

Recovered and false memories



DANIEL B. WRIGHT, JAMES OST and CHRISTOPHER C. FRENCH look at how the evidence has developed since the Society's working party report.

IN 1995 the recovered memory debate was near its most vociferous height.

Hundreds of people were recovering memories of childhood sexual abuse (CSA), sometimes in therapies where it was believed that repressed or dissociated memories had to be recovered in order for the person to 'heal'. Many of the people who recovered these memories confronted the person whom they remembered abusing them, and some cases ended up in the criminal courts with successful prosecutions.

However, there were those who questioned whether all such memories should be accepted as accurate reflections of real events (e.g. Loftus, 1993). It was argued that some, perhaps even most, of such recovered memories might in fact be false memories produced, at least in part, by the therapists themselves. In response to such concerns, bodies such as the American Psychiatric Association and the American Psychological Association issued guidance to their members regarding the potential dangers of unintentionally implanting false memories in patients.

The argument is critical for the science of memory, but also for thousands of people who have either recovered memories or have been accused of abuse on the basis of such memories, not to mention the families and friends of all concerned. Against this backdrop, the British Psychological Society's Working Party on Recovered Memories (WPRM) published their report, recommendations,

and the results of a survey they conducted with BPS accredited practitioners (Andrews, Bekerian *et al.*, 1995; Andrews, Morton *et al.*, 1995).

However, in 1995 there was little direct experimental evidence of the impact of so-called 'memory recovery' techniques and the relative ease with which some false reports can be created. Much of the evidence at that time was based on memory studies not specifically designed to address the recovered memory debate. Before 1995 there was much literature showing that memories could be distorted (by misinformation, by stereotypes, and so on), but only a couple of studies on the creation of false memories for entire events (e.g. 'the mousetrap study' by Ceci *et al.*, 1994, and 'lost in the mall', cited in Loftus, 1993) and a small literature on errors in autobiographical memory (e.g. Conway, 1990). There were also some case studies of memories for bizarre events (biologically impossible events, alien abduction, widespread Satanic ritual abuse).

Since the publication of the WPRM, there have been significant efforts directed towards designing studies that are more relevant to the recovered memory debate, and more emphasis within some case studies on investigating firstly the veridicality of the memories and, secondly, whether there had indeed been a period of forgetting. We focus on some of this research conducted since the publication of the WPRM. Owing to length constraints, this is a selective review both in relation to the topics chosen and the studies cited. This selectivity is guided by our own beliefs, which are not idiosyncratic to us; many people on both so-called sides of the recovered memory debate also share these views. We believe:

- that what appear to be newly remembered (i.e. recovered) memories

of past trauma are sometimes accurate, sometimes inaccurate, and sometimes a mixture of accuracy and inaccuracy;

- that much of what is recalled cannot be confirmed or disconfirmed;
- that, because of these two beliefs, reports of past trauma based on such recovered memories are not reliable enough to be the sole basis for legal decisions.

Our review covers four areas: adding entire events into a person's autobiography; forgetting memories; remembering forgetting and forgetting remembering; and using case studies. Further, we focus on research with non-clinical (usually student) populations. We do not cover the large trauma/PTSD literature (for thorough reviews see Brewin, 2003; McNally, 2003).

False reports of entire events

Before 1995 there were a couple of studies showing that false events could be added to people's memories. With the eventual publication of the 'lost in the mall' study (Loftus & Pickrell, 1995), several laboratories began showing that, with a little encouragement (see Ost, 2006), it was possible for participants to come to report relatively unusual events (e.g. spilling a punchbowl at a wedding: Hyman *et al.*, 1995; putting slime in a teacher's desk: Lindsay *et al.*, 2004), events occurring in the first few days of life (Spanos *et al.*, 1999), medical procedures that never happened (Mazzoni & Memon, 2003), and negatively charged events (e.g. being attacked by a dog: Porter *et al.*, 1999). This even occurs with interviewers who are trained in appropriate and non-leading interview techniques (Ost *et al.*, 2005). It is easier to implant a memory for an event if the person believes that the event is physically possible and also likely

WEBLINKS

Recovered Memory Project: www.brown.edu/Departments/Taubman_Center/Recovmem
British False Memory Society: www.bfms.org.uk
Royal College of Psychiatry recommendations: www.fmsfonline.org/RoyalCollege.html

to happen (Pezdek *et al.*, in press; Scoboria *et al.*, 2004). Of course, laboratory studies are limited: within ethical constraints, making somebody think that they were attacked by a dog as a child (Porter *et al.*, 1999) may be about as traumatic an event as can be added. This is an important point and is a necessary limitation of laboratory tasks. However, the case studies we discuss later provide strong evidence that it is indeed possible to implant false memories of extremely traumatic events.

Many researchers have also investigated whether people differ in how susceptible they are to such false memories (Read & Winograd, 1998). One of the most researched individual difference measures in this area is dissociative tendencies, or having difficulties integrating thoughts, memories, images, and so on. In lay terms, this is 'spaciness' and is closely related to cognitive failures (Wright & Osborne, 2005). People who report much dissociation are likely to be the most susceptible to memory distortions in experiments (e.g. Ost *et al.*, 2005; Wright & Livingston-Raper, 2001). Clearly, further research is needed on the link between dissociation and false reporting, especially given that a tendency to dissociate is often associated with a history of abuse (Brown *et al.*, 1998).

Forgetting memories for events

The term 'recovered memory' implies that, at some point, the memory must have become inaccessible to conscious awareness (as opposed to being a 'continuous memory'). Although this

terminology is not ideal, it is clear that people often fail to report important events, for example known hospitalisations (Loftus, 1993). Several surveys of people with documented childhood sexual abuse have found that some of the people fail to report this abuse. The most recent of these surveys, by Goodman *et al.* (2003), found a non-disclosure rate of around 19 per cent. The authors suggested that a lack of willingness to disclose, as opposed to a lack of memory, was the most parsimonious explanation for much of the non-disclosure, but that some of the cases may have arisen through forgetting (see also McNally, 2003, for a comprehensive review). Their data do not support the claim that there is some special memory mechanism responsible for forgetting about these traumas.

However, prior to 1995, two special mechanisms were generally put forward to explain the inaccessibility of memories for some events: repression and dissociation. Repression has historically been a difficult concept to define, and several incompatible definitions exist. This led to strong criticism of the concept and of the evidence for it (Holmes, 1990). As a result, recent investigations have focused on more precise definitions of the concept, akin to motivated forgetting (Brewin & Andrews, 1998). As for dissociation, the dissociative amnesia model (Brown *et al.*, 1998) suggests that, rather than people consciously or unconsciously 'repressing' memories, individuals learn to deal with traumatic events by dissociating from them.

There is less laboratory work on

forgetting memories (i.e. factors that may reduce levels of reporting for witnessed events) than there is on creating memories (i.e. factors that may lead individuals to report events that did not occur). The two most relevant procedures are the directed forgetting task and retrieval-induced forgetting, which can be related to the concepts of repression and dissociation, respectively (see papers in Wessel & Wright, 2004, for studies using both of these procedures). We focus on retrieval-induced forgetting.

Anderson and colleagues (e.g. Anderson & Spellman, 1995) have shown that re-presenting some associated words from lists of studied words decreases the likelihood that other studied words will be reported. They call this retrieval-induced forgetting. Like studies (e.g. Roediger & McDermott, 1995) showing that people falsely report semantically related words, the applicability of these studies to memory for events may be limited (Freyd & Gleaves, 1996), but important extensions have been made. For example, Barnier, Hung *et al.* (2004) found evidence of retrieval-induced forgetting for positive, negative and neutral autobiographical events. Wright *et al.* (2001, 2005) showed that re-presenting stories without certain critical scenes lowered the likelihood that these critical scenes were recalled. They argued that this situation is analogous to the situation where a perpetrator acts as if the abuse has not occurred and that such behaviour could make memories of the abuse less accessible.

Most of the studies examining individual differences in forgetting have examined what is called repressor personality types. These are people who state they are not anxious but show some of the signs of being anxious (Myers, 2000). Some of this research, for example studies showing that repressors are less likely to remember negative autobiographical memories (Davis, 1987), was conducted before 1995 and influenced the WPRM. Several laboratories are now looking at how repressors differ on different laboratory tasks (Barnier, Levin *et al.*, 2004; Myers & Derakshan, 2004).

While the results are complex, it is clear that repressive coping style is related to the failure to report negative stimuli in many circumstances. Further research is needed on the link between the repressive coping style and non-reporting to gain a greater understanding of the processes involved.

Laboratory studies of memory are limited by ethical considerations – making up a childhood dog attack may be about as traumatic an event as can be added

However, as we will now show, conducting research assessing the extent of non-reporting is difficult, as people generally lack a reliable metacognitive awareness regarding their memory.

Remembering forgetting and forgetting remembering

Was there any moment today when you forgot what you had for breakfast? This is not a philosophical conundrum, but an important question about people's ability to make metacognitive judgments about their own memories.

There are two aspects of these metacognitive judgments that are important for the recovered memory debate. The first aspect relates to a question some mental health professionals asked in order to help them determine whether a client might have experienced trauma as a child. They would ask if there were any periods during the client's life for which they had few or no memories (i.e. remembering forgetting). If a client reported such gaps in their memory this could suggest, to some, that some traumatic event had caused these periods of amnesia. The use of techniques intended to uncover these supposed 'hidden' memories might then appear justified.

However, Belli *et al.* (1998) wondered whether the way this question was asked could increase the likelihood that people report memory gaps. They found that participants who were asked to recall 12 childhood memories (a difficult task) subsequently rated their overall childhood memory as being worse than participants who were only asked to recall four such events. Although the responses are likely to be based in part on people's actual autobiographical memory, they are malleable (see also Brewin & Stokou, 2002). Thus, responses to this question are liable to bias and are an unreliable way of showing whether an individual really does have atypical gaps in memory compared

with the general population.

The second aspect of these metacognitive judgments is that people often forget that they have previously remembered an event. Merckelbach *et al.* (2006) have conducted one of the most important of these studies for the recovered memory debate. They asked people to report vivid memories for some childhood events. After either a one-hour or a two-day delay, they were asked if they had recently thought about any of these events and several others. Despite recalling the events either an hour or a couple of days before, many participants reported not having thought about the events for years. Critically, Merckelbach *et al.* compared people reporting continuous memories of CSA with those who reported recovered

'Was there any moment today when you forgot what you had for breakfast?'

memories of CSA. The people reporting that they had recovered memories of CSA were more likely to forget remembering the recent events in their laboratory tasks. This finding has important implications. Could it be that these people had recalled the CSA continuously (or at least fairly often), but just forgot remembering it?

Case studies

Different types of case studies have been used to illustrate the different processes described above. Illustrating false memories is simple. From biologically impossible events (Wagenaar, 1996) to alien abduction claims (e.g. French, 2003), people clearly come to believe in events that never occurred. Some well-documented case histories exist, like retractor cases against therapists (e.g. Bennett Braun, Roberta Sachs – see Bikel & Dretzin, 1995). These show that, without the constraints of psychology ethics committees, it is possible to create memories for truly traumatic and abusive events that did not occur. The number of these case histories has increased dramatically since 1995.

For methodological reasons, case studies demonstrating recovered memories of real events are more difficult to find. While a memory for space abduction can be taken as *prima facie* evidence of a false memory, to show a true recovered memory

it is necessary to show that (a) the event occurred, (b) the person could not remember the event for a period subsequently, and (c) the information recovered could not have been gained from other sources (Schooler *et al.*, 1997).

The largest archive of cases consists of, at the time of writing, 101 cases of 'corroborated recovered memories' (Cheit, 2005). To be included, the case must have 'strong corroboration', but this can simply mean testimony from other witnesses (which can be problematic; see Garven *et al.*, 1998). Cases can also be included on the basis of 'corroboration of significant circumstantial evidence'. In reading through the cases, it appears being found guilty in court is another form of corroboration. Of course, both inclusion in Cheit's archive and the court decision should be based on other evidence. Critical and detailed scrutiny of many of these cases can lead to a sceptical view of the accuracy of many of these memories. Further, Cheit does not list not remembering the event, and evidence for this, as a criterion. This does not mean that the all the cases on this list are not examples of true recovered memories, only that the requirements to be in this archive are not as stringent as, for example, in Schooler *et al.* (1997). There is a smaller archive, but one that we feel takes more care to make sure, for example, that there is a period of non-remembering.

Still, even surpassing Schooler's criteria does not necessarily mean that the memory is a true recovered memory. A case discussed by both Cheit and Schooler, and reported in Corwin and Olafson (1997), appeared to show a water-tight case of a true recovered memory. Corwin and Olafson provided convincing evidence of the abuse, and provided no reason to doubt that it took place. However, when Loftus and Guyer (2002a, 2002b) looked more closely at the case it was clear that Corwin and Olafson had left out information that would have been useful to most readers to decide how water-tight this case was. It is worth reading the details (which are all available on the web) to make your own mind up about this fascinating case. It is important to remember that this is just a case study. If you conclude that this case is not a water-tight example of a true recovered memory, this does not mean that some recovered memories are not true.

How will history judge us?

DISCUSS AND DEBATE

What evidence is necessary to show a true recovered memory?

How should the criminal courts treat recovered memories?

What role has the media played in the recovered memory movement over the past 20 years?

Have your say on these or other issues this article raises. E-mail 'Letters' on psychologist@bps.org.uk or contribute to our forum via www.thepsychologist.org.uk.

Since 1995 and the BPS working party report there has been much research on reports of memories for events that have allegedly been recovered after a long period of non-remembering. The belief that some of these claims are based on events that did occur, some on events that did not occur, and some a combination of the two was held by us then, and research over the past decade has provided much evidence to support this view. We now know events can be implanted into a person's autobiography, that some people are more suggestible than others, that particular techniques increase the likelihoods memories can be implanted, but also that most people will not believe bizarre memories, at least after the amount of persuasion applied in typical laboratory studies. We also know more about forgetting.

While research over the last few decades has shown that presenting contradictory evidence impairs memory, recent work by Anderson and others shows that presenting related material can also impair memory. Similarly, while 10 years ago there was relatively little work on meta-memory judgements, a vast amount has been conducted recently. We know not to take at face value statements like: 'I have not thought about that for years', and work my Merckelbach and colleagues suggests those people with recovered memories may have particularly unreliable meta-memories. In summary, 10 years of data has not altered our opinions, but has solidified them with scientific evidence. Here we only scratch the surfaces of large and sometimes controversial areas of research.

Finally, it is important to consider the wider implications of the recovered memory debate. Child sexual abuse is a large societal problem, and children often do not disclose abuse unless specifically asked (London *et al.*, 2005). The debate about recovered memories should not be used to deny these facts. What is important for the discipline is how it has used science to inform this debate.

■ Daniel B. Wright is at the University of Sussex. E-mail: danw@sussex.ac.uk.

■ James Ost is at the University of Portsmouth. E-mail: james.ost@port.ac.uk.

■ Christopher C. French is at Goldsmiths College, University of London. E-mail: psa01ccf@gold.ac.uk.

References

- Anderson, M.C. & Spellman, B.A. (1995). On the status of inhibitory mechanisms in cognition. *Psychological Review*, 102, 68–100.
- Andrews, B., Bekirian, D., Brewin, C. *et al.* (1995). Recovered memories: The report of the working party of the British Psychological Society. In K. Pezdek & W.P. Banks (Eds.) *The recovered memory/false memory debate* (pp.373–392). San Diego, CA: Academic Press.
- Andrews, B., Morton, J., Bekirian, D.A. *et al.* (1995). The recovery of memories in clinical practice. *The Psychologist*, 8, 209–214.
- Barrier, A., Hung, L. & Conway, M.A. (2004). Retrieval-induced forgetting of emotional and unemotional autobiographical memories. *Cognition and Emotion*, 18, 457–477.
- Barrier, A., Levin, K. & Maher, A. (2004). Suppressing thoughts of past events: Are repressive copers good suppressors? *Cognition and Emotion*, 18, 513–531.
- Belli, R.F., Winkielman, P., Read, J.D., Schwarz, N. & Lynn, S.J. (1998). Recalling more childhood events leads to judgments of poorer memory. *Psychonomic Bulletin and Review*, 5, 318–323.
- Bikel, O. & Dretzin, R. (Producers). (1995). The search for Satan [Television series edition]. In *Frontline*. Alexandria, VA: PBS.
- Brewin, C.R. (2003). *Posttraumatic stress disorder: Malady or myth?* New Haven, CT: Yale University Press.
- Brewin, C.R. & Andrews, B. (1998). Recovered memories of trauma. *Clinical Psychology Review*, 18, 949–970.
- Brewin, C.R. & Stokou, L. (2002). Validating reports of poor childhood memory. *Applied Cognitive Psychology*, 16, 509–514.
- Brown, D., Schefflin, A.W. & Hammond, D.C. (1998). *Memory, trauma treatment, and the law*. New York: Norton.
- Ceci, S.J., Huffman, M.L.C., Smith, E. & Loftus, E.F. (1994). Repeatedly thinking about a non-event. *Consciousness & Cognition*, 3, 388–407.
- Cheit, R.E. (2005). The archive: 101 corroborated cases of recovered memory. Retrieved 6 August 2005 from tinyurl.com/42yj7
- Conway, M.A. (1990). *Autobiographical memory*. Milton Keynes: Open University Press.
- Corwin, D. & Olafson, E. (1997). Videotaped discovery of a reportedly unrecalable memory of child sexual abuse. *Child Maltreatment*, 2, 91–112.
- Davis, P.J. (1987). Repression and the inaccessibility of affective memories. *Journal of Personality and Social Psychology*, 53, 585–593.
- French, C.C. (2003). Fantastic memories. *Journal of Consciousness Studies*, 10, 153–174.
- Freyd, J.J. & Gleaves, D.H. (1996). 'Remembering' words not presented in lists. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 22, 811–813.
- Garven, S., Wood, J.M., Malpass, R.S. & Shaw, J.S. (1998). More than suggestion. *Journal of Applied Psychology*, 83, 347–359.
- Goodman, G.S., Ghetti, S., Quas, J.A. *et al.* (2003). A prospective study of memory for child sexual abuse. *Psychological Science*, 14, 113–118.
- Holmes, D.S. (1990). The evidence for repression. In J.L. Singer (Ed.) *Repression and dissociation* (pp.85–102). Chicago: Chicago University Press.
- Hyman, I.E., Husband, T.H. & Billings, F.J. (1995). False memories of childhood experiences. *Applied Cognitive Psychology*, 9, 181–197.
- Lindsay, D.S., Hagen, L., Read, J.D., Wade, K.A. & Garry, M. (2004). True photographs and false memories. *Psychological Science*, 15, 149–154.
- Loftus, E.F. (1993). The reality of repressed memories. *American Psychologist*, 48, 518–537.
- Loftus, E.F. & Guyer, M. (2002a) Who abused Jane Doe? (Part I) *Skeptical Inquirer*, 26, 24–32.
- Loftus, E.F. & Guyer, M. J. (2002b) Who abusing Jane Doe? (Part II). *Skeptical Inquirer*, 26(July/August), 37–40, 44.
- Loftus, E.F. & Pickrell, J.E. (1995). The formation of false memories. *Psychiatric Annals*, 25, 720–725.
- London, K., Bruck, M., Ceci, S.J. & Shuman, D.W. (2005). Disclosure of child sexual abuse: What does the research tell us about the ways that children tell? *Psychology, Public Policy, and Law*, 11, 194–226.
- Mazzoni, G. & Memon, A. (2003). Imagination can create false autobiographical memories. *Psychological Science*, 14, 186–188.
- McNally, R.J. (2003). *Remembering trauma*. Cambridge, MA: Harvard University Press.
- Merckelbach, H., Smeets, T., Geraerts, E. *et al.* (2006). I haven't thought about this for years! Dating recent recalls of vivid memories. *Applied Cognitive Psychology*, 20, 33–42.
- Myers, L.B. (2000). Identifying repressors. *Psychology and Health*, 15, 205–214.
- Myers, L.B. & Derakshan, N. (2004). To forget or not to forget. *Cognition and Emotion*, 18, 495–511.
- Ost, J. (2006). Recovered memories. In T. Williamson (Ed.) *Investigative interviewing* (pp.259–291). Cullompton: Willan.
- Ost, J., Foster, S., Costall, A. & Bull, R. (2005). False reports of childhood events in appropriate interviews. *Memory*, 13, 700–710.
- Pezdek, K., Blandon-Gitlin, I., Lam, S., Hart, R.E. & Schooler, J. (in press). Is knowing believing? *Memory & Cognition*.
- Porter, S., Yuille, J.C. & Lehman, D.R. (1999). The nature of real, implanted, and fabricated memories for emotional childhood events. *Law and Human Behavior*, 23, 517–537.
- Read, J.D. & Winograd, E. (1998). Individual differences and memory distortion: Introduction. *Applied Cognitive Psychology*, 12, S1–S4.
- Roediger, H.L. & McDermott, K.B. (1995). Creating false memories. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 21, 803–814.
- Schooler, J.V., Ambadar, A. & Bendiksen, M. (1997). A cognitive corroborative case study approach for investigating discovered memories of sexual abuse. In J.D. Read & D.S. Lindsay (Eds.) *Recollections of trauma: Scientific research and clinical practices* (pp.379–388). New York: Plenum.
- Scoboria, A., Mazzoni, G., Kirsch, I. & Relyea, M. (2004). Plausibility and belief in autobiographical memory. *Applied Cognitive Psychology*, 18, 791–807.
- Spanos, N.P., Burgess, C.A., Burgess, M.F., Samuels, C. & Blois, W.O. (1999). Creating false memories of infancy with hypnotic and non-hypnotic procedures. *Applied Cognitive Psychology*, 13, 201–218.
- Wagenaar, W.A. (1996). Anchored narratives. In G.M. Davies *et al.* (Eds.) *Psychology, law and criminal justice* (pp.267–285). Berlin: Walter de Gruyter.
- Wessel, I. & Wright, D.B. (Eds.) (2004). *Emotional memory failures*. Hove: Psychology Press.
- Wright, D.B. & Livingston-Raper, D. (2001). Memory distortion and dissociation. *Journal of Trauma and Dissociation*, 3, 97–109.
- Wright, D.B., Loftus, E.F. & Hall, M. (2001). Now you see it: now you don't: Inhibiting recall and recognition of scenes. *Applied Cognitive Psychology*, 15, 471–485.
- Wright, D.B., Mathews, S.A. & Skagerberg, E.M. (2005). Social recognition memory: The effect of other people's responses for previously seen and unseen items. *Journal of Experimental Psychology: Applied*, 11, 200–209.
- Wright, D.B. & Osborne, J.E. (2005). Dissociation, cognitive failures, and working memory. *American Journal of Psychology*, 118, 103–113.