GIVING SIGHT AND VOICE
TO THE BLIND MUTES:
AN OVERVIEW OF THEORETICAL IDEAS IN
AUTOBIOGRAPHICAL MEMORY

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In metaphorical terms, some might characterize psychologists as “blind mutes trying to understand the elephant,” with each set of scholars (the blind mutes) understanding only a portion of the problem (the elephant) and unable to communicate their understanding to other scholars. Both individually and collectively, the articles in this special issue, which is devoted to theories of autobiographical memory, provide a powerful counterargument to this metaphor. This article highlights some of the important ideas that appear in each of the articles in this volume and notes how the study of these ideas has benefited from a broad approach to the study of autobiographical memory.

Critics often argue that one of psychology’s flaws is that it is too insular: Scholars in the various subfields of psychology are often characterized as paying little attention to the work of scholars in other subfields. An appropriate metaphor might be that of “blind mutes trying to understand the elephant,” with each set of scholars (the blind mutes) understanding only a portion of the problem (the elephant) and unable to communicate their understanding to other scholars.

In recent years, psychologists have been making concerted attempts to give sight and voice to the blind mutes by constructing theory and conducting research that cut across traditional area boundaries. Indeed, the existence of this very journal is evidence of those efforts. Social Cognition

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originated in response to the need for a publication outlet that was re-
ceptive to the research being done by social psychologists who thought
that adoption of theories and methods of cognitive psychology could
significantly aid in the understanding of social thought, social emotion,
and social interaction. Despite initial resistance from social psycholo-
gists who seemed to be afraid that paying attention to other areas might
cause social psychology to lose its “special” identity, the idea that one
needs to take cognition seriously in social psychological research—both
in terms of theorizing and in terms of the assessment of process and
structure—seems to have caught on.

The idea that researchers from different disciplines ought to share
their ideas, and even more radically, should collaborate with each other,
has become increasingly important to the progress of psychology. The
problem area that is the focus of this special issue, autobiographical
memory, is one example of the consequences of such efforts. Both indi-
vidually and collectively, the scholars who have contributed to this spe-
cial issue reflect the diversity that characterizes research into
autobiographical memory. Collectively, these scholars have published
articles that have appeared in the cognitive, social, developmental, per-
sonality, clinical, neuropsychological, and evolutionary psychology lit-
eratures. Consequently, one of the stimulating, but vexing, problems of
being a scholar in this area is the need to keep abreast of theory and re-
search that is published in these diverse literatures (thank goodness for
computerized literature searches). However, it is interesting to note that
this diversity does not only apply to between-author comparisons: This
diversity also characterizes the authors themselves. Individually, most
of these scholars have made substantial contributions to more than one
literature. As befits the diverse origins of the theoretical ideas character-
izing the field, approaching a problem with ideas drawn from multiple
perspectives appears to be the norm, rather than the exception, to these
theorists’ approaches to the study of autobiographical memory.

The first of the articles in this special issue, by Klein, German,
Cosmides, and Gabriel, powerfully illustrates this diversity. Their con-
tribution grapples with the question of the nature of an autobiographical
memory, essentially asking the question: “What makes a memory auto-
biographical?” Their discussion of the nature of autobiographical mem-
ories draws heavily on: (1) concepts of the self developed in personality,
social, and developmental psychology, and (2) concepts of memory de-
developed largely in cognitive and developmental psychology. Klein et al.
postulate that the capacity to think about the self involves the formation
of meta-representations (loosely, thoughts about thoughts) and suggest
that autobiographical memories are such meta-representations. They
then describe four properties: self-reflection, self-agency, self-owner-
ship and temporality, which are postulated to be crucial characteristics of these autobiographical memory meta-representations.

In discussing data relevant to this thesis, Klein et al. discuss how various syndromes defined by clinical psychologists (e.g., autism, schizophrenia) might involve deficits in the memory system or in the meta-representation system, with specific meta-representation deficits in one or more of the four properties that they describe. Klein et al. also relate these deficits to neuropsychology, describing how various brain areas might be involved in mental representations or mental processes that themselves are related to the four key components of the autobiographical memory meta-representations. For example, they describe how selective damage to brain areas has a specific impact on the nature of memories reported (or not reported) and how those memories are described.

As a consequence of their analysis, Klein et al. provide a taxonomy of the ways in which autobiographical memory can be disrupted. These include: (1) a disruption of the ability to remember events, (2) an inability to determine whether an event is fictional or real, (3) an inability to weave events together into a coherent personal history, (4) an inability to place events in a correct temporal order, and (5) an inability to perceive events as caused by the self (and more). Importantly, each element of this taxonomy can be related back to deficits in either: (1) memory, (2) the ability to form meta-representations, or (3) an inability to place one of the four types of information that are necessary for an item to be an autobiographical memory into the meta-representations that are formed.

The multi-disciplinary nature of scholarship in autobiographical memory is also obvious in the article by Conway, Singer, and Tagini. This study addresses a conundrum in autobiographical memory: How can a system of autobiographical memory that is guided by a self-system that introduces bias and distortion into autobiographical memory (presumably in the service of self-coherence) also yield memories that are reasonable facsimiles of the real world—memories that allow functional responses to real threats and opportunities (a property that they term “adaptive correspondence”)?

To solve this problem, Conway et al. expand the Self-Memory System (SMS) model developed over the last 15 years by Conway and various collaborators. The old SMS model saw the self as providing a set of goals that served to regulate access to, and use of, the pool of information that comprises memory. As such, the SMS postulated that the self played an active role in the selection of, and construction of, autobiographical memories. Moreover, the memories themselves were thought to reflect events that were relevant to an individual’s goals—it is a primary reason
that these events, and not others (the goal-irrelevant events) are retained in memory.

The new instantiation of the model takes a more sophisticated view of the self. Influenced by research suggesting that the self has multiple components, including long-term and short-term components (as well as imaginary components, such as the desired self), the new SMS is designed to account for both short-term malleability in the influence of the self on autobiographical memory, as well as long-term consistency. Conway et al. support this conception by reviewing laboratory and field research that documents the effects that different versions of the self have on autobiographical memory. In the process, they discuss self-defining memories and the qualities that seem to make those memories different from events that might be interesting, but non-self-defining. Conway et al. also discuss evidence gleaned from interviews. This evidence suggests that early attachment patterns influence autobiographical recall in ways that are consistent with the impact of those attachment patterns on the long-term self. They also discuss clinical case studies documenting different self-relevant memory deficits and how those memory deficits were overcome in therapy in ways that are consistent with the new SMS model. Conway et al. bolster their case by reference to neuropsychological evidence, especially the extent to which brain areas that control goal processing are involved in memory for self-relevant events. The breadth of evidence, gleaned from many different disciplines of psychology, with which Conway and his collaborators wrestle and attempt to fit into their model, is impressive.

The range of research cited in the article by Levine and Pizarro also serves to debunk the supposed insularity of psychologists. This article addresses research that explores how emotions might affect autobiographical memory. Levine and Pizarro begin by noting that there have been contradictory ideas about the relation between the strength of an emotion and memory, with some (e.g., cognitive psychologists) saying that strong emotion increases memory and some (e.g., clinical psychologists) saying that it decreases memory. After a brief review, Levine and Pizarro conclude that, in general, the results of research suggest that strong emotions strengthen memory. They also point to neuropsychological studies that highlight the probable role of the amygdala in this enhanced memory effect.

However, Levine and Pizarro also make the point that past research into this issue has often equated emotion and arousal level: That is, the primary effect of emotion on memory was implicitly or explicitly perceived to be due to the effects of arousal. Levine and Pizarro argue that this view of emotion is overly simplistic. They note that conceptions of emotions can be quite complex and differentiated. For example, one can
cross the dimensions of activation and valence to determine various qualities of different emotions (e.g., active-positive, active-negative, passive-positive, and passive-negative; specific examples might be ecstatic, calm, angry, and depressed).

Levine and Pizarro then make a sensible rhetorical point: Given that these complex conceptions of emotion are not exactly new, why have autobiographical memory researchers not used these conceptions to guide their research and theorizing? They answer this question by describing why researchers should do so. In particular, they argue that different emotions are accompanied by different goal states and different information processing tendencies, which should translate into different patterns of autobiographical memory effects. For example, they refer to evidence suggesting that positive emotions are often characterized by flexible processing, increased reliance on general knowledge, and the use of cognitive heuristics, and suggest that these tendencies ought to be reflected in the kinds of memories that are formed when people are in positively valenced emotional states. Levine and Pizarro bolster their case by reviewing evidence from studies in social, personality, clinical, and developmental psychology that support the relation between this differentiated view of emotion and autobiographical memory.

The Skowronski and Walker article is also highly interdisciplinary, but it emphasizes social factors to a greater extent than is seen in the other studies in this compilation. More specifically, they discuss ideas concerning how social discourse might affect autobiographical memory. While such ideas are certainly not new, Skowronski and Walker’s analysis emphasizes two ideas that have not played a prominent role in previous discussions of this issue. The first of these concerns the impact that the social norms that govern social discourse might have on autobiographical memory. Their line of reasoning is straightforward: If autobiographical memory is influenced by social discourse, and if the content of social discourse is governed by social norms, then those social norms ought to have a discernable impact on autobiographical memories.

The second idea emphasized by Skowronski and Walker concerns the cognitive processes that might mediate the action of social discourse on autobiographical memory. For example, they suggest that because discourse involves event rehearsal, such discourse should often work to maintain event memory over time. This might be especially true when such discourse involves elaborative rehearsal (linking an event to other events or to a life story). However, the retelling of events often involves selectivity (not telling others certain facts), embellishment (to enhance the interest value of stories), or the possible development of a semantic memory trace that can compete with the original episodic memory trace.
All of these processes might serve to distort the content of a recalled event.

Skowronski and Walker also argue that social discourse can have effects on emotional responses to autobiographical memories, potentially maintaining the rosy glow felt in response to the retrieval of positive events and dampening the sting felt in response to the recall of negative events. They note that while the evidence suggests that such effects might occur simply as a consequence of the cognitive work involved in social storytelling, the social support that one receives when such stories are told may also play a role in these patterns of affect.

Skowronski and Walker review a considerable amount of research in an attempt to support these ideas. Their review includes extensive discussion of research from the social psychology and communication literatures (e.g., with regard to communication norms) and from the cognitive literature (with regard to cognitive processes and structures involved in autobiographical memory). However, their review of the literature also cites studies conducted by researchers in a number of different subareas of psychology, including studies from clinical, health, personality, and developmental domains.

The ultimate article in this compilation is by Friedman. This work addresses a seemingly simple, but tremendously important, issue: how does one know “when” an event occurred? Cognitive psychologists have extensively studied accuracy and bias in temporal judgment and have tried to relate temporal judgment patterns to the memory structures and cognitive mechanisms involved in such judgments. Friedman’s literature review examines some of the theories of temporal knowledge and some of the research that bears on these theories.

Friedman’s review suggests that there is little support for the notion that events are “time-stamped” or “time-tagged.” The review also points to the conclusion that there are multiple mechanisms that are involved in “knowing” when events occurred. As with other elements of memories, there appears to be a fair amount of reconstruction that is involved in making judgments of event times or event orders. These efforts at reconstruction seem to lead to the same kinds of effects and errors (e.g., schema-driven biases) that appear elsewhere in the memory literature. However, Friedman argues that the data also suggest that there is more to temporal knowledge than reconstruction. People occasionally know exactly when an event occurred, at least on a calendar time scale (e.g., a date semantically encoded with a memory, such as the date the of the World Trade Center attack in New York City). People also sometimes seem to have an “intuitive” approximate sense of how old an event is, and this sense seems to provide temporal information too rapidly to be accounted for by reconstructive efforts (which tend to be slow
and laborious). It is unclear how this rapid distance information is coded or stored, but Friedman suggests that it may involve the use of cognitive heuristics, such as vividness.

Although Friedman’s review largely focuses on theory and data generated by cognitive psychologists, the temporal knowledge problem has implications for a number of different subdisciplines of psychology. Clinical psychologists note that some individuals (e.g., people with Korsakoff’s syndrome) often have difficulty placing life events in order, and these psychologists use that difficulty in their diagnoses. Developmental psychologists have studied the age at which children first seem to manifest an ability to place events in time and to order them appropriately, and have attempted to relate that onset to the development of the self. Psychologists with an interest in the adult self (largely in the personality and social areas) also puzzle over the extent to which the ability to place events in a proper temporal order or in their proper temporal context is related to the mental structures that comprise the self, and also wonder how the self might alter or bias temporal judgments. Some social psychologists wonder whether temporal judgments that are made about others involve the same (or different) mental processes that are involved in making temporal judgments about the self. Because his review emphasizes the structures and processes involved in temporal knowledge, Friedman’s analysis would seem to inform researchers in all of these areas.

In addition to providing information about theory and research into autobiographical memory and illustrating its cross-area appeal and relevance, the articles that comprise the present volume speak to several other salient issues. The first of these is that there need be no value distinction between “real-world” research and laboratory-based research. Clearly, the investigation of autobiographical memory is real world—it investigates a person’s memories for events in that individual’s own life. Yet, as illustrated by the articles in this volume, such real-world research does not have to be trite or theoretically impoverished. The articles in the present volume often use sophisticated ideas about representation and process that are derived from highly controlled, laboratory-based work and that have been rigorously tested in those contexts. These ideas regarding structure and process are also often tested using ingenious derivations of laboratory techniques that are adapted for use with autobiographical memories. Hence, it is not necessarily the case that real world research cannot contribute to the rigorous development and testing of fundamental ideas about human thought, emotion, or behavior. In fact, as evidenced by the articles in this volume, real-world research can, indeed, make substantive and theoretically based contributions to psychology. Given that social cog-
nition research has often been criticized for its excessive reliance on supposedly sterile and artificial laboratory techniques, the successful application of ideas that are central to social cognition in the study of a real phenomenon ought to be seen as an encouraging development.

However, I do not derogate laboratory research. Instead, I point to the successful interplay between laboratory-based investigations of memory and real-world explorations of memory as an example of the exciting possibilities that come from integrating laboratory and real-world research approaches. One issue here, as always, is that there is a trade-off in research. Real-world research often allows the examination of questions that would be difficult to study solely in the laboratory. However, the laboratory provides the control that is sometimes necessary to establish a cause-and-effect relation between constructs—establishing cause-and-effect is what the experimental method does especially well. One substantial caveat, though, is that the establishment of cause-and-effect in the laboratory can often result in the discovery of effects that are overwhelmed when examined in real-world contexts. In those real-world contexts, other variables can often interfere with or mask the cause-and-effect relation observed in the laboratory. Hence, it is crucial to take laboratory-derived effects and examine them in real-world contexts, not only to get a sense of the power of those effects, but also to get a sense of the variables that might mask or moderate the effects. Those moderating or masking variables can themselves be later subjected to laboratory investigation.

It is this give-and-take between the laboratory and the real world that characterizes research on autobiographical memory and that has helped to make it such a productive area of research. The methods employed in many of the studies described in the articles contained in this volume range from neuroimaging studies to studies that mimic closely controlled laboratory techniques in cognitive and social psychology (e.g., the judgment-of-recency paradigm) to studies that explore the content of peoples’ free-flowing narratives or of the conversations between mothers and their children. The use of such a wide array of methods has contributed substantially to our understanding of autobiographical memory, in part because of the convergent and divergent construct validity that is produced when multiple methods are applied to research.

Because I was largely trained in the techniques of the laboratory, I must admit that I was a bit reluctant to enter the area of autobiographical memory (I first dipped my toes in its waters in 1986—thanks to a substantial push from Chuck Thompson). However, as I have matured, and as the area has progressed, it has come to occupy more and more of my own research time. In part, this is because I have myself (perhaps late)
come to recognize the need for research in both laboratory and real-world contexts. In part, it is also because I have come to realize that the issues of process and structure that are of interest to autobiographical memory are fundamentally the same as the issues that I explore in many of my laboratory-based studies.

In any case, I was thrilled when the authors who have contributed to this volume agreed to do so. In my opinion, they are among the best that scholarship in the area has to offer, and the articles that they have submitted are not only a delight to read, they also stimulated my own thinking about a number of different lines of research (which I, somewhat selfishly, will keep to myself for the moment). Indeed, to return to my opening metaphor, these articles served to both sharpen my own eyesight by heightening my ability to see how my own research fits with the ideas produced by other scholars, and enhanced my voice by enabling me to better communicate that fit to others. I hope that you have the same experience, both in terms of your level of enjoyment and in terms of the level of intellectual stimulation that is produced (as long as the ideas generated do not overlap with my own).