Philosophers, novelists, and psychologists have long been fascinated by the powers and frailties of memory. What and why do we remember? Are memories ever lost, or is it only our access to them that is blocked? Is forgetting simply a failure of memory or an active process, repressing or erasing unwanted recall? Can we learn how to improve our memories, or be taught how to forget?

Only recently have neuroscientists joined this quest; it was once considered beyond their remit (as a postdoc I was strongly—though unavailingly—pressured not to attempt memory research by my two successive Nobelist chiefs, because they judged it a career-limiting move). Now, however, memory is a hot field, with researchers avidly seeking the brain locations and molecular mechanisms involved in making, storing, and retrieving memories. And whilst their emphasis has been primarily on the processes of memory itself, a potentially lucrative sideline of research has opened up with the increasing numbers of young men returning from dubiously legal wars abroad with painful flashbacks and post-traumatic stress disorders, urgently needing to forget. What if a pharmacological memory eraser could move from science fiction into the psychiatrists’ pharmacopeia?

Douwe Draaisma, a historian of psychology, whose new book ponders many of these questions, has a rare gift for discovering buried archives that cast new light on even familiar accounts of key episodes in the discipline’s often troubled past. His past books, including The Nostalgia Factory and Why Life Speeds Up As You Get Older, have developed what has become a well-honed method: a set of linked essays around his major theme, each focusing on an individual researcher or a particular pathology. At their best, the essays combine the sensitivity of Oliver Sacks to his patients’ predicaments with the discursive style of Stephen Jay Gould. As with Gould, the anecdote that opens each essay seems a long way off beam, but Draaisma’s prose circles his intended target ever more closely before finally homing in.

“What if a pharmacological memory eraser could move from science fiction into the psychiatrists’ pharmacopeia?”

Each chapter explores a different aspect of the “myths, perils and compensations” of forgetting, although one sometimes feels he has to work hard to say something new about, for instance, Korsakoff’s disease, or Sigmund Freud’s analysis of Dora. However, at his best he casts a sharply critical eye on some of the best known case studies in the memory literature, notably that of Henry Molaison, the patient whose hippocampus and surrounding tissue was ablated in 1953 to mitigate his epilepsy. Molaison’s consequent total loss of recent memory, which revealed the central role of the hippocampus in memory formation, made him a focus of research study for the next 55 years, and built the research careers of several generations of psychologists. Draaisma, however, has a different story to tell, of Molaison himself, the casual brutality of the neurosurgeon William Scoville who sucked out large chunks of Molaison’s brain through a straw, and the unseemly competition to grab what was left of it at Molaison’s death. This account raises questions about the surgical and research ethics at the Montreal Neurological Institute (MNI).

Draaisma is equally dismissive of the myths have been built up around the memory research of another distinguished MNI researcher, Wilder Penfield, whose functional maps of the cerebral cortex, derived from electrical stimulation of the exposed brain in patients being prepared for surgery to treat epilepsy, grace many textbooks. Among Penfield’s most famous observations was that when particular regions of the cortex were stimulated, the patient reported recalling a fragment of long-buried memory. Draaisma’s forensic dismantling of the evidence for this much-reported claim is a joy to read for those of us who have long been sceptical of Penfield’s interpretations.

Elsewhere in the book Draaisma discusses why we forget dreams, recovered and false memory, and cryptamnesia—unconscious plagiarism—a phenomenon, I guess, familiar to all of us, when what we experience as our own brilliant idea has actually been unknowingly adopted from something we have read or heard. But Draaisma’s most moving accounts shift from the world of research into much wider terrain. Peter Esterhazy, the descendent of a long line of wealthy Hungarian aristocrats, was impoverished by the communist expropriations of the 1950s. He wrote a long history of his family lineage, including a eulogy to his father, turned from a land-owning count to a manual labourer by the regime. Only after the Soviet regime’s post-1990 collapse did he discover that his father had been an informer for the secret police; Draaisma describes how this discovery shook Esterhazy’s kaleidoscope of memory into new patterns. And—another cache he has discovered—the letters written on the eve of their execution by the casualties of the French Revolution. What have these to do with memory? Read the book, and learn.

Steven Rose
S.P.R.Rose@open.ac.uk