Involuntary Memory
New Perspectives in Cognitive Psychology

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It has been more than a century since Hermann Ebbinghaus formally introduced the concept of involuntary memory in his premier text on memory. Given certain methodological challenges, this topic remained a mystery throughout most of the twentieth century until it was recently taken up by a handful of researchers.

This book is the first ever to tackle the concept of involuntary memory. It reviews some ten years of research on the topic and presents new research findings. Its goals are ambitious: It hopes to further extend our knowledge and understanding of memory by presenting new ideas and findings on an area of memory which has been in obscurity for more than a century.

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WHAT ARE INVOLUNTARY MEMORIES?

Defining involuntary memory is the first task of a volume which attempts to review and present research on the topic. However, as with topics such as the unconscious, this is perhaps best done by defining its opposite first: voluntary memory. Hermann Ebbinghaus (1885/1964) appears to have been the first memory researcher to attempt a definition of voluntary memory:

In the first group of cases we can call back into consciousness by an exertion of the will directed to this purpose the seemingly lost states (or, indeed, in case these consisted in immediate sense-perceptions, we can recall their true memory images): that is, we can reproduce them voluntarily. During attempts of this sort, – that is, attempts to recollect – all sorts of images toward which our aim was not directed, accompany the desired images to the light of consciousness. Often, indeed, the latter entirely miss the goal, but as a general thing, among the representations is found the one which we sought, and it is immediately recognized as something formerly experienced. (p. 1)

While few descriptions since Ebbinghaus would prove to be so eloquent, most of them, however, capture his sense of the process, describing voluntary recall as instances when memories come to mind because they are either willed, intended, thought about, searched for, and so forth (e.g., Baddeley, 1990; Conway & Pleydell-Pearce, 2000; Conway & Rubin, 1993; Moscovitch, 1992; Jacoby, 1991; Richardson-Klavehn, Gardiner, & Java, 1996). In short, voluntary memory appears to be our ability to call up our personal past on demand.

In contrast, as its label suggests, involuntary memory is not under our control. Once again, Ebbinghaus (1885/1964) was the first to attempt a definition:

In a second group of cases this survival is even more striking. Often, even after years, mental states once present in consciousness return to it with apparent spontaneity and without any act of the will; that is, they are reproduced involuntarily.
Researchers working in the modern era define involuntary memory much in the same way as did Ebbinghaus. For example, involuntary memory has been described in the modern literature as instances in which memories come to mind spontaneously, unintentionally, automatically, without effort, and so forth (e.g., Ball & Little, in press; Berntsen, 1996; Conway & Pleydell-Pearce, 2000; Kvavilashvili & Mandler, 2004; Mace, 2004; Mandler, 1994; Richardson-Klavehn et al., 1996; Schacter, 1987). Although typically called involuntary memory, so as not to confuse it with implicit memory (i.e., unintentional memory that we are unaware of, e.g., Richardson-Klavehn & Bjork, 1988; Schacter, 1987), modern workers have added additional labels to the term and thus involuntary memory has variously been called involuntary explicit memory (e.g., Bowers & Schacter, 1990; Schacter, 1987), involuntary conscious memory (e.g., Mace, 2005a; Richardson-Klavehn, Gardiner, & Java, 1994), involuntary autobiographical memory (e.g., Ball & Little, in press; Berntsen, 1996; Kvavilashvili & Mandler, 2004; Mace, 2004), and involuntary aware memory (e.g., Kinoshita, 2001; Mace, 2003a, 2003b). Many of these terms are used in the current volume.

**Involuntary memories: three different occurrences**

There appear to be three different occurrences of involuntary memory: those which occur in everyday mental life, those which occur during the process of voluntary recall or involuntary recall, and those which occur as a part of a psychiatric syndrome. As each of these occurrences is discussed extensively in this volume, I will only attempt to give the reader a sense of them briefly in this section, giving a better sense of the questions they raise in the next section.

**Precious fragments**

The most familiar form of involuntary memories appears to be those which occur as result of everyday mental functioning. This form of involuntary remembering was made famous by novelist Marcel Proust, who in the series *Remembrance of Things Past* gave an example of an involuntary memory which would become the cornerstone of involuntary memory descriptions:

I raised to my lips a spoonful of the tea in which I had soaked a morsel of cake. No sooner had the warm liquid mixed with the crumbs touched my palate than a shiver ran through me and I stopped intent upon the extraordinary thing that
was happening to me. An exquisite pleasure had invaded my senses, something isolated, detached, with no suggestion of its origin . . . I sensed that it was connected with the tea and the cake . . . And suddenly the memory revealed itself. The taste was that little crumb of madeleine which on Sunday morning at Combray when I went to say good morning to her in her bedroom, my aunt Léonie used to give me, dipping it first in her own cup of tea. (Proust, 1928/1998, pp. 60–63)

In this very colorful example, Proust is describing those everyday involuntary memories, which though they appear to be produced by common everyday experiences such as a taste of a tea-soaked cake, nonetheless take us by surprise. These types of everyday memories appear to be what Ebbinghaus (1885/1964) had in mind in the quotation cited above. The pioneering autobiographical memory researcher, Marigold Linton, called these memories “precious fragments” of the past, apparently referring to her own experiences with them and with descriptions of them provided by author, Esther Salaman, who wrote extensively about involuntary memories in a personal essay which recounts her own experiences with involuntary memories and those of various novelists (Linton, 1986; Salaman, 1970).

As by-products of other memories

Less commonly known are those involuntary memories that appear to result as a function of memories that were retrieved voluntarily or involuntarily. For example, when one retrieves a memory, sometimes the memory will trigger another related memory, which in turn might trigger another. This type of involuntary memory production has also been on the minds of memory researchers. For example, Ebbinghaus appeared to have this form of involuntary remembering on his mind when he suggested that the recall of nonsense syllables seemed to cause others to come to mind automatically. Linton (1986) is more explicit about them in her writings, describing them as another way in which “memories come unbidden”: “Throughout my life I have noticed delicate memory fragments that recur year after year – coming unbidden sometimes when my ‘mind is silent’ but also as by-products of searches for other information” (p. 53). Involuntary memories which are produced by other memories have also been featured in the writings of Salaman (1970), who describes them as resulting from deliberate attempts to construct the past.

Not so precious fragments

The third category of involuntary memory occurrences is those which result from traumatic experiences. Some individuals who experience a traumatic event subsequently experience repetitive involuntary memories of the event. This