

The strange sensation of déjà vu: not so strange in temporal lobe epilepsy

Chris J A Moulin

He who is faithfully analysing many different cases of epilepsy is doing far more than studying epilepsy.
Hughlings Jackson

Déjà vu is an infrequent and nebulous mental experience—a mismatch between subjective perceptions of memory and retrieval itself.¹ Relative to other memory errors and illusions, it has not received much attention in scientific works. However, one area where déjà vu has been studied consistently is temporal lobe epilepsy (TLE)² and in the spirit of Hughlings Jackson, Warren-Gash and Zeman³ make an important contribution to this field.

There has been a constant problem with the TLE literature and our understanding of déjà vu more generally. Despite the fact that in other domains we have learned a great deal about cognition through the study of epilepsy—I would say cognitive neuropsychology is indebted to it—there has always been the idea that déjà vu in TLE is *abnormal*. The relationship between healthy forms of the experience and its nature in TLE has not been clear and it is this important issue which Warren-Gash and Zeman address.

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Using a detailed inventory, Warren-Gash and Zeman³ find *prima facie* evidence that there is a continuum between healthy déjà vu and the déjà vu experiences in TLE — and that the two forms are phenomenologically the same. Warren-Gash and Zeman³ show that where TLE patients and controls do differ is in the phenomena which occur alongside the déjà vu. This is because the minor glitch responsible for déjà vu in healthy experiences may well discharge further and with more intensity in the epileptic brain than it does in the healthy brain.

The findings are of clinical relevance. There is nothing diagnostic in déjà vu *per se*, but one needs to look at triggers and associated phenomena (see⁴ for more on the clinical interpretation of déjà vu). Future research should consider whether there is anything distinctive about déjà vu in other populations thought to experience it more frequently: anxiety and dissociative disorders, for instance.

Recent laboratory research on healthy people has suggested that déjà vu is caused by feelings of familiarity generated by situations which appear to be familiar but are known not to be.⁵ But it is unclear whether these sorts of experience in such dry tests of memory reach the evocative heights of the ‘real’ déjà vu experience.¹

In contrast, Warren-Gash and Zeman³ point to people with and without epilepsy having déjà vu of similar intensity and phenomenology. It now might be reasonable to suggest that there is the same underlying cause of déjà vu in people with and without epilepsy: déjà vu is a somewhat unpredictable neural event, a quirk of biology.

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