

Part I

Overview

The first chapter of this book is an overview by the Editor. It begins with several trends and themes that are central to the study of autobiographical memory and that recur throughout the book. The introduction then acknowledges and provides references to additional topics that might have been included in a book with different goals but the same title and concludes with a chapter-by-chapter preview of the book. The preview makes explicit the intended organization of the book and the more obvious relationships among the chapters that follow.



1 Introduction

David C. Rubin

All attempts at a scientific explanation of human behavior are ambitious. This book is no exception. Consider the challenge. A complete understanding of autobiographical memory would require: a knowledge of basic memory processes in the individual as well as of the influences of the society in which the individual lives; a knowledge of memory processes in the individual at one age and time as well as of the effects of changes in development and environment over a lifetime; a knowledge of the intact as well as of the impaired individual; a knowledge of cognition as well as of affect. This book is an attempt to begin meeting this challenge. Together the chapters represent a set of interwoven interests. Each chapter views autobiographical memory from a different perspective, but shares with the others a common approach that encourages the free exchange of ideas.

Recurring themes

Phenomenological reports as data

Several themes run through the book. One is a heavy reliance on phenomenological reports. Brewer (Chap. 3), for instance, makes explicit his claim that phenomenological reports are data that must be accounted for in the same sense as more objective measures, such as amount recalled or reaction time. In order to begin formulating theories of autobiographical memory, Linton (Chap. 4) considers her own process of recall; Neisser (Chap. 5) makes a basic distinction between descriptions of occurrences and the awareness of those occurrences; and Reiser, Black, and Kalamarides (Chap. 7) analyze what their subjects have to say about their process of recall. Similarly, Brown, Shevell, and Rips (Chap. 9) use subjects' protocols while dating events to test hypotheses about the structure of autobiographical memories. In these cases, it is not the recall but what is reported about the process of recalling that is considered as primary data, on a par with more traditional measures. Other



4 DAVID C. RUBIN

types of phenomenological reports, such as Robinson's reports of mood (Chap. 10), also find their way into the book. In the clinical studies, however, phenomenological reports take on a whole new role. The problem with the patient described by Crovitz (Chap. 15) is not that he cannot recall the details of an event but rather that he does not feel he can recall them from his own memory. If this phenomenological distinction is not allowed, the phenomenon of interest disappears.

Verifiability

Intertwined with the increased reliance on phenomenological report is an expanded view of the role of verifiability. A few years ago researchers in this area were receiving reviews asking how they could call their work memory research when they were not at all sure of the relation between the verbal reports they were collecting and the initial events that led to them. Memory research, to these critics, required the presentation of a known stimulus, a delay, and a report of that known stimulus. The reports could be partial or they could contain distortions, but their relation to a known stimulus was essential. The study of memory included here is broader. Some of us (Linton, Chap. 4; Barclay, Chap. 6; Brown, Shevell, & Rips, Chap. 9; Butters & Cermak, Chap. 14) are probing the issue of how memories distort, change, and are lost over time, using known, verifiable, initial stimuli. The rest of us are often content to try to understand the internal structure of the memory system without asking the methodologically difficult question of how that internal structure relates to past realities. Once Bartlett (1932), with a little help from others such as Neisser (1967), had convinced us that memory is much more often a reconstruction than a reproduction, questions began to arise about the constructive abilities of our memories that are independent of those memories' relations to past events (e.g., Robinson, Chap. 2, and Barclay, Chap. 6). If memory creates as well as distorts, the principles of that creation need to be understood, and this does not always require knowledge of a particular stimulus presentation.

The issue of verifiability and phenomenological report mix in part because it is often more important that our memories seem real than that they be real. Brewer (Chap. 3) makes use of this distinction in his taxonomy of memory, Barclay (Chap. 6) makes this distinction clear in his discussion of literary autobiography, and Baddeley and Wilson (Chap. 13) as well as Crovitz (Chap. 15) use clinical case studies to provide some painfully vivid examples. There are at least two independent criteria for judging the autobiographical memories: how well they reflect past occurrences, and how real they seem to the rememberer. Verifiability addresses only one of these criteria.



Introduction 5

An increase in the description of behavior

Another theme or attitude that runs through the book is a clear willingness to stand back and begin describing memory almost as if it had never really been studied before. In doing so, the contributors tend to use the metaphor of a botanist, or an ethologist, to describe their activities. Cognitive psychologists are beginning to study autobiographical memory, and, reasonably enough, the first step they often take is to try to describe the phenomena under study. Several chapters provide broad initial taxonomies of aspects of autobiographical memory, including descriptions of the kinds of memories recalled (Linton, Chap. 4), the place of autobiographical memories in memory as a whole (Brewer, Chap. 3), search strategies (Reiser, Black, & Kalamarides, Chap. 7), and clinical deficits (Baddeley & Wilson, Chap. 13). In addition, the chapters by Rubin, Wetzler, and Nebes (Chap. 12) and by Wetzler and Sweeney (Chap. 11) consist mostly of descriptions of the shape of curves with only tentative attempts at theoretical explanations of those curves.

Much of current psychology involves the statistical testing of hypotheses, often in relatively artificial situations. If our recent history is any indication in the area of memory research, many of these hypotheses, and the theories from which they come, are not worthy of the empirical research they generate (Meehl, 1978). One of the most encouraging indications that real progress may be made in autobiographical memory is the willingness of psychologists to delay committing themselves to particular theories and detailed hypotheses until phenomena worth their theorizing have been more fully described. This is not to say that existing theories are ignored. They are included in an extremely eclectic and searching manner. What is avoided, however, is the tendency to test one theory, or one version of a theory, against a null hypothesis before evidence is considered that could falsify the whole class of theories of which the theory being tested is a member. The techniques used to try to understand nature must be appropriate to the problem and to the degree of theoretical sophistication and empirical knowledge available. This book's preponderance of taxonomies is appropriate for our current level of understanding and should help lead to more solid and lasting advances.

Varied theoretical perspectives

In order to begin understanding the broad range of phenomena uncovered when autobiographical memory is viewed without strong theoretical blinders, it is necessary to integrate a broad range of research and theory. The research presented in the chapters that follow is a varied and efficient mix of sophisticated laboratory techniques and complex "real-world" problems. The theo-



DAVID C. RUBIN

retical perspectives employed, however, are what most clearly show the eclectic nature of this volume. Rather than contrasting, the various perspectives complement each other, the insights gained from each perspective adding to our total understanding.

The influence of experimental psychology

The most widely used theoretical perspective is that of the experimental psychology-verbal learning view of human memory. This traditional perspective serves to couch many of the questions asked and provides laboratorytested accounts for much of the data. Thus, autobiographical memory can be said to include encoding, retention, and retrieval as measured in the laboratory. Moreover, to the extent measured, these terms operate in autobiographical memory much the way they do in the laboratory. Studies of retention functions and encoding specificity apply directly to describing the distribution of adults' autobiographical memories (e.g., Rubin, Wetzler, & Nebes, Chap. 12; Wetzler & Sweeney, Chap. 11) and to consideration of developmental changes (e.g., Fitzgerald, Chap. 8). Even the classic debate about differences between recall and recognition turns out to be important. A person recalls an autobiographical memory, but if that recalled memory is not recognized as the person's own it will not add to the person's theory of self or sense of continuity (e.g., Barclay, Chap. 6; Baddeley & Wilson, Chap. 13; and Crovitz, Chap. 15). Theories of recognition that stress judgments of familiarity (Mandler, 1980) are certainly appropriate here.

At the more cognitive end of the experimental psychology-verbal learning perspective, the concept of schema, in its many forms, pervades this book. Autobiographical memory is organized in more ways than just a time line; specifying that organization is a major goal of most of the research presented here. A sign of progress is the introduction of affect into that organization.

The influence of developmental psychology

The theoretical perspective of developmental psychology enters on a somewhat argumentative note. Those of us of the experimental psychology-verbal learning persuasion tend to study healthy college sophomores who develop at most a semester, and usually less than an hour, during our experiments. As these subjects are supposed to be near their intellectual prime, we feel that we can safely ignore their development during this brief interval. Autobiographical memory forces a different view (e.g., Fitzgerald, Chap. 8). Even studies using only one age group and lasting only an hour often ask for memories from the entire lifespan. In all memory studies, the relationship of the



Introduction 7

person at the time of retrieval to the person at the time of encoding is important. For autobiographical memory, the person is often markedly different in development at these two times. The study of autobiographical memory is the study of memory for a lifetime and therefore must be informed by what is known about memory development. Another argument for the developmental perspective comes from the observation of autobiographical memory itself. Questions about childhood amnesia (Wetzler & Sweeney, Chap. 11) and reminiscence (Rubin, Wetzler, & Nebes, Chap. 12) predate experimental psychology, and careful observers have noted other, more subtle changes in autobiographical memory with development (e.g., Barclay, Chap. 6; Linton, Chap. 4).

The influence of personality and social psychology research

The theoretical perspective of personality and social psychology speaks to one of the central aspects of autobiographical memory. Autobiographical memory is about the self; it is about such technical terms as self-theories, self-reference, and identity (Barclay, Chap. 6). Autobiographical memory is the source of information about our lives, from which we are likely to make judgments about our own personalities and predictions of our own and, to some extent, others' behavior. Autobiographical memory, however, also provides a sense of identity and of continuity, a sense that can, but need not, be lost along with the neuropsychological loss of other aspects of autobiographical memory functioning (Baddeley & Wilson, Chap. 13; Butters & Cermak, Chap. 14; Crovitz, Chap. 15).

Although cognitive psychology has provided concepts for personality and social psychology, it has been slow to incorporate ideas from personality and social psychology. Part of this lack of reciprocity is due to reductionist tendencies. Part is also due to the choice of research questions. Our understanding of many of the laboratory tasks used in cognitive psychology might not benefit from such borrowing. In any case, in studying autobiographical memory, cognitive psychologists are faced with issues similar to those that personality and social psychologists have pondered. Although novel solutions would certainly be appreciated, it appears that psychology's tendency to ignore its past will be avoided.

The influence of the humanities

A refreshing aspect of this volume is the inclusion of a humanistic perspective from outside the normal scope of psychology. Some of the questions psychologists are now asking have been pondered by scholars whose interests are



8 DAVID C. RUBIN

in literature (Barclay, Chap. 6), history (Brown, Shevell, & Rips, Chap. 9), and philosophy (Brewer, Chap. 3) rather than in memory per se. Although the humanists' methods often differ from those of psychologists, their descriptions of the behavior of individuals who are constructing autobiographies and histories provide a good source of both data and hypotheses to pursue. Considering the literary autobiographies and the histories themselves as complex human behaviors enriches our data base.

Paths not taken

As is pointed out by Brewer, different implicit and explicit definitions of autobiographical memory are used in the 15 chapters of this book. At present, autobiographical memory is a topic of study, a book title, a set of phenomena, and not a clearly defined part of a system of memory. For the purposes of this book, the examples of research and theory define the term autobiographical memory, not a formal definition. In selecting the chapters, I tried to choose research from a cognitive background that adds to what we know about the recollections people have for a substantial portion of their lives. Without a formal definition of autobiographical memory, other selections were possible. A different book with different goals, but the same title, could have just as well included chapters on the aspects of psychoanalysis that provide an indepth probing of an individual's autobiography; on how one decides that a memory is one's own memory of an actual event (Johnson, in press; Johnson & Raye, 1981); on the reports of individuals who have constructed their own autobiographies either in a literary attempt or during individual or group psychotherapy (Allport, 1942; Myerhoff, 1978); on the technique of survey literature used to access particular aspects of autobiographical memory (Dijkstra & van de Zouwen, 1982; Moss & Goldstein, 1979); on the sociological and psychological description of the life course (Back, 1980; Reese & Smyer, 1983); on how people recall a small number of particular episodes from their lives, such as earliest childhood memories (Adler, 1937; Langs, 1965), eyewitness testimonies (Loftus, 1979), and flashbulb memories (Brown & Kulik, 1977; Neisser, 1982; Pillemer, 1984; Rubin & Kozin, 1984; Winograd & Killinger, 1983).

A preview of the book

Each of the 14 chapters that follow attempts to understand the recollections people have of a substantial portion of their lives. Together they are a tutorial on the cognitive psychology of autobiographical memory. The outline of the book is quite simple. Part II contains introductions to the topic of autobiographical memory from three perspectives; historical, theoretical, and meth-



Introduction 9

odological. Within the framework set up by these introductory chapters, Parts III, IV, and V explore the schematic and temporal organization of autobiographical memory. Several clinical case studies are examined in Part VI.

The remainder of this introduction previews the book chapter by chapter. The purpose is not to provide a summary; there is much more covered in each chapter than will be mentioned here. Rather, the overall organization of the book will be laid out, the role of each chapter in that organization specified, and some indication given of the type of information presented in each chapter. The reader with a knowledge of contemporary research in this area, after examining the Table of Contents, could skim the rest of this chapter and miss little.

Historical, theoretical, and methodological contexts

Robinson's introductory chapter (Chap. 2) traces the study of autobiographical memory back to Ebbinghaus, Freud, and Galton. It is a long history but one marked with long periods of stagnation. The divergent traditions that followed from the work of these three scholars have affected, in varying degrees, the chapters of this book. In contrast, Brewer (Chap. 3) provides a contemporary context for the study of autobiographical memory. He probes the possible meanings of autobiographical memory, its likely components, and its relation to other forms of memory. Whether autobiographical memory is ultimately viewed as a separate form of memory with its own functional properties, and possibly its own physiology, is not at all clear. Nonetheless, at any point in the progress of science, and especially as a new area of research is being undertaken, a scholarly and efficient approach requires defining terms and searching related literatures for concepts and data. Brewer accomplishes this by providing a taxonomy of all of human memory, indicating where the functions discussed in this book would fall. Both Robinson and Brewer end with a consideration of the reconstructive and reproductive aspects of autobiographical memory. Robinson stresses the former, Brewer the latter.

Linton (Chap. 4) provides the methodological context for the book. She begins her chapter innocently enough by asking, "What do we know about the contents of human memory?" Like Brewer, she attempts an inventory but concentrates on autobiographical memory. She finds that the contents of autobiographical memory appear to change systematically with the method of observation used. Her extensive research on her own autobiographical memory leads not only to comparisons among methods but also to taxonomies of the kinds of memories retrieved and the types of search strategies that are effective under various conditions.



10 DAVID C. RUBIN

One of the most interesting aspects of Linton's chapter is her taxonomy of autobiographical memories. Unlike Brewer, who places autobiographical memory in a taxonomy of human memory in general, Linton classifies the different kinds of autobiographical memories she recalls. Most research limits the temporal and thematic scope of the memories studied, either by asking subjects to try to recognize descriptions of events of a certain format (Barclay, Chap. 6) or by asking questions that require knowledge of a certain kind (Brown, Shevell, & Rips, Chap. 9; Butters & Cermak, Chap. 14) or by using cues and instructions to evoke only certain kinds of memories (Reiser, Black, & Kalamarides, Chap. 7; Fitzgerald, Chap. 8; Wetzler & Sweeney, Chap. 11; Rubin, Wetzler, & Nebes, Chap. 12; Baddeley & Wilson, Chap. 13; Crovitz, Chap. 15). In her more open-ended searches of autobiographical memory, Linton does not limit what she will consider as a memory and so arrives at a classification of her recalls that ranges from the most general level of mood tone through themes, extendures, episodes, and elements down to details. Some of these levels match up with the earlier literature; others, like extendures, which are sets of memories loosely bound by the coexistence of some significant persistent orientation, do not.

Together, the chapters by Robinson, Brewer, and Linton provide a broad introduction to autobiographical memory and the existing background literature. Once this is accomplished, direct probes are made into how autobiographical memory is organized. In Part III Neisser; Barclay; Reiser, Black, and Kalamarides; and Fitzgerald examine the role of organization in autobiographical memory; and in Part IV Brown, Shevell, and Rips and Robinson examine the role of one kind of organization that has been held to be central to autobiographical memory: temporal organization.

The general organization of autobiographical memory

Neisser (Chap. 5) provides a theoretical framework for the taxonomy of autobiographical memory observed by Linton, as well as an alternative framework for much of the rest of the book. Neisser extends Gibson's approach to perception to the study of autobiographical memory. Just as objects in the world have nested structure, the events that make up our lives have nested structure. Just as grains of sand, for example, are nested in sand castles which are nested in dunes which are nested in a beach, small movements are nested in actions which are nested in events which are nested in whole periods of our lives. Neisser initially tries to describe the structure of such nesting in the world instead of in mental representations. The emphasis on describing observables in the environment with greater precision is not a return to the behaviorism Neisser (1967) once argued against. The behaviorists did not at-



Introduction 11

tempt to describe carefully the environment in which animals and people evolved and normally live. Rather, Neisser's description of the environment is the start of a new endeavor, the beginning of an ecological theory of memory.

Whether the organization is described in terms of the external world or internal cognitive schemata, all the authors in Part III take as part of their challenge the description of how that organization affects behavior. Barclay (Chap. 6) musters the strongest arguments for the role of organization in autobiographical memory, arguments that complement Brewer's attempt to resurrect the copy theory of memory for recent memories. Barclay's thesis is that most autobiographical memories are reconstructions of past events, reconstructions that are driven by highly developed self-schemata. He begins by reviewing cases in which people believed their inaccurate memories to be accurate. The errors in memory reviewed are not random but rather fit into reasonable stories the rememberers might construct. Barclay then proceeds to review the ways in which literary autobiographies are constructed and criticized. Literary autobiographies, he says, "must convey precisely and honestly the autobiographer's intentions"; they need not, in fact cannot, convey an accurate record of the past. The events reported must be plausible and consistent, not veridical. The psychological literature on the self is then summoned to demonstrate that the forces acting to schematize autobiographical memories are much the same as those forces acting on an autobiographer. If Barclay's thesis and the evidence used to support it are correct, people should be willing to recognize, as their own, memories that are not theirs and should do so with increasing frequency as the events become more remote from and more similar to actual occurrences in their lives. Barclay reports such data from a group of students who kept diaries for him. His chapter provides theory and data that help us understand the paradox of why we believe our own memories to be true, yet know from extensive research that they cannot

Reiser, Black, and Kalamarides (Chap. 7) take a very different approach to studying memory organization. Rather than arguing that autobiographical memories are constructed to be consistent with an overall self-schema, they begin describing what the structure is like. Their methodological approach is to analyze the search process people take in finding specific memories. Reiser, Black, and Kalamarides' subjects were asked to recall specific events, such as an instance of when they went to a public library or felt impatient or had bad weather during a vacation. The subjects talked aloud as they searched for a particular instance, and their protocols were analyzed to uncover their search strategies. If the way in which memory is searched is known, so is its functional organization. Aided by artificial intelligence theories of the struc-