



Centre for Evidence Based Medicine,
Nuffield Department of Primary Care
Health Sciences, University of Oxford,
Oxford

Twitter @JKAranson

Cite this as: *BMJ* 2022;376:e804

<http://dx.doi.org/10.1136/bmj.o804>

Published: 25 March 2022

When I use a word . . . Memory, semantic and episodic

Although the Oslerian aphorism “Listen to the patient; he is telling you the diagnosis” is widely quoted as a truism, it is not the whole story. The patient’s tale is almost inevitably incomplete and needs to be augmented by skilful questioning. The complete diagnosis, which should be a thorough account of the condition, its causes and contributory factors, often comes only after the further additions of observation, examination, and investigations. In some cases the patient is unable to tell the tale properly or even at all. While in most cases the patient’s autobiographical search to remember the past relies primarily on voluntary episodic memory, in others, such as neurodegenerative disorders and cases of toxicological neural damage, episodic memory, voluntary or involuntary, may be impaired.

Jeffrey K Aronson

Seeking the diagnosis

“Listen to the patient; he is telling you the diagnosis” is an aphorism that has been attributed to William Osler, but whose Oslerian provenance, I have suggested, is doubtful.¹ My view about this is partly conditioned by the fact that Osler’s clinical style was to concentrate more on observation and examination than on the patient’s tale, important though that is. I have also suggested that patients do not generally volunteer all the relevant facts in the case, spontaneously recounting only the bare bones of the problem, and that careful, sensitive history taking is necessary to flesh out all the details, turning the tale into a narrative that will lead to at least a differential diagnosis, which can then be supplemented by observation, examination, and relevant investigations.²

The meaning of the word “diagnosis,” literally thorough knowledge, is also fluid. “Diabetes,” for example, is an incomplete diagnosis. At the simplest level, one has to specify whether it is diabetes insipidus or diabetes mellitus. If the latter, one needs to differentiate at least between types 1 and 2, not to mention uncommon variants, such as the several subtypes of maturity-onset diabetes of the young (MODY).³ In cases of type 2 diabetes mellitus one might also want to specify, as part of the diagnosis, whether insulin is needed.

Some “diagnoses” are no more than labels. There is an apocryphal story (at least, I hope it’s apocryphal) about a consultant doing a whirlwind ward round, who on asking for the diagnosis in a particular case is told “PUO” (“pyrexia of unknown origin”). “Well done,” he says, and moves on to the next patient.

Consider also the patient with delirium or dementia. The nature of the problem may be immediately clear from the way in which the patient takes part in the conversation, but it may be hard to distinguish between the two conditions, acute and chronic, and to elucidate the underlying cause and any other important features simply from what the patient says and without seeking information from others.

Remembrance of things past

There is a Proustian element in this.

When in 1922 C K Scott Moncrieff began to translate Proust’s epic novel *À la recherche du temps perdu*, the first part of which, *Du côté de chez Swann*, had been published in 1913, he translated the title as *Remembrance of Things Past*. When Terence Kilmartin revised Scott Moncrieff’s version in 1981, correcting errors and relying on a 1954 French edition, he retained the title. Only in 1992, when D J Enright’s further revision appeared, based on the Pléiade edition of the French text (1987–9), did publishers start to use the more accurate title, *In Search of Lost Time*, which is now standard.

When Proust wrote to Scott Moncrieff, just a month before he died on 18 November 1922, he praised the translation but averred that the translator had confused “le temps perdu” with “le temps retrouvé” (which is also the title of the last volume in the sequence).⁴ Scott Moncrieff’s translation is a literary one. It comes from Shakespeare’s Sonnet 30:

“When to the sessions of sweet silent thought I summon up remembrance of things past, I sigh the lack of many a thing I sought, And with old woes new wail my dear time’s waste. . . .”

But Proust distinguished voluntary and involuntary memory. Remembrance of things past he considered to be an expression of the former, obtained by willful recall. The latter, often stimulated by tastes and odours, is what his protagonist Marcel experiences, for example, when the taste of Aunt Léonie’s madeleine, dipped in tea or a tisane, brings past events flooding back to his mind. That is why Scott Moncrieff’s translation misses the point.

Today psychologists distinguish two types of autobiographical memory, semantic and episodic.⁵ “Semantic” comes from the Greek adjective σηματικός, significant, which in turn comes from the verb σημαίνειν to show or signify, from the noun σῆμα, a sign. Semantic memory deals with meanings and concepts and reflects the ability to recall things one knows but has not oneself experienced—factual information, such as the lines in Shakespeare’s Sonnet 30. Episodic memory, on the other hand, is the ability to recall specific episodes from one’s own experience.

The hippocampus plays a role in processing episodic memory and it also contains a large number of

olfactory receptors. It has therefore been suggested that Proust's description of involuntary recall secondary to olfactory sensations prefigures episodic memory.⁶ Olfactory stimulation of memory is known as the Proust phenomenon, which can also be engendered by stimulation of the amygdala.⁷ In neurodegenerative diseases olfactory function is markedly reduced, as is the patient's ability to generate not only voluntary but also involuntary memories.

In most cases the patient's tale, an effort of autobiographical memory, is a Shakespearean attempt to conjure up remembrance of things past, primarily using episodic memory. The more recent the events the more cogent the account is likely to be, but not infrequently a patient will date the onset of a condition to another memorable event, such as the death of a much loved pet, which may not accurately reflect the history. In contrast, in the case of the patient with Alzheimer's disease and other neurodegenerative disorders, and in those with other causes of hippocampal damage,⁸⁻¹⁰ insofar as memory is possible the effort might be better regarded as largely Proustian. Indeed, olfactory stimuli may improve autobiographical recall in patients with mild Alzheimer's disease.¹¹

Competing interests: None declared.

Provenance and peer review: Not commissioned; not peer reviewed.

- 1 Aronson JK. When I use a word. . . . Listening to the patient. *BMJ* 2022;376:o646. doi: 10.1136/bmj.o646. pmid: 35277383
- 2 Aronson JK. When I use a word. . . . Diagnosis. *BMJ* 2022;376:o747. doi: 10.1136/bmj.o747. pmid: 35314432
- 3 Delvecchio M, Pastore C, Giordano P. Treatment options for MODY patients: a systematic review of literature. *Diabetes Ther* 2020;11:1667-85. doi: 10.1007/s13300-020-00864-4 pmid: 32583173
- 4 Proust M. *Letter to Scott Moncrieff, 10 October 1922. Quoted in Painter GD. Marcel Proust: A Biography.* Chatto & Windus, 1959.
- 5 Clayton NS, Salwiczek LH, Dickinson A. Episodic memory. *Curr Biol* 2007;17:R189-91. doi: 10.1016/j.cub.2007.01.011 pmid: 17371752
- 6 Baudry M. Did Proust predict the existence of episodic memory? *Neurobiol Learn Mem* 2020;171:107191. doi: 10.1016/j.nlm.2020.107191 pmid: 32084557
- 7 Bartolomei F, Lagarde S, Médina Villalon S, McGonigal A, Benar CG. The "Proust phenomenon": Odor-evoked autobiographical memories triggered by direct amygdala stimulation in human. *Cortex* 2017;90:173-5. doi: 10.1016/j.cortex.2016.12.005 pmid: 28065428
- 8 Parrott AC, Lees A, Garnham NJ, Jones M, Wesnes K. Cognitive performance in recreational users of MDMA of 'ecstasy': evidence for memory deficits. *J Psychopharmacol* 1998;12:79-83. doi: 10.1177/026988119801200110 pmid: 9584971
- 9 Buss C, Wolf OT, Witt J, Hellhammer DH. Autobiographic memory impairment following acute cortisol administration. *Psychoneuroendocrinology* 2004;29:1093-6. doi: 10.1016/j.psyneuen.2003.09.006 pmid: 15219661
- 10 Christie L-A, Acharya MM, Parihar VK, Nguyen A, Martirosian V, Limoli CL. Impaired cognitive function and hippocampal neurogenesis following cancer chemotherapy. *Clin Cancer Res* 2012;18:1954-65. doi: 10.1158/1078-0432.CCR-11-2000 pmid: 22338017
- 11 El Haj M. Odor-evoked autobiographical memory in Alzheimer's disease? *Arch Clin Neuropsychol* 2022;37:513-20. doi: 10.1093/arclin/acab074 pmid: 34491308