

Long Past, Short History: The Case of Memory (2008)

Kurt Danziger

Abstract: For Hermann Ebbinghaus, an early experimentalist usually credited with introducing the popular contrast between psychology's long past and short history, the distinction had to be made because psychologists had finally embarked on a path of cumulative progress by means of empirical investigations. However, Ebbinghaus did not invent the distinction so much as change its emphasis in a way that hid continuities between long past and short history. To illustrate: the history of memory reveals significant links between the experimental period and its predecessor, not only on the conceptual level, where ancient metaphors survive, but also on the level of practice, where there was a long tradition of systematic intervention in the operations of memory that provided material for modern approaches. Exclusive reliance on the particular discontinuity emphasized by Ebbinghaus also tends to obscure other peculiarities of the modern period that may be equally important historically.

I thought today might be a good opportunity for reflecting on a centenary, a centenary that I am sure will be news to many of you. Not that I think we really need another centenary – we've got too many of them already - but this one happens to be of rather special interest to historians of psychology.

So what centenary do I have in mind? Well, admittedly it's a rather modest centenary. It doesn't mark the birth of a great personality or of a laboratory but rather the birth of a slogan. It so happens that a catchphrase you all know made its first public appearance in 1908. Here it is:

Psychology has a long past but only a short history (Ebbinghaus, 1908).

These were the words with which Ebbinghaus began his popular general textbook of psychology. As we know, they were the words of a slogan that quickly acquired a life of its own, often repeated, most famously by E.G. Boring two decades later. The words functioned as a declaration of independence for the new scientific psychology intent on breaking any links with the preceding era of mere speculation.

Clearly, for Ebbinghaus, and his followers, the new autonomy of experimental psychology had profound implications for the historiography of the discipline. On the first page of his 1908 text he goes on to explain what he means: Before the advent of modern psychology, he says, there was no "lasting progression", no "progressive development" in the subject. A basic structure, laid out long ago by Aristotle, had lasted right into the 19th century without real change. That was psychology's long past – a time without progress. But now that psychology had become scientific it had finally acquired a history, by which Ebbinghaus meant a story of change and cumulative development.

In the early years of the 20th century, the distinction between psychology's long past and short history had a provocative aspect because 19th century books on psychology's past had had no

hesitation in presenting this past as a history. But once experimental psychology had established an irreversible institutional presence historians of psychology faced a problem:

What exactly forms part of psychology's "long past"? What defines the boundaries of such a field? Before the 18th century, at the earliest, there was no generally recognized conception of psychology as a distinct subject area in the way we understand it. How then do we decide what belongs to psychology's past and what does not? As one professional historian put it:

Histories of psychology...possess no rational criteria of inclusion or exclusion (Smith, 1988).

As long as we restrict ourselves to the more recent history of empirical psychology we are on relatively firm ground: we can use professional and institutional criteria to decide what is part of our topic and what is not. But once we go further back, those criteria become useless. In practice, what gets included in or excluded from psychology's long past becomes essentially a matter of convention. Of course, we can always give an anachronistic psychological meaning to any and all reflections about human experience. But this leaves so vast a field that we might well ask:

Then of what would History of psychology **not** be a History? (Richards, 1987).

Does this mean we should just forget about the long past that is claimed for psychology and concentrate on its short history? Certainly, this is justified for many specific investigations. But if we never took a broader perspective modern psychology would begin to look like the result of some immaculate conception, which it wasn't. So what do we do about that long past?

One good reason why psychology's past is so hard to pin down derives from the fact that psychology itself is not so much a unified subject as a loose assembly of topics and approaches that is constantly changing. The very notion of A history of psychology implies an internal coherence that isn't there. One cannot expect history to supply the unity which the subject itself lacks. So we have to adopt an approach to the history of psychology that is based on the recognition of multiplicity rather than the myth of unity.

For the more recent history, this approach is evident in studies that trace the development of various content areas and of diverse professional and investigative practices. But psychological concepts also have their multiple, though interlinked, histories. The meaning of psychological research and practice is framed in terms of specific categories, such as motivation, intelligence, behaviour, attitude, personality, each of which has its own identifiable history. Some years ago I tried to trace some of those histories in a book I called *Naming the Mind* (1997). It turned out that virtually all of these categories only acquired their current psychological meaning in relatively recent times. Their history was co-extensive with the history of modern psychology. They might have had a past, but it certainly was not a psychological past. The break between their pre-psychological meaning, often moral or theological, and their psychological meaning was quite sharp. So apparently Ebbinghaus had been vindicated.

But then I asked myself whether there might be other categories for which this break was less pronounced. Very quickly, memory presented itself as a likely candidate. Unlike most of the

terms in the modern psychologist's vocabulary, memory has a truly ancient lineage. Plato and Aristotle engaged in speculations about memory that attracted comment and discussion right up to the present day. Ancient Roman writers addressed the subject of memory as part of their discourse on rhetoric, a topic they took very seriously. Monastic authorities of the Middle Ages added their own interpretation of the nature and uses of memory. During the Renaissance there was an outburst of writings devoted to memory, and over the centuries there was also speculation about a physical basis for memory. In the late nineteenth century, memory becomes an object of investigation for modern science.

I won't pretend that it was only this remarkable history that aroused my interest in memory. Such an interest can safely be regarded as one of the symptoms of old age. The day comes when you have to admit to yourself that your memory isn't what it used to be. For me, that day came around the time I was becoming intrigued by the issue of psychology's long past and short history. So academic and personal motives converged nicely to send me off on what became a decade-long search for memory and its history. The outcome of that search was a book, *Marking the Mind: A History of Memory* (Cambridge, 2008), that has just gone off to the printer.

I would like to use my remaining time to share with you some of the things I found out about memory that seem to have a bearing on the relationship between psychology's long past and short history. As one would expect, there is both continuity and discontinuity in this relationship. Much of the discontinuity is fairly obvious, and there is no need for me to go over familiar territory: the features that make the modern scientific approach to memory different from what went before. Let me rather mention some of the historical continuities that show the break between scientific and pre-scientific to be not quite as sharp as it is often made out to be. After that, I will briefly mention one of the less obvious aspects of discontinuity.

One widely recognized link between ancient and modern ideas about memory is their common dependence on metaphor. Whenever people have tried to come to grips with the nature of memory they have found it virtually impossible to avoid the use of metaphors, especially metaphors of storage, of course.

We make search in our memory for a forgotten idea, just as we rummage our house for a lost object... We turn over the things under which, or within which, or alongside of which, it may possibly be (James, 1890).

But this is just one example among an uncountable number stretching over many centuries. At the end of the seventeenth century, John Locke referred to memory as 'the storehouse of our ideas'. Well over a thousand years earlier, the storehouse metaphor had been celebrated by St Augustine who wrote about the 'wonderful storerooms' of memory, its 'huge cavern, with its mysterious secret and indescribable nooks and crannies'. Some medieval variants of the storage metaphor referred to boxes and chests for storing valuables, and some writers liked purses or money bags that could be used to convey the idea of memory as a compartmentalized store. In twentieth century literature on the psychology of memory the image of the purse was not unknown and was joined by that of a bottle, a junk box and even a garbage can.

Doing memory experiments did not mean escaping from an age-old metaphorical tradition, because it was difficult to describe what experiments told us about memory without having recourse to metaphor. When trying to explain the way memory worked, 20th century psychologists regularly invoked storage metaphors, as people had been doing for about two thousand years. This historical continuity was no secret (Roediger, 1980), and metaphors of memory were sufficiently topical to be discussed in journals such as *Behavioral and Brain Sciences* (Koriat and Goldsmith, 1996).

What accounts for the longevity of storage metaphors? Why do they seem so natural? Is there something that supports these metaphors' persistence? I think we can find a clue to the answer in the fact that physical storage was only an extension of earlier and persistent references to another kind of storage, the storage of symbols.

If we go way back to the earliest examples of storage metaphors we get to Plato's suggestion that we should think of memory as analogous to making impressions on wax. Why wax? Not only because of its physical properties, but because in Plato's time tablets coated with wax were commonly used as writing surfaces, and it was specifically the impressions made in writing that were to be regarded as analogous to memory traces.

It seems to me that the conjunction of memory with sensations, together with the feelings consequent upon memory and sensation, may be said as it were to write words in our souls (Plato).

Plato was only the first in a long line of authors who depicted memory as a kind of inner writing. It's an analogy that runs like a red thread through the history of memory and is implicitly acknowledged in more recent theories of symbol storage.

Memory storage is a metaphor, yes, but it is based on something more than a mere analogy. It is based on a real peculiarity of human memory, the fact that people do their remembering in interaction with memory aids. These aids, whether they be marks on stone, letters on wax tablets, or programmable silicon chips, serve as an external memory that greatly magnifies the scope of whatever internal memory capacity humans may be endowed with. By the time people began to speculate about a memory inside them, that internal memory had already become quite dependent on an apparatus of external memory that kept on growing. It is hardly surprising that this visible apparatus always supplied the models for conceptualizing the operations of an invisible memory usually located inside our heads. Metaphors of memory were usually derived from the technology of memory, and as that technology developed, so the metaphors changed their concrete form, from wax tablets to books to computer programs. But technological developments only delivered improved variants of the operation of symbolic inscription that remained the basis of external memory. As long as people made use of an external memory based on technologies of inscription they had an ever present source for metaphors of internal memory.

Our visible success in building up the apparatus of external memory should not make us forget that there is a long history of attempts at developing a technology of internal memory. In ancient Greece and specially Rome there was already a body of written advice on memory training for the use of lawyers, philosophers and politicians. The context of public persuasion placed special demands on memory and called for specialized memory skills. Methods of memory improvement, known as

mnemonics or sometimes mnemotechnics, were developed and eventually collected in well known manuals. It is clear that this technology of internal memory had an influence on speculations about memory. Aristotle's texts, for example, contain indications that he was familiar with the mnemonic advice of his time and used that knowledge in formulating his own ideas. The same holds for his medieval successors.

So it is not altogether true to say that the past only speculated about memory, whereas nowadays we practice planned interventions in its operations and scrutinize the results. In fact, since ancient times, theorizing about memory was accompanied by planned attempts to intervene in its operations. We have to add mnemonics, the technology of internal memory, to the factors that link different periods in the history of memory.

Just like the technology of external memory, the technology of internal memory underwent considerable change in the course of time. From Roman times until the Renaissance period visual imagery remains, not the only, but the most favoured tool for memory training. To get some idea of how this was supposed to work, let us look at two illustrations from a widely used book on memory training published in Venice in 1533 (Romberch). Imagery was to be used in two steps. In the first step you establish a stable background image that you can conjure up at any time. This background image should have several distinct locations or "places", such as the chapel, barber shop, etc. of the village used as a background in the first illustration.

Then, in the second step, you mentally place images of various concrete objects at specific spots in the background image. These concrete images are chosen so that they will remind you of particular topics you want to address during your speech, sermon, or argument. While speaking, you take a mental walk through your background image and come across your previously chosen topics one by one in a pre-determine sequence. The main point to note about this example is the way the whole process assumes that people already have or can easily acquire great facility in forming and manipulating visual imagery.

I am sure you have all been wondering how anyone could actually believe that such a cumbersome procedure, which seems to impose extra demands on memory, could function as a memory aid. Yet, procedures of this kind were taken very seriously over many centuries, even by individuals about whose considerable memory skills there is no doubt, for example St. Thomas Aquinas. How does one explain this?

One thing we do know. The popularity of imagery as an aid to memory training takes a nose dive after the end of the 16th century. By the mid-18th century the most successful manuals on the art of memory were emphasizing altogether different systems of mnemonics that privileged purely verbal methods. Some historians have linked this to the rise of Protestantism and the Puritan suspicion of imagery in general: the truth is in the word, not in 'graven images'. There was a drive to dump religious imagery – iconoclasm, a call to smash the images. In some influential circles this was generalized to human thought: serious thinking, scientific thinking, is incompatible with the analogical thinking encouraged by imagery. It has been suggested that this constituted a kind of "inner iconoclasm" (Yates, 1966). Be that as it may, the point I want to emphasize here is that the technology of internal memory, like that of external memory, is not static but is subject to historical change.

Perhaps we should regard the more recent switch to empirical investigations of memory phenomena as, among other things, a further development in the technology of internal memory. Historically, concern with memory always had a speculative, theoretical, aspect and a practical, interventionist, aspect that often influenced each other. This continued after the introduction of empirical methods. Certainly, memory discourse changed after the introduction of modern methods of investigation. But the change was not absolute; there were elements of continuity. Quite generally, mnemonic procedures and the procedures of memory research resemble one another in that both involve deliberate, planned interventions in the spontaneous operations of memory. More specifically, the most favoured *materials* during the first century of memory research strongly resembled the kind of material that had become prominent in post-Enlightenment mnemonics. I have just mentioned that in the history of mnemonics we can observe a significant break around the 17th century when the old preoccupation with visual imagery is replaced by a new focus on verbal elements and the associative links between them. When memory research made its appearance in the late 19th century it showed the same preference for verbal or quasi-verbal content over imagery that had become common in modern mnemonic systems and the same tendency to present this content in the form of lists of discrete items to be memorized.

It seems the relationship between psychology's long past and short history may be more complicated than Ebbinghaus had imagined it would be. In the case of memory, which was after all the topic on which his reputation was founded, there are inconvenient facts which make one skeptical about his simple scheme. There are continuities which bridge the break between ancient past and recent history, and there are previous historical breaks which, from a broader perspective, may be as important as the break in Ebbinghaus' lifetime.

My point is that the change from long past to short history involved more than the adoption of empirical methods. I do not want to question the importance of that adoption, but taking a longer term view enables one to see that the more recent period has links to the past that are rendered invisible by insisting on a complete break. Any exclusive focus on the advent of experimentation also obscures *other* differences between the more recent and the more remote past that deserve at least equal attention. I don't really have time to go into this, but I would like at least to point to one of these other differences to give you an indication of what might be involved.

One profound change began at roughly the same time as the break between psychology's long past and short history, that is to say, the latter part of the 19th century. When one has been following memory discourse over the centuries one becomes aware of an unmistakable change of focus at that point. Within a relatively few years there is a surge of interest in the negative aspects of memory, forgetting and memory pathology. In the past, there had been plenty of interest in memory but almost no interest in forgetting. The conviction that to understand memory one must pay attention to its failures and malfunctions is specifically modern. So when psychologists began to follow Ebbinghaus in studying memory by analyzing forgetting they were being more revolutionary than they perhaps realized. The more general fascination with memory pathology that starts in the 19th century and gathers momentum in the 20th is absolutely distinctive for the modern period.

Where does all this leave the distinction between long past and short history? Not altogether in the dust, because in many respects things did take a radically new turn around the time that modern

psychology made its appearance. But this was not the beginning of history any more than 1990 was the end of history, as was once claimed. Ebbinghaus may have been a bold scientific innovator but history was not his strong point. He thought the history of modern psychology would become a story of cumulative progress, where facts would put an end to a long past of conflicting speculations. Well, that is not quite what happened. If anything, the switch to empirical methods increased controversy. Experimental research had too many unrecognized ties to the past and to the broader historical context to provide the answers that would make interpretive controversy obsolete.

At this point I can reveal that Ebbinghaus did not invent the distinction between psychology's past and its history, he changed its meaning. If we turn to what would have been a standard text in Ebbinghaus' environment, Max Dessoir's *History of Modern German Psychology*, republished six years before Ebbinghaus' book (Dessoir, 1902), we already find the distinction between a past and a history, though it has a different significance. Ancient Indian psychological thought, according to Dessoir, forms part of modern psychology's past, but it is not part of its history because there is no historical link between the two. History implies a continuous connection between past and present:

A historical connection exists when the past continues to affect the present (Dessoir, 1902).

Dessoir's text dealt mainly with philosophical psychology, a topic that Ebbinghaus thought was no longer relevant to what experimentalists like himself were doing. By introducing the contrast between psychology's *long* past and *short* history Ebbinghaus was emphasizing the break that had recently occurred within western psychology, whereas Dessoir had focused on the continuity. A century later, it may at last be possible to appreciate both points of view.

NOTE

Keynote address, Cheiron (International Society for History of the Social and Behavioral Sciences) meeting in Toronto, June 2008.

REFERENCES

- Danziger, K. (1997). *Naming the mind: How psychology found its language*. London: Sage.
- Danziger, K. (2008). *Marking the mind: A history of memory*. Cambridge: Cambridge University Press.
- Dessoir, M. (1902). *Geschichte der neueren deutschen Psychologie*. Berlin: Duncker.
- Ebbinghaus, H. (1908). *Psychology: An elementary textbook*. Boston: Heath.
- James, W. (1890) *Principles of psychology*. New York: Holt.

Koriat, A. and Goldsmith, M. (1996). Memory metaphors and the real-life/laboratory controversy: Correspondence versus storehouse conceptions of memory. *Behavioral and Brain Sciences*, 19, 167-228.

Plato (1963). *The collected dialogues of Plato*, (E. Hamilton and H. Cairns, eds.), pp. 1118/19. Princeton University Press.

Richards, G. (1987). Of what is history of psychology a history? *British Journal of the History of Science*, 20, 201-211.

Roediger III, H.L. (1980). Memory metaphors in cognitive psychology. *Memory & Cognition*, 8, 231-246.

Romberch, J. (1533). *Congestorium artificiosae memoriae*.
<http://www.gnosis.art.pl/iluminatornia/mysterion/romberch04.htm>

Smith, R. (1988). Does the history of psychology have a subject? *History of the Human Sciences*, 1, 147-177.

Yates, F. A. (1966). *The art of memory*. Chicago: University of Chicago Press.