Reminiscence as autobiographical memory: a catalyst for reminiscence theory development

SUSAN BLUCK* and LINDA J. LEVINE*

ABSTRACT
Research on the psychological outcomes of reminiscence techniques has led to equivocal findings. The goal of this paper is to advance current theory guiding research on reminiscence by examining the implications of viewing reminiscence as a type of autobiographical memory. Butler's classic paper on reminiscence as 'life review' (1963) is examined, and revisions to this approach are proposed based on research and theory concerning autobiographical memory. Specifically, the process of reminiscence is delineated through a discussion of the partially reconstructive nature of autobiographical memory and the relation of memory to the self. These developments are then used to predict the types of psychological outcomes that can be expected to result from reminiscence, and the types of reminiscence techniques that can be expected to lead to the distinct outcomes of self-acceptance and self-change. Linking the literatures on reminiscence techniques and autobiographical memory also provides a catalyst for future theoretical and empirical work.

KEY WORDS – Reminiscence, autobiographical memory, theory, review.

In keeping with the growth of gerontological literature generally, the number of published studies on reminiscence has grown rapidly over the last twenty-five years. Haight (1991) documents the number of articles on reminiscence published in American journals over the last three decades as three in the 1960s, twenty in the 1970s, and seventy-one in the 1980s. This increased interest in reminiscence is not just a reflection of the general surge of interest in gerontology. The claims of psychologists concerning the outcomes of reminiscence have changed dramatically. Early research approached reminiscence as a sign of cognitive deterioration (Buhler 1935). Reminiscence and reminiscence techniques are now embraced as potential tools for addressing many late-life ills; from alleviating depression (Magee 1988) to encouraging the development of integrity (Havighurst and Glaser 1972).

Studies of reminiscence and of reminiscence techniques vary widely.

* Department of Psychology and Social Behavior, University of California.
They document a variety of creative methods for stimulating reminiscence, including the use of sensitizing questions (Birren and Deutchman 1991; Haight et al. 1995), historical materials (Hughston and Merriam 1982) and music (McCloskey 1990). The methods used in reminiscence studies include case reports and empirical studies reporting on both individuals and groups. Similarly, the outcomes measured in studies of reminiscence vary considerably, including acceptance of death (Georgemiller and Maloney 1984), cognitive functioning (Hughston and Merriam 1982), depression (Magee 1988), ego integrity (Havighurst and Glaser 1972), intergenerational connectedness (Greene 1982), meaning in life (Birren and Hedlund 1987), self-esteem (Ebersole 1978; Haight et al. 1995) and spiritual well-being (Hately 1985).

Given this diversity, it is not surprising that research evaluating the beneficial outcomes of reminiscence has led to equivocal findings. For example, some researchers (for example, Perrotta and Meacham 1982) find that reminiscing has no effect on depression while others report beneficial effects using the same outcome variable (Lappe 1987). Indeed, the literature does not clearly support the relation of reminiscence to any outcome.* Critical reviews of this literature point out that the field lacks a standard methodology for evaluating reminiscence techniques as well as an accepted definition of reminiscence. Most reviewers also agree that there is a lack of cohesion between reminiscence theory and both research and practice. One reason may be that there has been very little theoretical work on reminiscence.

The bridge between theory and most current research and practice in this area has been the concepts of life review and reminiscence as proposed by Butler (1963). He did not develop an actual theory but outlined some critical points concerning the prevalence and process of life review and, thus, reminiscence. His work stimulated a more positive view of reminiscence which encouraged further research and the development of reminiscence techniques. Although most researchers cite Butler (1963) as providing the underpinnings for reminiscence work,³ studies of the techniques are rarely closely guided by his thinking. The current lack of connection between research and theory may be due to the fact that Butler’s view of reminiscence stemmed from a psychodynamic perspective that is currently less popular, and that is not easily amenable to empirical testing (Romaniuk 1981; Thornton and Brothie 1987).

Unlike Butler’s account, recent work on autobiographical memory has strong empirical foundations and focuses on the processes involved
in the storage and retrieval of memories. The theoretical ideas that are emerging from this literature resemble those presented by Butler (1963) in that they focus on the search for meaning and the integration of the self as goals of the organism (Brewer 1986; Conway 1992, 1996; Markus and Nurius 1986). That Butler’s intervention-oriented, psychodynamic approach and the empirically-based literature on autobiographical memory have evolved such similar conceptualizations provides an indication of the convergent validity of this view of reminiscence. Delineating the relation between psychological processes and outcomes is crucial however, if research is to inform practice (Goldfriend and Wolfe 1996). A more detailed understanding of the process of reminiscence (i.e., the mental events that occur when an individual reminisces) is needed in order to identify potential outcomes that can be linked empirically to reminiscence (i.e., what is expected to change as a result of this process). This paper is thus an attempt to begin dialogue and theory-building by delineating our view of the relation of reminiscence to autobiographical memory and the self. It is expected that a ‘renovation’, in which some of Butler’s original framework is kept and additions are made where necessary, will yield the soundest theory for facilitating future research and practice.

After reviewing Butler’s ideas concerning the process of reminiscence and life review, findings from the autobiographical memory literature will be presented and integrated with Butler’s conceptions. Specifically, research on autobiographical memory demonstrates that memory for personal experience is not a direct and unalterable copy of past experience, but rather is partially ‘reconstructed’ (Barclay 1986; Levine 1997; Neisser 1982a). An individual’s ‘self-schema’ and his or her current memories guide this process of reconstructing memories in a dynamic fashion: the self-schema guides and constrains the reconstruction of memories, and autobiographical memories in turn play a central role in defining the self (Greenwald 1980; Markus 1980). An integration of these findings with reminiscence theory allows one to predict the types of outcome that might be expected to result from reminiscence, and the types of reminiscence technique that might be expected to lead to the two distinct outcomes of self-acceptance versus self-change.

In summary, current researchers studying potential psychological outcomes of reminiscing base their work very loosely on Butler’s conception of life review. This literature has shown equivocal evidence for the beneficial outcomes of reminiscence. The current paper examines reminiscence as a type of autobiographical memory in order to: (a) elucidate the process of reminiscence and thereby to more
soundly predict outcomes (Bluck 1993, 1995; Webster and Cappeliez 1993) and (b) stimulate further theoretical work on reminiscence.

**Definitional issues**

The term ‘life review’ is defined by Butler as: ‘a naturally occurring, universal mental process characterized by the progressive return to consciousness of past experiences, and, particularly, the resurgence of unresolved conflicts’ (1963: 66). Reminiscence has no standard definition in the literature. After examining other definitions (Ballard 1913; Brewer 1986; Butler 1963; Coleman 1986; Merriam 1980; Wong and Watt 1991) and taxonomies of reminiscence (LoGerfo 1980; Watt and Wong 1991), we have constructed the following definition which, despite its limitations, has the advantages of specificity and completeness (Bluck 1994; for a discussion of the problems involved in defining reminiscence, see Fitzgerald 1996).

Reminiscence is the volitional or nonvolitional act or process of recollecting memories of one’s self in the past. It may involve the recall of particular or generic episodes that may or may not have been previously forgotten, and that are accompanied by the sense that the remembered episodes are veridical accounts of the original experiences. This recollection from autobiographical memory may be private or shared with others.

Based on this definition, life review is a particularly structured form of reminiscence. Life review might be thought of as ‘integrative reminiscence’ (Watt and Wong 1991) in which people use past experience to resolve current conflicts and to lend meaning and coherence to current experience. Just as life review is a subset of reminiscence, reminiscence is a subset of autobiographical memory. ‘Autobiographical memory’ also lacks a standard definition among those who study it (for definitions, see Brewer 1996; Nelson 1993). Our view is that while autobiographical memory is a system that encodes, stores and guides retrieval of all episodic information related to our personal experiences, reminiscence is one way in which we access this information for our use. That is, reminiscence is the act or process of recalling particular or generic episodes.

**Examining process**

In his seminal work, Butler (1963) argued that reminiscence was mistakenly being viewed as a symptom of psychological dysfunction because data had been collected primarily from clinical samples. According to Butler, the life review encompasses both unbidden and volitional reminiscing that occurs largely as a result of the loosening of
defence mechanisms. His explicit hypothesis was that life review
was prompted by the psychological imminence of death, making
it especially common in old age. He pointed out, however, that
individuals of any age who are faced with death will engage in
reminiscence, as may those faced with psychological isolation or
loneliness, which Butler considered a type of death. Butler also noted
that people of all ages may question their identity and use their past as
a source of guidance from time to time.

The process of the life review, according to Butler, is to make
unconscious material conscious through reminiscence so that it can be
integrated into the current conscious life story. This return to
consciousness of past events may be guided or occur spontaneously. Life
review may begin with memories that are fleeting thoughts, images, or
dreams of the past, but gradually defence mechanisms loosen to allow
an unfolding (not necessarily an orderly one) of life’s events. Unresolved
conflicts must be reintegrated into the life story to provide a more
meaningful picture of life, and effect a reorganization of personality.

Butler’s ideas concerning life review provide an important starting-
point for the current view of reminiscence as beneficial and possibly
necessary to mental health. Two important issues arise, however, when
we view reminiscence as a form of autobiographical memory. These are
the veridicality of memory and the relation of memories to the self.
Taking a stand on memory veridicality is crucial to any theory of
reminiscence, yet the issue of veridicality has rarely been considered
within the reminiscence literature. These theoretical concerns are also
important for the implementation of reminiscence techniques. Recent
theory and research on autobiographical memory suggest that a
partially reconstructive view of reminiscence is warranted.

Memory veridicality

The study of autobiographical memory has only begun to receive
serious, enthusiastic attention in the last 15 years. One reason for its
avoidance by those in the mainstream of memory research was that the
accuracy of personal memories is difficult to verify, and the veridicality
of memory has been central to development of memory theory (Rubin
1986). Can a researcher be said to be studying memory if the episodes
being studied may not have occurred, or may have occurred quite
differently than remembered? For mainstream memory research this
was a problem. The small but growing field of autobiographical
memory has begun to tackle such issues and to conduct systematic
studies of the degree of veridicality and reconstruction that occur in
normal autobiographical memory. In this field, the possibility that memories may not be objectively true makes them more, rather than less, interesting (Robinson 1996). The way that memories have been embellished or distorted may be found to be a function of an individual's personality, cumulative life history, present life satisfaction, or life circumstances. Our ability to understand the way a single individual selects and reconstructs memories may prove to be diagnostic of the individual's central concerns, or of problematic characteristics of the individual.

Bartlett (1932) was among the first to discuss the possibility that memory was fundamentally reconstructive. He argued that in order to cope with a vast and ever-changing array of stimuli, people encode and retrieve information according to schemata consisting of general impressions and attitudes. Although people may have actual memory traces or fragments, these traces are typically combined into more general structures. This not only allows the large amounts of information encountered daily to be summarized, but also permits the organisation of memories into a resource for current and future cognitions.

When initially proposed in the 1930s, Bartlett's highly constructivist view of memory was not popular. With the emergence of interest in autobiographical memory it is being reconsidered, though few advocate the degree of reconstruction suggested by Bartlett (but see Loftus, 1993). Indeed, the degree of reconstruction in memory is a controversial issue. Copy theories (e.g., Brown and Kulik 1977; Livingston 1967) and reconstructive theories (e.g., Barclay and De Cooke 1988; Loftus 1993) mark the ends of this continuum, and there are data to support both positions. For example, analyses of individuals' memories for surprising and consequential events have revealed evidence of people's ability to retain certain events with detailed clarity (e.g., Brown and Kulik 1977), as well as evidence of a tendency to 'fill in the gaps' as needed (e.g., Loftus 1979; Neisser 1982a; Neisser and Harsch 1992).

Brewer (1986) takes an intermediate position by arguing for a partially reconstructive view of memory. He suggests that our encoding is reasonably accurate (given the inherent inaccuracies of perception and selective attention), but that memories are reworked the more we retrieve them, and are also under the influence of strong schema-based processes. Other researchers (e.g., Conway and Rubin 1993; Conway 1996; Schacter 1996) have argued that the self is involved in the dynamic reconstruction that occurs at encoding and retrieval.

Some evidence for the view of memory as partially reconstructive comes from Nigro and Neisser (1983) who examined the conditions under which people remember their own past experiences from both
first-person and third-person perspectives. High school and college students were asked to recall and date memories characterized by emotionality or self-awareness. Students generally recalled recent events from a first-person perspective. When recalling personal experiences from long ago, however, the visual image that students retrieved was more likely to be from a third-person perspective, as if they were watching, rather than participating in, the event that was being recalled. This suggests that, over time, and possibly with repeated retrieval, memories are reworked from the original in which the individual was an actor, to a memory in which the individual is an observer.

Neisser's findings (1982b) also support a partially reconstructive, though more revisionist, view of autobiographical memory. He conducted a case study of John Dean's memory for his meetings with former United States President, Richard Nixon, as reported in testimony during the 'Watergate' hearings. Following the hearings, taped recordings of the meetings were discovered, enabling Neisser to compare Dean's recollections with the actual conversations that had taken place. The results suggested that individuals may add or delete details, 'cut and paste' several memories to create a single memory, and distort the gist of the memory, but that important themes of events tend to be remembered veridically.

Also supporting a partially reconstructive view of memory is research demonstrating people's tendency to falsely identify memories as their own when presented with accounts that retain meanings similar to their original memories (Barclay 1986; Barclay and De Cooke 1988; but see McAuley 1988). For example, Barclay and Wellman (1986) had college students keep diaries of memorable events over a four-month period. These events were then used, along with 'foils' or false items that they had constructed, to test the students' ability to distinguish real from false autobiographical memories. Foils consisted of reported events in which either the students' original factual description or their evaluative reactions had been altered by the researcher, as well as some completely new events that had not occurred. Students judged 50% of altered foils and 23% of new foils to be actual personal events. Despite this, their confidence ratings of the accuracy of memories was consistently high across categories. A follow-up study conducted two and a half years later showed an increase in the likelihood of confusing actual events with semantically similar foils. The closer a foil was in meaning to the original event, the greater the likelihood that it would be accepted as having occurred. These findings suggest that personal memories become more schematized over time, increasing the likelihood that plausible events, that are compatible
with the self schema, will be erroneously accepted as real. Barclay (1996) argues that this type of schema-based reconstruction, which he calls "improvisation," in autobiographical memory is functional in maintaining a sense of personal coherence. He claims that one of the purposes of reconstruction is to allow the individual to adapt to the present by using memory to impart new meaning to old events, not just to preserve accurate accounts (see also Levine 1997).

The studies reviewed thus far support a partially reconstructive view of memory. The emotional and social significance of memories must also be considered in understanding the reconstructive memory process. Highly emotional events are more likely to be recalled than neutral events (e.g., Bohannon 1992; Brown and Kulik 1977), but such events may be both highly memorable and subject to confabulation (Heuer and Reisberg 1992). Easterbrook (1959) hypothesized that high arousal (emotionality) causes a narrowing of attention to the central aspects of events. These central aspects (but not peripheral details) may also receive greater elaboration in memory (Christianson and Safer 1996; Levine and Burgess 1997). If this is the case, then when an event is later recalled, a person may "flesh out" the vague or missing detail information in accordance with his or her own values and biases (Loftus and Kaufman 1992).

The social and psychological functions served by emotional memories may also facilitate their reconstruction. Loftus and Kaufman (1992) suggest that people benefit in a variety of ways from being able to recount exciting stories about themselves. To this end, they may build on actual memories, filling in details in order to appear more credible, and in order to present themselves in a positive light. These authors suggest that through sharing intimate stories with others we build closer relationships, and that retelling and reworking memories may also serve to lessen psychological tension. Hirst and Manier (1996) have also studied the ways in which social forces affect how memories are reconstructed in their work on "conversational remembering". They emphasize that memory does not only occur in one's head but as a result of the social dynamics of the situation in which events are being recalled. Thus, how we remember events may depend partly on how we or others talked about those events in past conversations. Similarly, in his Personal Construct Theory, Kelly (1955) suggested that stories enable people to establish meaning through linking together the events of the past, using personal constructs. Memories may be seen as a basic building block of the 'stories' that individuals, groups and even societies, come to construct and reconstruct about themselves (Viney 1993).
In sum, research on reconstructive processes in autobiographical memory indicates that several factors may affect the extent to which our memories represent actual life events veridically; these include the passage of time, the amount of rehearsal, the need for consistency with the self-concept, the intensity of emotion or arousal at the time of the event, and the social dynamics of the context in which the memory is recalled. Moreover, people are able to rework memories and still feel confident about the accuracy of those memories. These findings indicate that the memories retrieved in the process of reminiscing are subject to reconstruction and may not be objectively veridical. Research on the relation of memory to the self suggests goals that may guide the reconstruction of personal memories.

The role of the self in reconstructing memories

The claim that people's reminiscences are reconstructed does not preclude the possibility that people have encoded complete and accurate records of their past. Selective recall from the set of available autobiographical memories may also be seen as a type of reconstruction of a person's history. For example, individuals are highly likely to remember recent events, but are also unusually good at recalling events from the period when they were adolescents to about twenty-five years of age (possibly due to the importance of these years in the development of personal identity) (Rubin et al. 1986; Fitzgerald 1988, 1996). People are more likely to remember positive than negative events (Thompson 1997; Wagenaar 1986) and events that are somehow unique (as opposed to frequent) or emotional (Brewer 1996). Despite these uniformities in memory selection, it is not known what the universal set of any individual's autobiographical memories consists of, or why at any given moment a certain subset of those memories becomes subject to conscious awareness (for a discussion of this issue, see Salaman 1970; Spence 1988). Thus, at least two levels exist on which individuals may be 'editing' their life stories: the events they remember at any given time, and the veridicality with which they remember them. The reconstruction of past events, and selection of events from memory, may be partially a function of the organization of autobiographical memory. Several researchers have begun to identify factors that may structure autobiographical memory. Examples of such factors include chronology, life themes, repeated versus individual events, 'scripts', and moods (e.g., Barclay 1986; Brewer 1986; Conway 1996; Linton 1986; Neisser 1986). Common to these is an understanding that the self
may play an important organizational role in memory, determining the information that is attended to, how that information is encoded, and how it is recalled.

The conception of the self as a central processor of incoming information is evident in constructs such as the self-schema (Barclay 1986; Markus 1977), self theories (Epstein 1973) and self as cognitive prototype (Rogers et al. 1979). Barclay (1986) describes the self-schema as arising through schematization of both the significant and the routine personal episodes of life. Schematization is the process through which memories for events are transformed for easy storage into their most generic, while still useful, form. These serve to summarize similar or repeated personal events. Once created, the self-schema helps individuals to interpret events as they occur and helps to supplement details of remembered experience. It thus acts as a filter for memory-encoding and guides memory reconstruction. Information that is most likely to be encoded and recalled is that which matches the expectations generated by the self-schema. Moderate deviations of incoming information from the current self-schema tend to be ignored or re-interpreted. The story that an individual comes to tell of any specific personal event, then, would typically be consistent with the self-schema, but not necessarily objectively accurate.

A view of autobiographical memory as influenced by the self or self-schema challenges us to define the self. Brewer, Conway, Rubin and Greenwald have made relevant contributions to this view, and to an understanding of the relationship between the self and autobiographical memory. Brewer (1986, 1996) defines autobiographical memory as memory for four types of information relating to the self: personal (or recollective) memories (e.g., I remember the time I found that beautiful orange shell at the beach); generic personal memories (e.g., I remember the summers we spent at the cabin); autobiographical facts (e.g., I remember that I grew up in Vancouver, Canada); and the self-schema or cognitive structure that contains knowledge of the self. The self-schema, which Brewer describes as one of the richer knowledge structures in long-term memory, contains unconscious material that interacts with incoming information. Once developed, it is thought to change slowly, providing the sense of consistency of the self over time. Ego, which Brewer differentiates from the self-schema, is described as the conscious experiencing entity that is the focus of phenomenological experience. Finally, the self is described as a complex mental structure consisting of the self-schema, the ego, and autobiographical knowledge stored in long-term memory. Brewer's framework provides a structure for conceptualizing the role of the self.
in reconstructive processes in autobiographical memory. The ego’s experience of life is filtered through the self-schema as material enters, and is retrieved from, long-term memory.

Conway’s view (Conway 1996; Conway and Rubin 1993) differs from Brewer’s with regard to the structure and process of autobiographical memory but still emphasizes the interrelations between memory and the self. He and his colleagues argue that life’s events are encoded selectively depending on the current themes and goals of the self. This information does not reside as a specific memory but is part of a larger general purpose knowledge base. At retrieval, we construct a transitory memory as demanded by the current self or environmental context, by searching through general abstract lifetime periods (e.g., when I lived at the beach house), general events (e.g., times that I have had a glass of wine with a friend), and event-specific knowledge such as sensory or affective information, vivid images, or very specific facts (e.g., I was wearing the blue shirt with the big white daisies on it). Afterwards the memory dissipates. This view allows for autobiographical memory being unstable, because every time a particular memory is recalled it is constructed according to the current self and context. It also allows for autobiographical memory to be constant because each memory is always embedded within the same hierarchical retrieval structure (i.e., lifetime period, general event, event-specific knowledge). The extent of change or constancy found in repeated recall of the same event can be regarded as an index of the discrepancies between the current and past self’s themes and goals.

Brewer’s and Conway’s views differ but both present a picture, not only of the structure, but of the processes involved in the relation of the self to autobiographical memory. While Brewer’s work presents a larger picture of the system by delineating various types of autobiographical memory and by differentiating the self from self-schema and ego, Conway presents a much more detailed view of the process by which the self affects the construction and reconstruction of memory at encoding and retrieval. Both agree that the self and memory work in tandem to allow us the ability to use our own past as a present resource.

If reconstruction of memories is guided by the self (Barclay 1986; Brewer 1996; Conway 1996; Markus 1980), what goals guide this process? It is here that Greenwald’s (1980) conception of the self as totalitarian may be informative: he defines the self as an organization of knowledge, similar to other organizations such as totalitarian states and scientific paradigms, in which biases exist that serve to maintain organization (in this case, a unified sense of self) and encourage behavioral perseverance toward goals. Based upon numerous empirical
studies of memory, Greenwald posits what he has termed an 'egocentric' bias toward attending to and remembering information related to self; a 'benefectance' bias, that is a tendency toward perceiving responsibility for desired, but not undesired, outcomes; and a 'conservatism' bias toward resisting cognitive change.

Research by Brenner (1973) exemplifies the bias that Greenwald (1980) refers to as 'egocentricity'. In a study in which participants read words aloud in a group and then were asked to recall as many words as possible, subjects were best able to recall words that they themselves had read, followed by words that their dating partner had read. They performed most poorly at recalling words that had been read by strangers. An example of the ‘benefectance’ bias was demonstrated in a study in which subjects performed a skilled tracking task and received ‘team feedback’ believing that they were a member of a team of two (Johnston 1967). Subjects took most of the credit for good scores and assigned most of the blame to their partners for below average scores. Finally, Greenwald’s ‘cognitive conservatism’, the predisposition to preserve that which is already established, is demonstrated in a study of autobiographical memory (Barclay and Subramanian 1987). Individuals who had been classified as viewing themselves as either dependent or independent, kept diaries of personal events for several weeks. They were later asked to recall as many events as possible from their diaries. In free recall, participants tended to remember events that were consistent with their view of self as dependent or independent.

According to Greenwald then, the goal of the self, with its biases as tools, is to revise or fabricate personal history through selective attention and memory reconstruction, in order to facilitate its own organization and existence. As a consequence of these biases, the individual must sometimes function with outdated or inaccurate information. While Greenwald’s view of the self is adopted here, it may be that future development of reminiscence theory will necessitate a more complex view of self that includes future ‘possible selves’ (Markus and Nurius 1986), the self as ‘dialogical’ (Hermans et al. 1992) and cross-cultural differences in the nature of self (Markus and Kitayama 1991).

Renovating the bridge between theory and practice

As expressed earlier, our aim is to renovate the seminal work of Butler, that has been the bridge to reminiscence research and practice, using the materials found in the literature on autobiographical
memory. Many of Butler's ideas remain. His view of reminiscence as occurring across the lifespan, as related to identity development and maintenance, and as a source of guidance for future plans and behaviour, are all in keeping with theory and research on autobiographical memory. The notion that reminiscence (as part of life review) may occur spontaneously or be guided, and that it may involve a gradual unfolding of remembered images of the past, is also consistent with this literature. The weakness in Butler's work concerns the process of reminiscence. Butler claimed that self-awareness, even if painful, was necessary for mental health. Through reminiscing, the unconscious could be made conscious and personality reorganization could occur. Butler saw this reorganization as producing a wide array of potential outcomes. He believed individuals could develop candour, serenity and wisdom and also predicted that life review could result in mild nostalgia, or even despair. It is in this area of predicting outcomes that the reviewed work on autobiographical memory offers a conceptual development. Butler did not delineate the process through which reminiscence occurs and, hence, was not able to make specific predictions concerning the expected outcomes of reminiscing. The empirical literature on reminiscence and reminiscence techniques has continued to suffer from this shortcoming.

The current review of theory and research on autobiographical memory highlights the psychological processes (particularly reconstructive processes) involved in reminiscence. We have introduced a model of memory as partially reconstructive, and a view of the self as central to the organization of autobiographical memory. Autobiographical memory and self are related symbiotically: our personal memories and the entire autobiographical memory system are integral parts of the self (Brewer 1986) while, simultaneously, the self guides what is attended to and remembered through cognitive biases and reconstruction (Greenwald 1980; Markus 1980). This implies that 'cognitive editing' occurs throughout life, and that the self we end up with may have been formed through our own self-protective cognitive biases. Reminiscence thus can be regarded as a cognitive function that, at any age (Coleman 1991; Webster 1993), is both guided by the self and is important in the development, maintenance and potential change of the self.

This dynamic link between autobiographical memory and the self is only apparent when memory is conceptualized as at least partially reconstructive. If one accepts a view of memory as a complete and accurate copy of the past, there is no mechanism to explain how remembering past events could affect other parts of the self system
thereby resulting in psychological outcomes. As such, there is no reason to believe that any particular outcome (e.g., serenity) is more likely to result from reminiscing than any other outcome (e.g., despair). On the other hand, if we accept a radically reconstructive view of autobiographical memory, it becomes difficult to understand how the self maintains any constancy over time. Accepting a partially reconstructive view results in regarding the self as largely constant over time but subject to 'revision' through selectively accessing and modifying memories.

**Predicting outcomes**

Before proceeding to predict potential outcomes of reminiscence, a few clarifications are in order. The use of the word 'therapy' to refer to reminiscence techniques has been intentionally avoided. Reminiscence techniques may have therapeutic or healing qualities but are not the same, either in terms of process or outcomes, as the various methods of psychotherapy (Birren and Deutchman 1992). Moreover, the participants in reminiscence groups do not come usually from clinical populations. The majority are older adult volunteers from community samples or residential facilities who are interested in what might popularly be called 'self-growth'. Self-growth and self-change are also the goals of many psychotherapeutic techniques. The role of memory in psychotherapy, and the efficacy of psychotherapy, however, are large and complicated issues of which measuring outcomes is just one element (Mahrer 1985; Ogles et al. 1996; VandenBos 1996). While some of the ideas expressed in this paper may be of interest to psychotherapists, the focus of the current work is to identify how self-acceptance and self-change may occur in non-clinical samples through reminiscence techniques.

Having broadened Butler's approach to reminiscence through a discussion of the veridicality of autobiographical memories and their relation to the self, the prediction of outcomes using this new theoretical perspective is possible. Because memory and the self are symbiotically related and are both part of the same organic system, it makes sense that changes in one part of this system should affect change in other parts. Therefore, the psychological outcomes most subject to change through reminiscing are self-related outcomes (e.g., self-esteem, the content and complexity of the self-concept). Other outcomes of interest (e.g., meaning in life, preparation for death) may also be affected, but
they should be mediated by more direct effects on the self. The set of memories available for a person to recall, reflects the life a person has lived and is of course unique to each individual. Across individuals, however, the specific outcomes of reminiscence for the self should depend on the type of memories that are recalled, and the type of memories recalled may depend on the processes used to elicit recall (i.e., the specific reminiscence technique used). While accessing some memories may lead to greater self-acceptance, accessing other memories may actually stimulate self-change.

In designing reminiscence techniques, researchers have followed Butler’s original conception of reminiscence as part of life review, which suggests that the goal of these techniques is to encourage personality reorganization or self-change. Some of the techniques currently in use, however, may be better suited to fostering self-acceptance. Self-acceptance is largely evaluative, having to do with how individuals view or feel about themselves. People can change how they feel about themselves and become more accepting without changing the self. Self-change refers, not to how one evaluates the self, but to changes in the actual composition or structure of the self.

Currently, it is not at all clear how facilitators choose themes or methods for stimulating reminiscence, and a rationale is seldom given in published studies (Burnside 1995). The following discussion is presented in order to encourage individuals who use reminiscence techniques to take into account the processes through which different outcomes might be affected when choosing themes or methods for eliciting reminiscence. It has been argued here that autobiographical memory plays a central role in the development and maintenance of the self across time. In terms of memory processes, facilitating self-acceptance may require quite different conditions or techniques than facilitating self-change.

Self-acceptance through telling the life story

Self-acceptance refers to how an individual views himself or herself in entirety. To be self-accepting one must be able to accept not only the “good” aspects of self and memories of positive experiences, but also those aspects of self or experiences that are less positive. Individuals who already have a moderate level of self-acceptance may reaffirm this sense, or increase their level of self-acceptance, through the use of reminiscence techniques. If the primary goal of a reminiscence technique is to affirm, reinforce or increase self-acceptance, it may be
adequate for individuals to reminisce and tell their life story without much probing. In this way, the story told represents a description of the current self and the memories are ones that have been practised or often repeated. That is, they are memories that are highly accessible because of the current organization of the self schema.

Memories retrieved with little probing may be veridical or reconstructed. Veridicality is less important than psychological comfort with the life story that is recalled. The role of the facilitator, or the group, is to encourage the telling of positive, self-bolstering memories and to validate the individual’s experience, thus allowing him or her to accept any memories that may bring discomfort. Through this process, individuals can reframe their life story in order to accept the good and bad as all part of life. The recalled elements of the life story remain the same, but the individual is encouraged to interpret them in a more resourceful manner. While the memories themselves stay the same, their meanings may change in light of the participants’ current perspective (Robinson 1996). One may expect this type of technique to be a pleasurable experience for participants who are basically satisfied with their life story. These types of supportive, positive social interactions seem likely to produce increased positive mood and tension reduction and result in a reaffirmation of, or increase in, self-esteem.

**Self-change through accessing non-central memories**

Most techniques described in the current literature involve reminiscence techniques that are not dynamic. They are not likely to stimulate memory of forgotten episodes or to challenge the ways in which memories have been reconstructed, nor are they likely to allow the resolution of unresolved negative events, thereby promoting personality reorganization, as Butler advocated (Butler 1963; Lewis and Butler 1974). It is unnecessary for all reminiscence techniques to take a dynamic approach, but if participants are seeking self-change then a more dynamic approach may be warranted. When the goal is self-change, the memories used to maintain the current self may not be the memories of primary interest. Instead, it may be necessary for the individual to access memories that are not central to the current self-schema in order to begin to broaden or redefine the view of self.

Review of the autobiographical memory literature demonstrates that our memories are not a videotape of our lives, but are subject to biases during encoding and retrieval. If recall is selective and memory is partially reconstructive, it would be theoretically possible for an
individual to have a different set of memories than the one that he or she currently embraces. As an extreme example, our sense of self might be quite different if our autobiographical memories had been remembered and reconstructed in such a way as to be drawn exclusively from the set of memories that the current self has forgotten. If one accepts this idea, the role of the facilitator may be to provide conditions in which the individual is able to access or reconstruct memories that are not central to the current self schema (i.e., not part of the standard script of self).

This may be a difficult task. The current self has been constructed, through selective attention and schema-based reconstruction, in order to maintain self-organization (Greenwald 1980). Yet this organization could be designed to ensure the survival, rather than the optimization, of the self. The self system may function much like other parts of the body: a bone that is left to set naturally will heal to allow future functioning, but not necessarily to maximize future functioning. Is it possible, then, through accessing non-central memories and becoming aware of how original memories have been reconstructed, to go back and 'reset the bone'? Though Butler (1963) spoke in the language of psychodynamics rather than memory research, he believed that one could 'reset the bone', and that old age was a particularly good time for this type of personality reorganization. He argued that the rolelessness of this life phase made it a time for the 'loosening of defenses'. It is no longer clear that late life offers a particular opportunity for self-change. Other life situations or potentially therapeutic techniques may create conditions for accessing non-central or long forgotten memories at any age.

If Greenwald's theory of the totalitarian self is correct, however, the windows of opportunity for self-change should be fairly infrequent. Even in the case of trauma or life transition, the function of reminiscing will be to reaffirm the current view of self. Under threat, the organization of the self-schema will be maintained while the traumatic or unexpected information is processed. Only if this is impossible will self-change occur (Greenwald 1980; Janoff-Bulman and Thomas 1989). Greenwald suggested that the maintenance of a coherent sense of self, even a negative self, may outweigh the potential advantages of change. On the other hand, he also noted that this tendency toward what he calls conservatism or resistance to cognitive change can interfere with adoption of new material or its integration with existing knowledge, and result in the self operating on the basis of out-of-date information. Butler may have been aware of the conservatism of the current self when he acknowledged that attempts at personality
reorganization through life review may sometimes end in anxiety. He held that individuals with flexible, resilient and self-aware personalities were most likely to benefit from reviewing their past through reminiscence. The goal of dynamic reminiscence techniques may be to ameliorate this inherent tendency toward conservatism such that the overall organization of the self is maintained but revision of the self is made possible.

In cases where the individual is dissatisfied with life or is seeking self-growth, reminiscence techniques may offer an opportunity for self-change through a broadening of available memories with which to redefine the self. Individuals cannot necessarily write any new story of self; we cannot pretend that we lived a different life. The stories people can tell of their lives are limited, but there is not only one. If it is possible to access forgotten memories, or to become aware of distortions that have occurred, individuals may be able to create a self that is not formed to support a theory in which they have long been invested, but a self that best fits the data. Future research may discover when, or if, this type of self-change occurs spontaneously, and how it might be encouraged through reminiscence.

It is clear that this dynamic type of reminiscence technique, although psychologically much more complex, is potentially a more insight-provoking process than the type of technique that might facilitate self-acceptance. Potentially, researchers who have used music (McCloskey 1990) and antique objects (Wylie 1990) to stimulate reminiscence are heading in this direction. That is, using auditory, visual, olfactory, or tactile senses to stimulate memory, may be one way in which less frequently remembered material may be accessed. Lewis and Butler (1974) also describe several ways of stimulating reminiscence such as encouraging genealogical research, attending reunions, and trips to one's birthplace.

Until the function of autobiographical memory reconstruction is understood more fully, the use of dynamic techniques should be pursued cautiously. If the driving force behind the reconstruction of memories about the self is to protect and preserve the self (Greenwald 1980), or to maintain positive illusions (Taylor 1983) or unrealistic optimism (Weinstein 1980), there is a danger that a dynamic reminiscence technique will drive the individual to enlightened despair. Indeed, Erikson (1950) talked about the crisis of late life being the potential for integrity or despair, and Butler (1963) noted the potential for terror and suicide as well as wisdom and candour as outcomes of life review. Both the dangers (breakdown of potentially self-protective mechanisms) and the potential for positive self-change (broadening of
self-concept) must be considered in designing new dynamic reminiscence techniques that go beyond facilitating self-acceptance. By understanding the memory processes underlying reminiscence, it becomes clear that memory can be a powerful tool in self-change. Current reminiscence techniques, having been designed without this theoretical framework, have not taken full advantage of the potential of autobiographical memory for facilitating change.

The current analysis is not intended as an endpoint but as a catalyst for the development of reminiscence theory that will provide a sound basis for future research and practice. Other issues being examined through autobiographical memory research (e.g., the characteristics of memorable memories, the effects of mood, environmental cues, and specific search strategies on what is remembered at a given time) have implications that may be relevant in the design of reminiscence techniques (Webster and Cappeliez 1993). Outside of the autobiographical memory literature, work on ruminations following negative life events (Janoff-Bulman and Thomas 1989), conceptualization of the self (Hermans et al. 1992; Markus and Kitayama 1991), and the relation of affect to cognition (Eich 1995; Levine 1997; Levine and Bluck 1997; Levine and Burgess 1997) are all likely avenues for expanding our current understanding of reminiscence. Those studying autobiographical memory are already recognizing the need for researchers from various areas of psychology (e.g., cognitive, social, developmental, personality) to combine their perspectives and methods and to venture beyond disciplinary boundaries (Brewer 1996; Fitzgerald 1996). Linking reminiscence with autobiographical memory is seen as a first step in tying together several approaches that can help us to understand the significance of the tendency of human beings to contemplate their past.

NOTES

1 The term 'technique', as opposed to 'therapy', is used here in accordance with the thinking of Birren and Deutchman (1991). They wrote that their technique, Guided Autobiography,
...is not designed to be used as formal therapy since it is not actively directed toward the cure of amelioration of a disease or social or emotional problem.
...The term therapeutic is defined as 'having healing powers' (Webster's Third New World Dictionary, 1981). Many things are therapeutic without being therapy per se. They are distinguished from therapy in that they do not directly or actively pursue change in behavior or emotions, although positive changes may result (p. 3).

3 See, for example, Burnside (1990), Fitzgerald (1996), Hugthon and Merriam (1982), Viney, Benjamin and Preston (1989).

4 There is currently a great deal of controversy concerning the possibility that therapists might 'implant' memories of sexual abuse in their clients' minds (for reviews, see Lindsay and Read 1994; Loftus 1993). The type of technique described here, while it is not psychotherapy, would also need to incorporate safeguards against facilitators suggesting memories to participants.

Acknowledgements

This research was funded by a fellowship from the Social Sciences and Humanities Research Council of Canada to Susan Bluck. We are grateful to Karen Rook for her helpful comments on previous versions of the manuscript. We would also like to thank Martin Conway and two anonymous reviewers.

References


Bluck, S. 1993. Reminiscence: renovating the bridge between theory and therapy. Poster presented at the Western Psychological Association meeting, April, 1993, Phoenix, Arizona, USA.


Reminiscence as autobiographical memory


Accepted 3 October 1997

Address for correspondence:
Department of Psychology and Social Behavior, University of California, Irvine, 3340 Social Ecology II, Irvine, CA 92697-7085, USA, llevine@uci.edu