal memory (Pillemer, 1992). The importance of AM in developing, maintaining, and strengthening social bonds has been

repeatedly noted (e.g., Pillemer, 1998) and sometimes tied to its potential evolutionary adaptive value (Neisser, 1988; Nelson, 1993, this volume).

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 (biographical self-disclosure) introduces the listener to information about the speaker and his or her world (Cohen, 1998), while sharing memories with someone who was present serves more of a social-bonding or intimacy function (Fivush, Haden, & Reese, 1996).

Directive

Despite some claims of the primacy of social functions, 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 that guide one's behavior. 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). David Pillemer has reviewed a variety of directive functions of AM in his book, Momentous events, vivid memories, and details some of these in his contribution (Pillemer, this volume). 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 some attention.

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 an important, if not the most important, function. The directive function of memory is seen as a crucial way in which individuals use the past as a resource for present and future behavior.

Until quite recently, little empirical work directly addressed the functions of AM (but see Hyman & Faries, 1992). The authors contributing to this special issue are all researchers who have made important contributions concerning function: each has developed methods, in some cases full programs of research, or provided creative theoretical guidance. By bringing together these empirical and theoretical contributions we hope to focus a

research spotlight on why people remember what they do about the experiences of their lives, and what use it is to them.

Below I introduce each of the contributions. We begin with an examination of function from a historical, socio-cultural perspective: the paper explores whether the functions of AM are universal and consistent over time. Next, there are papers that investigate each of the three major functions: self, social, and directive. This organization into three functions does not suggest that three is the magic number. A secondary aim of this special issue is to stretch our consideration to allow that more or less categories of function may be more parsimonious. In this regard, Webster's contribution calls us to question the adequacy of the current trio.

The Functions of AM in Historical Perspective

Shifting roles of individual and collective memory narratives. Katherine Nelson's paper analyzes both self and social functions of autobiographical memory as embedded in an evolutionary and socio-cultural timeframe. Though it focuses on self and social functions, however, her conceptualization of memory, based on Tulving's and others views, is that memory is a knowledge structure that is "not about the past but about the future" (Nelson, this volume). Although she doesn't explicitly frame it this way, I believe that the directive function is therefore seen as implicit in, and part of the definition of, autobiographical memory. That is, the job that humans needs done is to explain the world in which we find ourselves in order to predict and plan for the future. In questioning whether there are three basic functions of AM, I believe it is a challenge to

consider that the directive function may underpin both self and social functions (see also Pillemer, 1998).

Given that explaining the present and thereby predicting the future is a basic human need, Nelson's article focuses on examining how that is done: what is the balance between the roles that the individual plays and the role that the greater society plays in providing explanations and predictors. She argues that a basic recording of temporally sequenced self-related events has developed as part of the memory system through evolution. In addition to that basic memory system, however, in historical periods that assume cyclic continuity (continuity through repetition of old patterns) between past and future there is little that individuals must do to predict the future. In such periods, cultural and societal level stories of continuity suggest that individuals' future will be just the same as their own past, and the past of their mothers and fathers. However, in modern or post-modern society, in which change not continuity is the norm, there is an imperative for the *individual* to forge a unique identity based on a unique life history that will allow them to explain and predict their future role in an ever-changing world.

Nelson makes a complementary argument concerning cross cultural variation in the use of AM: in cultures that value and therefore encourage common values and group (as compared to individual) identification, the individual's best strategy for explaining the present and predicting the future is to look to common cultural myths and narratives. In individualistic societies, like the United States, a common narrative no longer exists and the *individual* has the

freedom and the burden of creating a unique life story both to serve their own needs for self-continuity (self function) and to present themselves to others (social function).

Nelson concludes that the current emphasis in modern American society on personal narrative is a result of this being a socio-historical time point in which individuals (and thereby individuals' memory), more than collective society, are charged with forging a unique identity. The central importance in contemporary America of using AM to serve self and social functions is reflected in parental and institutional emphasis on nurturing children to recall their own personal past at an early age (see also Fivush et al., this volume), and to begin developing a life story that will carry them into adulthood (see also Habermas & Bluck, 2000; McAdams, 1985). Nelson's paper reminds us that the functional approach is based on adaptation occurring through the person-environment interaction. As that relationship changes, so might the way that memory serves its functions, and possibly (across evolutionary time) also the functions that memory is called upon to serve. Keeping that in mind we will, given our current time period, fall back upon the three broad functions that have been defined in the current literature, beginning with the self function.

Self Function

Self-enhancement and coherence: time is on our side. Wilson and Ross revisit the notion of the interdependence of, and reciprocal relations between, the self and autobiographical memory (see also, Brewer, 1986; Bluck & Levine, 1998; Webster & Cappeliez, 1993) in their contribution. This link has long

intrigued psychologists, and the authors remind us of William James' (1890/1950) remark that, were an individual to awake one morning with all personal memories erased, he or she would essentially be a different person. Most of us would agree with James' statement, but thinking carefully, what would change and what would stay the same in such a 'memory-free' person? That is, when James says this would be *essentially* a different person, it raises the question, to what extent is AM not just an interrelated part, but a truly essential aspect, of self? Self and memory are not completely overlapping sets, that is, they are not simply the same thing. Instead, taking an ecological approach to memory (Neisser, 1986), we are guided to answer the question of how essential memory is to the self by identifying the functions that memory serves for the self.

Though this dynamic link between self and memory has often been the object of theoretical consideration, it has received less empirical attention. The program of research described by Wilson and Ross provides an operationalization of two functions that memory plays for the self: providing a coherent view of self and a largely favorable view of the self. Their work sheds light on how memory allows us to say "I am the same person as I was before - but better."

In various studies these authors have found that people self-enhance by evaluating past selves as inferior to their current one. This work highlights the truly autobiographical nature of autobiographical memory. That is, though we often think of memory as a series of events, it is also a record of a series of selves, or a record of the self across time, an autobiography. The current self can

enhance its stature by devaluing the past through remembered selves who were not as sweet or kind, as motivated or intelligent, as the current one. This is an important though fairly straightforward point.

What comes next is less intuitive. The authors detail how individuals use memory to push the past away, or to pull it forward in time, in order to better serve the function of self-enhancement. They show that people can rid themselves of past negative selves by pushing them into the distant past, so as to make them no longer relevant to the current self's well-being. As well, they discuss how favorable events can be pulled forward in time so that we can continue to take credit for past successes as part of our current identity. As a second process by which memory serves self-enhancement functions, the authors discuss point of view in memory, particularly how a third person perspective on our own negative life events may allow us a distance from those events that promotes health and well-being.

In turn, these remembered events also have implications for the current self: for current affect and feelings of satisfaction, though not in a straightforward fashion. Remembering positive events from the past often results in one's current mood being elevated, but not always. So we can't say that the function of remembering past episodes is always to feel better in the present. Sometimes contrast effects occur in which remembering a happy past makes one feel worse about one's current woes. The piece added to this picture by Wilson and Ross is, again, time (see also, Clark, Collins, & Henry, 1991). That is, mood enhancement is likely to occur when recalling recent positive events of the self, whereas

contrast effects are more likely to occur when recalling events of a distant past self. Overall, the authors' program of research suggests that autobiographical remembering serves a self function, that is, to maintain a coherent but still largely favorable present self (see also Greenwald, 1980). They briefly allude to the idea that there could be tension between functions of coherence and enhancement.

This seems an idea worthy of further consideration. I have mentioned that multiple functions may be served at one time, but what about the case in which serving one function inadvertently hinders another. For example, if as Wilson and Ross suggest, self-enhancement occurs through pushing remembered selves back in time ("I'm different now"), evaluating past selves poorly ("I'm not just different but better"), and seeing the past self in third person (objectifying old selves), might this self-enhancement in the most extreme case lead to a sense of self based very much in the present, and one that recruits only positive past events to be part of the current self? Does this imply that, were an individual to awake one morning with all negative memories erased, he or she would essentially be what memory works for us all to be?

Emotion regulation as a function of AM: self meets social. Although Pasupathi presents work on emotion regulation, we see again here, the tendency to employ memories in a manner that aids current well-being, this time not an enhancement of one's view of self, as in Wilson and Ross's work, but of one's current mood state. This paper focuses on a ubiquitous aspect of memories of the self, that is, that we tell and retell them to other people. The series of studies Pasupathi presents suggest that the emotional intensity of a memory for an initial

everyday event is different from memories of times that we retold the event to another person. This difference in remembered affect is seen as a means by which humans engage in emotion regulation, which has been seen as one subtype of the self function of AM (Cohen, 1998; Pillemer, 1992). Thus, her work shows how a self function such as emotion regulation is served in a social context, that is conversational remembering. Of course, the conversation may at the same time be serving social functions (e.g., eliciting empathy) and it is here we see that self and social functions are likely not, in reality, discrete categories.

The pattern of findings in Pasupathi's paper show the constancy of positive emotion between memories of an initial event and its retelling, and the diminishing of negative emotion between initial event and retelling. That is, we see that individuals can (to quote Bing Crosby) "accentuate the positive and eliminate the negative." Well, maybe not eliminate the negative, but at least diminish it, in the stories they tell to others. This seems to occur for the sample in general but even more so for men. In terms of a functional approach, the question is whether the transformation of negative emotion is due to autobiographical memory, that is, that people and especially men remember negative events in a way that helps to down-regulate negative emotion (see also Walker, Vogl, & Thompson, 1997). The alternative is that these individuals remember the negative emotion just as much but feel that it is not functional to display it, so they regulate what is said (not necessarily what is remembered).

My latter interpretation of this work suggests that emotion regulation may not be a primary function of AM but instead could be viewed as an important

mechanism by which primary functions (e.g., self, social, directive) of autobiographical memory are served. So for example, retelling a difficult situation but not retelling the negative emotion one experienced may result in presentation of a self-enhancing (strong, courageous) memory to the listener of the story. Another example, this time using emotion regulation to help AM serve a social function, is that women may include more negative affect than men when retelling an event in order to serve the function of eliciting or providing empathy.

The importance of Pasupathi's paper, and more generally her programmatic work in this area (e.g., Pasupathi, 1998, 2001), is that she highlights the role of emotion in how memory may serve important functions. She also reminds us that in everyday life, functions are often served in a social context in which both characteristics of the listener and the speaker may affect how successfully memory can be recruited toward certain ends. The paper that follows, by Alea and Bluck, further elaborates the role of social context in how AM serves its functions.

Social Function

Why are you telling me that? Alea and Bluck's contribution focuses exclusively on how social functions are served when individuals share memories with another person. Noting the paucity of empirical work on all functions of AM, including the social, the authors attempt to help remedy this situation by providing a conceptual model that can be used to generate research questions. Though noting that such models could eventually be useful for each broad function, in the current paper they limit their scope to providing a conceptual

model of the variables and processes that are involved when AMs are shared to serve social functions.

The authors provide two interrelated definitions of their model's outcome variable, that is, social function. The first is a taxonomic definition of function as use: what different types of social uses is memory put to in different situations (e.g., intimacy maintenance, teaching, eliciting empathy)? The second is a stricter idea of function that implies adaptive level: to what extent is a certain type of social function actually served under various conditions (e.g., does intimacy show an increase after memory sharing)?

The conceptual model then identifies developmental, individual level, social, and qualitative memory variables that, according to their literature review, should affect what social uses memory is put to, and how well it serves them. At the broadest level, all variables are nested in a lifespan contextual frame. The reasons why people reflect on the past, and share memories with others, is seen as varying with their life phase. Within that developmental frame, characteristics of the person sharing the memory (e.g., gender) and characteristics of the listener (e.g., level of familiarity of the listener and speaker) are also considered. Both speaker and listener characteristics can influence what memory is used for (e.g., women may be more likely to use AM for intimacy development than men), as well as the extent to which a social function is served. Social variables such as the length and quality of the relationship between the speaker and the listener, and personal responsiveness between the listener and the speaker in a particular

exchange, are also discussed as factors that are likely to affect how well AM serves social functions in dyadic exchanges.

Besides developmental and social variables, qualitative memory characteristics, such as amount of detail and emotion shared, can influence how well AM serves a particular social function. For instance, sharing an emotional AM with another person may lead to increased intimacy with that person (a social function of AM) that may not have occurred if the memory was purely informative (had lots of details) with little emotion.

The paper offers a rich framework for interpreting empirical contributions such as those made by Fivush et al., and Pasupathi, in this volume. It allows us to map the sub-field of the social functions of AM to see where contributions are substantial enough to provide guidance in generating new hypotheses, and also to identify crucial gaps that are really in need of further exploratory development.

“What happened then, Mom?” Telling as teaching. The paper by Fivush et al. examines particular variables and relations in the conceptual model of social functions detailed by Alea & Bluck. Their model illustrates that in considering the social functions of AM, we need to take note of the content (information and valence) of the memory being shared and who is doing the telling and the listening. Certainly, the functions AM serves may be moderated by what is being remembered and the relationship between those sharing the memory.

Fivush et al. explore a fundamental relationship for development, that between mother and child. One question that frames their paper is why do parents (in this case, mothers) reminisce with their children? What is the function

of such exchanges? More than that, however, this work examines AM (as opposed to other information that parents might share with children) because it seeks to describe how not only the past, but emotionally-charged information about the past, is treated in conversation. Several complementary functions of sharing past emotional experiences with children are put forth. For example, parents influence children's developing self-concept through the way that they engage in emotional past talk with them. They also influence the way that the child sees him or herself in relation to others, and how they see emotion as an integral part of social relations. Finally, another function is to teach and inform, or socialize children about how to express, and maybe even how to experience, or cope with their own emotions (i.e., to regulate emotion, see also Pasupathi, this volume).

This latter function is nicely elaborated in the paper. It is argued that socialization in emotion regulation (through memory sharing) may be particularly important for dealing with the negative emotional experiences in a child's everyday life. That is, mother-child talk about past situations in which the child experienced sadness, anger, or fear may serve the function of guiding children's understanding of each of these negative emotions in ways that are socially sanctioned. Sharing and rehearsing past negative events may thereby help socialize the child in their cultures' norms concerning expression and experience of different types of negative emotions, partly depending on their gender-appropriateness.

The researchers present data collected using a naturalistic method, conversations between mothers and their sons and daughters about actual everyday negative events. Their analyses show that mothers elaborate and evaluate different aspects (e.g., what happened during the event, how it was resolved, how the child was feeling at that time) of memories of sadness, anger, and fear to differing extents. This work suggests that when considering the functions of AM one should be attentive to the lifespan developmental stage of the partners in the social sharing. Teaching and informing is certainly a social role that parents are charged with, and memory-sharing may be one way in which adults socialize children about their own emotions, particularly negative ones, and what to do with them. In turn, this may influence the child's growing sense of self as an emotional being.

Directive Function

Drawing on the reservoir of personal experience. Pillemer's contribution focuses on the directive function of AM. The central point of his article is to demonstrate the importance, and in his words, "the guiding power of the specific episode." He recruits examples of everyday and traumatic memories to first demonstrate the phenomenon. That is, he shows that people really do recollect specific moments or events and use their memories of both traumatic and pedestrian experiences to guide them toward successful functioning and away from repeated failure. Given the importance of using memories as directives it is perhaps surprising that this function has received less attention, and sometimes

less support in the small empirical literatures on the functions of AM and reminiscence (for a review, see Bluck & Alea, 2002).

Pillemer's reanalysis of the available data on directive functions (including some new data of his own) leads us to the conclusion that using memory as a directive has more support in the current literature than is readily apparent. In addition, he points out that this function may be underrepresented because of some confusion concerning its conceptualization (does it refer only to current problem-solving, or to the larger issue of guiding and planning future behavior, or both?), and difficulty with its measurement. He argues that measuring memory directives is especially difficult using self-report measures (like the Reminiscence Functions Scale; Webster, 1993), because the use of memory to direct future behavior may be less subject to awareness than the use of memory in the service of self and social functions. This brings us back to the implicit message in Nelson's paper, that using the past to explain the present and predict the future (i.e., as a directive) may underlie the use of personal memory to serve functions in both self and social domains.

Pillemer's contribution revitalizes research on how individuals, whether consciously or not, use specific personal memories to guide and direct their behavior. An additional area for future investigation is whether different levels of AM, that is not only the specific episode, but life domains and life themes (Conway & Pleydell-Pearce, 2000; Bluck & Habermas, 2001), or the life story (McAdams, 1996) have similar power in directing individuals future plans and behavior.

Is Three the Magic Number?

The contributions reviewed thus far each provide evidence for one or more of the three broad functions of AM. It appears that self, social, and directive functions of AM have some credibility. The challenges of inventing new and creative methodologies for their further study, and sorting out some complex theoretical issues are still before us. The final paper in the special issue challenges us in still a different way: Webster's work links two rather distinct literatures to probe whether self, social, and directive are exhaustive categories of function.

Linking with the reminiscence literature. Webster is one of a few authors who are working to tie together research on memory from the reminiscence tradition with research stemming from an autobiographical memory approach. A few papers have already been written that attempt to bridge these substantively similar but traditionally different literatures (see also Bluck & Levine, 1998; Fitzgerald, 1996; Webster & Cappeliez, 1993). His contribution to this issue, development of a circumplex model for mapping reminiscence functions and relating them to the broad AM functions, provides a crucial linking of literatures that will move forward the discussion and understanding of the functions of personal memories in human lives.

Webster's circumplex model provides a good conceptual framework not only for uniting the literatures but for utilizing the strengths of each. His earlier work focused on the development and validation of the only scale in the literature to measure memory functions, that is, the eight factor Reminiscence Functions

Scale (RFS; Webster, 1993). In his contribution to this issue, he employs theoretical work on the three broad functions from the AM literature to suggest analyses that organize the eight RFS factors into a conceptually meaningful circumplex model. The model is composed of a self-social dimension and a proactive/growth-reactive/loss dimension. The model is newly developed and its acceptance clearly awaits further statistical testing. Even at this point however, it provides, a useful heuristic for viewing specific, empirically based functions of reminiscence, such as problem-solving, and teaching and informing others, within the broader theoretical framework of major adaptive functions of autobiographical remembering (self, social and directive functions).

His circumplex model also highlights how different traditions, even within one discipline (i.e., psychology) can sometimes provide such complementary convergence but also can arrive at quite different conclusions. For example, in the AM literature the notion of a directive function (using the past to plan for the future, solve problems in the present) has been repeatedly suggested, but the idea of the individual being directive in response to a negative context (e.g., being reactive) versus in order to move toward desired goals (i.e., being proactive or growth-oriented) has not been given special attention.

The reminiscence literature has its early roots in psychodynamic (e.g., Butler, 1963) and other therapeutic literature (Birren & Deutchman, 1991), especially in relation to older adults supposed preponderance to reminisce. Issues of dealing with loss and striving for optimal human development are central themes. It is unsurprising, given these roots, that the reminiscence

literature, particularly Webster's work, calls our attention to the necessity of including such reactive functions as boredom reduction, and revival of bitter memories, in our consideration of the functions of remembering the personal past (see also Pillemer, 1992, for a psychodynamic function). This may require examination of function that is not related only to immediate positive outcomes (e.g., eliciting empathy from a listener, developing intimacy in a given encounter) but to long term adaptivity such as working through the loss of a loved one, which may require repeated processing of negative memories (e.g., Janoff-Bulman & Thomas, 1989; Suedfeld & Pennebaker, 1997). The task Webster presents us is to incorporate reactive (as well as proactive) uses of memory into the broader framework of how memory serves adaptive functions in everyday life. His own analysis sets us well on the way to doing that, while challenging AM researchers to broaden their scope both in the literature we read, and possibly in the way that we define adaptive function.

Spotlights and High Beams: Future Directions and Conclusion

I began with the metaphor of using this special issue to focus a spotlight on the functional approach to studying AM. When we turn on the high beams what do we see down the road: what issues and concerns have been raised by this collection of papers? I outline a few of these below:

(1) Function is a concept that is based on individual needs being determined by contextual press. Nelson argues that the uses to which memory is put, particularly the extent to which the individual memory system must serve certain functions as opposed to relying on larger cultural memory narratives

(myths and norms) to guide behavior, depends on the cultural and historical context of a given society. This offers the possibility for research that addresses cross-cultural comparisons of how and what functions are served by AM. At the same time it begs the theoretical question: is one, or more, function of AM universal (e.g., guiding future behavior; see Pillemer, this volume)?

(2) Even within a single culture, such as Western industrialized societies, individual level and contextual variables still matter. The basic issue, as related to the question above, is whether some functions of AM are innate, and others are learned. Of course the more sophisticated views of nature and nurture do not concern one or the other, but issues of co-construction (Li, 2002). In this case, the call is for further research (such as that by Pasupathi, and Fivush et al.) that demonstrates individual difference variations (e.g., gender, age, personality) in the use of AM to serve self, social, and directive functions.

(3) Beyond individual differences, continued focus on social contextual variables will be crucial to understanding moderating influences on how memory serves its functions. These include such things as the length and quality of the relationship in which memory sharing occurs, and the interaction between the listener and speaker. The lifespan developmental phase of the individual, or individuals in an interaction, may also guide the ways memory is used and the uses it is put to (see Alea & Bluck, this volume). Of course, social contextual variables are of primary concern in the cases in which memory sharing occurs. Another central question to be investigated is how private remembering differs

from memory sharing in serving centrally important functions such as, for example, self continuity.

(4) The mechanisms (i.e., emotion regulation) by which functions are served also offers a ground for continued research. In addition to examining the role of emotion in how AM functions, this could include the role of memory characteristics (e.g., perceived temporal distance; Wilson & Ross, this volume), or phenomenology (e.g., first versus third person perspective, vividness, level of detail).

(5) I have also alluded to the issue of how many functions of AM there are: is three the magic number? Of course determining a number is in some ways unimportant. What is important is to continue to test hypotheses that build areas of support, or fail to support, the existing theoretical functions: self, social, and directive. Thinking about the number of functions does, however, push us to ask some conceptual questions that might guide future research. What is the overlap in how memories serve certain functions in particular situations? Do some memories provoke conflict by serving a certain function while challenging another? For example, there may be limits to how self-enhancing one's memory can be before it becomes incredible, and thereby seen as ingenuous, in social situations. Self-enhancement could thereby defeat intimacy development.

(6) Finally, as we talk of something having a function being a 'match' between the individual and his or her environment, we might also want to put more emphasis on that environment. One way to do that is suggested by Webster's contribution. That is, he talks about the functional use of reminiscence

as a type of movement toward growth and development, and also as a reactive stance toward loss or negative circumstance. I think this work suggests that researchers investigate the situations, or triggers, in the environment that prompt an individual (whether consciously or not) to call memory, instead of or as well as other resources, to their aid.

Conclusion

The body of work presented in this special issue, as well as other research by these and many additional investigators demonstrates the utility of taking a functional approach. The findings presented here lend support to continued investigation of self, social, and directive functions of AM and offer a variety of methodologies for doing such work in both laboratory and natural settings. The theoretical work presented in the issue offers us the opportunity to keep our empirical research on AM grounded not only in data but in the context of the individual (e.g., socio-emotional context), and sometimes the cultural-historical, context. In addition, looking across these papers offers us a glimpse of the direction in which this literature is headed. I, for one, am looking forward to traversing the road ahead.

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