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## Suffering from reminiscences: exhumed memory, implicit memory, and the return of the repressed

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In one of his earliest psychoanalytic essays, 'Further remarks on the neuropsychoses of defence', Freud introduced the concept of 'the return of the repressed' (Freud 1896, p. 170) as a mechanism underlying neurotic symptoms. Discussing the nature and mechanisms of obsessional neurosis, he wrote (Freud, 1896, pp. 169–70):

[The illness] is characterized by the return of the repressed memories – that is, therefore, by the failure of the defence . . . The re-activated memories, however, and the self-reproaches formed from them never re-emerge into consciousness unchanged; what become conscious as obsessional ideas and affects, and take the place of the pathogenic memories so far as conscious life is concerned, are structures in the nature of a compromise between the repressed ideas and the repressing ones . . .

The notion of the return of the repressed did not apply just to obsessional neurosis, however; it was also implicated in hysteria and paranoia (Freud 1892–9; 1896), hysterical attacks (Freud 1909b, p. 111), psychical (secondary) impotence (Freud 1909c, p. 183), obsessions (Freud 1911b, p. 323) and other forms of mental illness. In Draft K on 'The neuroses of defense', enclosed with his 1896 New Year letter to Fliess, Freud wrote that 'The main differences between the various neuroses are shown in the way in which the repressed ideas return . . .' (Freud 1892–9, p. 223; see also Freud 1924, p. 183).

As psychoanalytic theory evolved, Freud made use of 'the return of the repressed' time and time again. The concept lies behind Breuer and Freud's pre-psychoanalytic assertion that 'hysterics suffer mainly from reminiscences' (Breuer and Freud 1893–5, p. 7). Freud saw in a young child's sleep ceremonials a representation of a repressed episode of sexual abuse by a servant-girl (Freud 1896, n.1, pp. 172–3). He attributed a child's interest in mathematics, and his puzzling inability to solve certain problems, to his repressed sexuality (Freud 1907, p. 36). He saw a parallel between the return of the repressed and forensic lie detection (Freud 1909a, p. 111). The concept comes up in the analysis of the Schreber case (Freud 1911a, p. 68), and in Freud's criticisms of Jung – who dared to substitute the return of complexes for the return of the repressed (Freud 1914, p. 30).

In his major statement on repression, Freud (1915, p. 154, italics original) wrote:

The mechanisms of a repression becomes accessible to us only by our deducing that mechanism from the *outcome* of the repression. Confining our observations to the effect of repression on the ideational portion of the representative, we discover that as a rule it creates a *substitutive formation* . . . Further, we know that repression leaves *symptoms* behind it. May we then suppose that the forming of substitutes and the forming of symptoms coincide, and, if this is so on the whole, is the mechanism of forming symptoms the same as that of repression? The general probability would seem to be that the two are widely different, and that it is not the repression itself which produces substitutive formations and symptoms, but that these latter are indications of a *return of the repressed* and owe their existence to quite other processes.

And he repeated the formulation in *Moses and monotheism*, the last of Freud's works to appear in his lifetime (Freud 1939, p. 127):

All the phenomena of the formation of symptoms may justly be described as the 'return of the repressed'.

#### THE RETURN OF THE REPRESSED, REDUX

More recently, Freud's essential ideas have been revived by proponents of the view that unconscious memories of childhood incest, sexual abuse, and other trauma underlie many forms of adult maladjustment and psychopathology (see, for example, Bass and Davis 1988, 1994; Blume 1990; Frederickson 1992; Herman 1992; Terr 1994; for a detailed analysis of the parallels between Freud's theories and later clinical practices, see Bowers 1995; Crews 1995; Kihlstrom 1994). The modern version of the trauma-memory argument (Kihlstrom 1995) runs approximately as follows:

- A child (or adult, for that matter), victimized by trauma, invokes repression or dissociation as a psychological defence mechanism;
- this repression or dissociation renders the child amnesic for the trauma itself;
- nevertheless, unconscious representations of the trauma are encoded and stored in memory:
- these unconscious memories affect conscious experience, thought, and action in the form of mental and behavioural symptoms such as intrusive images, somatic feelings, and dreams;
- such symptoms are signs that a traumatic event occurred, a representation of which
  is available in memory;
- restoration of conscious access to the traumatic memory is an important ingredient in psychotherapy for trauma victims;
- where attempts to exhume the traumatic memory do not succeed, it is important for the patient to acknowledge that the trauma occurred.

Thus, just as Freud asserted a century ago, many current practitioners

argue that unconscious memories express themselves as symptoms. Bass and Davis (1988) clearly have the trauma-memory argument and the return of the repressed in mind when they write in their best-selling self-help book, *The courage to heal*, of flashbacks, sense memories, and body memories as if they were representations of past episodes of abuse. Blume (1990), another popular self-help author, echoes this view:

'Hysterical symptoms'... represent unremembered trauma or unacknowledged feelings. Because there is a physical distraction, the survivor is at once protected and blocked... Her body remembers, but her mind does not. (p. 93)

Flashbacks are memories of past traumas. They may take the form of pictures, sounds, smells, body sensations, feelings or the lack of them (numbness). Many times there is no actual visual or auditory memory. (p. 102)

Frederickson (1992) offers an elaborate classification of five kinds of memory, four of which seem to reflect the return of the repressed (italics added):

Recall memory is a consciously retained memory of events accompanied by the sense of having experienced those events. It involves a series of related images organized around time and space into a logical sequence. (p. 88)

Imagistic memory is a memory that breaks through to the conscious mind in the form of imagery. This imagery is actually an incomplete picture of events that happened. The images are like a slide show. They pop up and are gone in an instant, often leaving the person wondering, 'Now, where did that come from?' . . When the images from repressed memories do come spilling out, they are persistent and uniquely compelling . . . Images that surface from the unconscious can be from any part of the abuse scene . . . Some aspects of the imagery may be exaggerated, even though each image represents an accurate slice of the abuse . . . The most confusing thing about the images is that they seem unrelated to what is happening at the present moment. They are, in fact, triggered by something in the environment that reminds their unconscious of the buried memory. The associated memory breaks through the unconscious as an image. (pp. 89-91).

Feeling memory is the memory of an emotional response to a particular situation. If the situation we are being triggered to remember is a repressed memory, we will have the feelings pertaining to the event without any conscious recall of the event itself. Feeling memory is often experienced as a flood of inexplicable emotion, particularly around abuse issues . . . A felt sense that something abusive has happened is a common form of a feeling memory. Some survivors will say, 'Yes, I think I was sexually abused, but it's just a gut feeling.' These clients are experiencing a feeling memory about being abused, even though at that moment they can recall nothing about their abuse. (p. 92)

Our bodies react to everything that happens to us, and body memory is the physical manifestation of a past incident. The more significant the incident is, the greater the impact on the body. Our physical bodies always remember sexual abuse, just as our feelings and our minds do . . . Like imagistic and feeling memory, body memory often emerges in conjunction with other forms of unconscious memory processes . . . The

body memories, alone or with other forms of memory, tell the story of the sexual abuse. (pp. 93-4)

Acting-out memory is a form of unconscious memory in which the forgotten incident is spontaneously acted out through some physical action. It involves either a verbal or bodily act in response to something that reminds one of the original episode . . . Perhaps the most common kind of acting-out memory is when survivors suddenly say something about their abuse that they had no intention of saying . . . Physically acting out part of an abuse memory is another manifestation of this kind of memory . . . Acting-out memory can occur even when you are asleep. A dream may contain a fragment of an abuse memory, triggering an acting-out memory . . . Similar reactions can also occur under the influence of drugs and alcohol.

Comparing conscious recollection with the return of the repressed, Frederickson (1992) further writes:

If an abuse memory does not materialize spontaneously, it rarely surfaces as a recall memory. The memory instead returns through the unconscious memory processes. Survivors will have a series of realizations about their abuse that they find clear and believable, but rarely do they have a sense of having lived what is being felt or pictured. They call it a memory because the pieces fit into their sense of reality, not because they actually now remember experiencing the abuse. What most people call spontaneous recall usually involves memories that have been denied, not repressed. (pp. 95–6)

In a recent television interview, Leore Terr, a prominent authority on childhood trauma (Terr 1991, 1994) argued that a particular patient's inability to eat whole bananas or pickles, white sauces, or mayonnaise was evidence that she had been sexually abused as a child, and justified therapeutic attempts to exhume memories of the abuse (interview on the Maury Povich Show, 25 May 1994). This vulgar Freudianism – even Freud admitted that sometimes a cigar is a cigar – epitomizes the present-day doctrine of the return of the repressed.

It is important to note that the return of the repressed is not just the stuff of popular-press books and tabloid television. Respected academic psychologists and psychiatrists have argued that cognitive and neuropsychological research on memory supports the idea that trauma can be repressed, and return as symptoms. For example, Terr (1991, 1994) has drawn a distinction between two types of trauma: type I refers to unanticipated, single events, while type II refers to exposure to multiple events and chronic conditions. According to Terr, victims of type I trauma typically have full, detailed memory of their experiences, while the memories of type II victims are impaired:

Children who experience type II traumas often forget. They may forget whole segments of childhood – from birth to age 9, for instance. (Terr 1991, p. 16)

If they are repeatedly traumatized, children can be expected to 'forget' much of what happened ... Holes in memory are created by defensive operations, such as the very common defense of repression. When repression lifts, the memories may come back

relatively intact. (Terr 1994, p. 30).

In her original paper on this subject, Terr (1991, p. 15) attributed the memory failures in type II trauma victims to psychological defences and coping operations such as denial, repression, and dissociation. In her later book, however, Terr (1994, pp.44ff.) draws on the distinction, now familiar in cognitive neuropsychology, between explicit and implicit memory (Schacter 1987, 1995). Explicit memory is conscious recollection, as evidenced by the individual's ability to recall or recognize some event from his or her past. Implicit memory, by contrast, refers to any effect of a past event on the person's ongoing experience, thought, or action, independent of conscious recollection. Accordingly, Terr argues that people can reveal in their behaviour memories for traumatic experiences that are not accessible to conscious recollection and verbal report:

The mystery that flows from this division of memory – when it comes to traumatized people – is how something taken into memory explicitly eventually behaves so similarly to the memories that are entirely implicit. These lost, no-longer-verbal memories drive action just as effectively as would a conditioning experiment (Terr 1994, p. 45).

Another trauma researcher who has made use of the explicit – implicit memory distinction is van der Kolk (1994; van der Kolk and van der Hart 1991), who has proposed that traumatic experiences are stored in somatic memory, in the form of visual images and physical sensations, even when they are not available in declarative memory as consciously accessible verbal reports. Reflecting on the contributions of Freud and Janet to understanding memory for trauma, van der Kolk and van der Hart (1991) clearly opted for the position which Breuer and Freud (that is, Freud before the hypothesis of infantile seduction was replaced by the hypothesis of infantile sexuality) shared with Janet: that current symptoms are unconscious expressions of memories of the past.

For the past 75 years, psychoanalysis, the study of repressed wishes and instincts, and descriptive psychiatry, virtually ignored the fact that actual memories may form the nucleus of psychopathology and continue to exert their influence on current experience by means of the process of dissociation . . . Lack of proper integration of intensely emotionally arousing experiences into the memory system results in dissociation and the formation of traumatic memories . . . Though subconscious, they continue to influence current perceptions, affect states, and behavior; they are usually accessible under hypnosis. (van der Kolk and van der Hart 1991, pp. 426, 431–2.)

Van der Kolk and van der Hart (1991) went on to propose that traumatic memories, because they are not accessible to consciousness, exist in a kind

I Terr (1994) actually uses the explicit-implicit and declarative-non-declarative distinctions (Squire et al. 1993) interchangeably. Terr (1994, pp. 48-50), also distinguishes between six major forms of memory – immediate, short-term, knowledge and skills, priming, associative, and episodic – although her definitions and examples of each type do not always match the standard terminology within cognitive psychology.

of frozen state, unaltered by subsequent experience or even the passage of time. In particular, these authors have proposed that the feelings of terror associated with traumatic events persist, even though the victim is unable to express them verbally; and that the retrieval of such somatosensory, iconic, or motoric memories is state dependent, so that they are especially likely to be evoked when the person is once again exposed to stress or trauma. Therapeutic recovery, in their view, requires that the person remember, or at least accept the fact of, the traumatic event(s) that precipitated the person's illness in the first place.

More recently, van der Kolk (1994) has drawn on neuroscientific research and theory to support his position that unconscious memories of trauma are expressed as somatic symptoms:

Research into the nature of traumatic memories indicates that trauma interferes with declarative memory (i.e., conscious recall of experience) but does not inhibit implicit, or nondeclarative, memory, the memory system that controls conditioned emotional responses, skills and habits, and sensorimotor sensations related to experience. (p.258, references omitted)

Van der Kolk (1994) further proposes that stress-induced increases in corticosteroids interfere with hippocampal function, and thus the storage of a declarative (or explicit) memory, but have no effect on the storage of non-declarative (implicit) emotional associations, which is mediated by the amygdala. Thus, the traumatized person responds emotionally to objects and events reminiscent of the original trauma, without consciously remembering the trauma itself.

Similarly, Kandel and Kandel (1994) proposed that children who cannot escape repeated abuse dissociate from the experience while it is happening, or repress the experience afterward. They further invoked the difference between explicit and implicit memory in order to explain how the emotional feelings associated with abuse could persist, while conscious recollection of abuse was lost. In the absence of independent corroboration, Kandel and Kandel suggested that 'particularly compelling behavioral clues . . . might sometimes help support a case' (p. 38). Thus, behavioural symptoms, construed as implicit memories, are held out as the means by which uncorroborated memories of historical events can be confirmed.

#### INFERRING HISTORY FROM SYMPTOMS

Part and parcel of the doctrine of the return of the repressed, for Freud as well as for the current promoters of recovered memory therapy, is the idea that a whole host of mental and behavioural symptoms are reflections – implicit memories, if you will – of childhood abuse. Those who present symptoms of 'Post-Incest Syndrome' (Blume 1990, p. xxi) or 'Repressed Memory Syndrome'

(Frederickson 1992, p. 40) are indeed, as Breuer and Freud would have said, 'suffering from reminiscences'. Thus, Bass and Davis (1988, pp. 34-54) offered a list of 74 symptoms representing the long-term effects of child sexual abuse. By suggesting that their readers evaluate themselves in terms of this list, Bass and Davis imply that people who display these symptoms are likely to have been victims of child sexual abuse. In the third edition of their book, Bass and Davis (1994, p. 15) state that this material 'was never designed to be a checklist of symptoms by which readers could determine whether or not they'd been sexually abused' (see also their cautionary note on p. 38).

Because other authors have followed the lead of Bass and Davis (1988, 1994) without being quite so circumspect, it seems likely that this is precisely what has happened. Thus, Blume (1990, pp. xviii–xxi) printed a 34-item 'Incest Survivors' After Effects Checklist', along with the statement that it 'can serve as a diagnostic device for suggesting childhood sexual victimization when none is remembered. It also serves as a roadmap for a therapist treating someone whose amnesia or denial is total. Whether or not actual memories are recovered, the checklist then presents a structure for identifying and addressing the consequences of incest' (1990, p. xvi). Similarly, Frederickson (1992, pp. 47–51) has published a list of 63 'symptoms that many survivors with buried memories have experienced' (p. 47). The lists include such attributes as feeling different from other people, having trouble expressing one's feelings, difficulty in accepting one's own body, relationships that don't work out, using sex to meet needs that aren't sexual, difficulty in setting boundaries with one's children, and dissatisfaction with family relationships.

Despite the attention given to such checklists in the media and popular press (not to mention therapists' offices),<sup>2</sup> there are several reasons why it is not possible to infer, from patients' patterns of symptoms and complaints, that they were, or even are likely to have been, victims of incest, sexual abuse, or other trauma as children. In order to appreciate what is wrong with such inferences, it is important to examine them in detail. In the absence of independent, objective corroboration of the patient's history, retrospective diagnosis of incest, sexual abuse, or other childhood trauma from images, dreams, bodily feelings, and other symptoms seems to be based on the following sort of argument:

Child abuse causes symptom X.

This person has symptom X.

Therefore, this person was abused as a child.

For example, a clinician presented with a bulimic patient might infer that he or she was subject to abuse as a child. If the patient does not remember the abuse, then the further inference would be that he or she had repressed (or dissociated) these memories, rendering them inaccessible to conscious

<sup>2</sup> The items of Blume's (1990) checklist were included in a professional guide to abuse-survivor therapy published by the American Psychological Association (Walker 1994), without any reference to evidence validating the association between these 'common symptoms' (p. 113) and abuse.

recollection. According to this logic, the bulimic symptoms represent what Freud called the return of the repressed, or what we would now call an implicit memory of the abuse. On the basis of this evidence, then, the patient might come to believe that he or she had in fact been abused, interpret other symptoms as evidence of the abuse as well, and eventually be led to reconstruct conscious recollections of the abuse itself.

For the purposes of analysing the syllogism above, let us assume that the premise is true: that some symptom, such as bulimia, occurs as a consequence of child abuse. Are we then permitted to infer child abuse as a likely historical fact when presented with a symptom such as bulimia? No. Logically, conditional reasoning of the sort characterized above involves a logical hypothesis, connecting an antecedent, p, with a consequent, q, as in the following statement:

If p, then q.

Such a hypothesis permits two types of conditional argument, known as *modus* ponens and modus tollens:

Modus ponens: IF p is true THEN q is true; p is true;

THEREFORE, q is also true.

Modus tollens: IF p is true THEN q is true; q is not true;

THEREFORE, p cannot be true.

For purposes of exposition only, let us assume now that the premise that child abuse causes bulimia is true. Then, if we know that the person has been abused (p), modus ponens permits us to infer (or predict) that he or she is also bulimic (q), or at least is at risk for this disorder. And if we know that the person is not bulimic  $(not \ q)$ , modus tollens permits us to infer (or postdict) that he or she was not abused  $(not \ p)$ .

However, if a person is bulimic, we are not permitted to infer that he or she was abused. To make this inference would be to commit a common logical error known as affirming the consequent. The error is to infer that the antecedent is true from the fact that the consequent is true – in the case of our example, that the person has been abused (p) from the fact that he or she is bulimic (q). The consequent might be true for other reasons. The only exception to the prohibition on affirming the consequent is when the 'if' is biconditional – that is, when the symptom in question is pathognomonic of abuse. This is unlikely to be the case for the sorts of behavioural and psychosocial symptoms included on the lists proposed by Bass and Davis (1988), Blume (1990), and Frederickson (1992) – not least because the symptoms in question seem to exemplify what Meehl (1956) called the 'Barnum effect', in which personality predicates are so general that they are applicable to some extent to almost anyone.

Moreover, there are at present no reasons to think that premises of this sort are actually true in the first place. For example, the specific connection between abuse and eating disorder is highly dubious (Pope et al. 1994).

Somewhat surprisingly, given all the attention to the problem of abuse and its consequences, there appears to be very little good evidence that any psychological symptom, or indeed any particular cluster of symptoms, is associated with trauma per se (Beitchman et al. 1991, 1992). It may be true that many abused children grow up to be bulimic adults, but that is not enough to establish a connection between past and present. We also need to know how many abused children do not become eating disordered, how many eating disordered patients were not abused. The true association between child abuse and eating disorder can only be determined once we have filled in all the cells in the 2×2 table implied by the premise that abuse causes eating disorder (Dawes 1993).

And, of course, the table itself must be properly constructed: subjects must be classified on the basis of the antecedent variable (i.e. whether they were abused), and the table must take into account the population base rates for the antecedent. Failure to do this - for example, simply examining histories of abuse in eating-disordered patients versus controls - can severely distort the relations in question, compared to what we might learn by following representative samples of abused and non-abused children into adulthood. Suppose we discovered, for example, that 60 per cent of abused children, but only 20 per cent of non-abused children, suffer an eating disorder as adults. On the surface, this might look like evidence of an association between abuse and eating disorder, but then suppose that the incidence of abuse in the population is 10 per cent. Based on these assumptions, Table 5.1 shows how a representative sample of 1000 individuals would be cast into the cells of a 2x2 table relating abuse and eating disorder. Note that while most of the abused children would be found to have an eating disorder as adults, most of the eating-disordered adults would not have been abused as children. Even with a strong prospective relation between childhood abuse and adult eating disorder, retrospective inference of childhood abuse from adult eating disorder would be incorrect in 75 per cent (160 of 240) cases. This analysis underscores the dangers associated with the practice, endorsed by Kandel and Kandel (1994), of construing symptoms as evidence supporting uncorroborated memories.

Table 5.1 Hypothetical relation between childhood abuse and adult eating disorder

Child abuse	Eating disorder		Total
	Present	Absent	
Present	60	40	100
Absent	180	720	900
Total	240	760	1000

The table assumes that the incidence of child abuse is 10 per cent, and that 60 per cent of abused children, compared with 20 per cent of non-abused children, suffer eating disorder as adults.

It should also be noted that even if the correlation between abuse (or other trauma) and eating disorder (or other behavioural or psychosocial symptoms) were established on the basis of a proper prospective, the interpretation of this association would be unclear because we know so little about the processes mediating the relations. In order to demonstrate a causal link (or just a statistical association) with abuse and trauma per se, not to mention repressed or dissociated traumatic memories, we must be in a position to evaluate the separate and combined effects of a number of factors which are inevitably confounded with abuse and trauma – for example:

- 1. A history of child sexual abuse per se. This, of course, raises the difficult question of how abuse is to be defined. All abuse is wrong, of course, and all abuse is illegal, but to say this does not mean that qualitative and quantitative differences among cases should be ignored. It is not at all clear that a single instance of fondling should be treated as equivalent to acts of intercourse or sodomy engaged over an extended period.
- 2. The family environment. If the perpetrators of child sexual abuse frequently abuse alcohol or other drugs, or abuse commonly occurs in families that are 'dysfunctional' in other ways, then it is possible that an individual adult's symptoms are attributable to these factors, rather than to sexual abuse *per se*. Do the adult children of alcoholic child abusers have different outcomes from the adult children of alcoholics who did not sexually abuse their children?
- 3. Whether the abuse is remembered or forgotten. This is, of course, the central issue in arguments about 'the return of the repressed'. For Breuer and Freud (1893-5), and for modern proponents of the trauma-memory argument as well, it is *forgotten* abuse which is transformed into symptoms, and remembering the abuse is the first step to recovery. Abuse for which the person is amnesic should be more pathogenic than abuse which is remembered.
- 4. The mechanism by which the forgetting occurs. For Breuer and Freud (1893–5), trauma is forgotten because it is repressed; for Janet (1907), trauma is forgotten because it is dissociated. Some proponents of recovered memory therapy treat these terms as loosely synonymous, while others appear to favour dissociation over repression; but the two mechanisms are not identical that is why Freud and Janet fought with each other so much! and it is not clear that their effects will be identical. Of course, there are other mechanisms by which incidents of abuse may be lost to memory, and it is not at all clear that ordinary forgetting and normal infantile and childhood amnesia should have the same pathogenic effects as repression and dissociation.
- 5. Whether abuse is remembered, inferred, or simply believed in. It is not at all clear what is remembered in recovered memory therapy. It is one thing to remember an incident of abuse, or a string of incidents, which had been previously forgotten (especially when these events can be confirmed by independent evidence). It is quite another thing to interpret (i.e. redefine) certain

incidents, which were always remembered perfectly well, as examples of abuse. And it is something else entirely to come to believe that abuse occurred, in the absence of any memory for any specific incidents of abuse at all. Moreover, it should be understood that recovering a memory of an abuse incident is not itself evidence that repression or dissociation has occurred. Cued recall or recognition procedures commonly yield memories that are inaccessible under conditions of free recall; and even when the type of memory test is unchanged, memory naturally fluctuates from one retrieval attempt to another (Tulving 1964); and there are conditions under which memory can improve with repeated testing (for reviews see Erdelyi 1984; Kihlstrom and Barnhardt 1993; Payne 1987). But nobody would say that these phenomena of memory, observed in college students remembering lists of pictures and words, reflect the lifting of repression or dissociation.

- 6. Whether remembered abuse is disclosed or kept secret. Recovered memory therapy implies that previously inaccessible memories are brought into conscious awareness, not merely that someone has agreed to disclose something that he or she has always remembered. Disclosure of trauma may have positive effects (Pennebaker 1990), but this is not the same as the recovery of a repressed or dissociated traumatic memory.
- 7. Whether the individual is identified by others as a victim of child sexual abuse, and
- 8. Whether the individual identifies him- or herself as a victim. These issues are two sides of the same coin. Although it seems intuitively plausible, even likely, that incest and other forms of trauma, abuse, and neglect would have adverse consequences for adjustment, it is also important to consider the possibility that at least some of these consequences are products of the social perception of the victim, rather than of victimization per se. That is, once a victim of abuse has been identified, other people (including family members, teachers, social service workers, and the like), believing that early trauma inevitably has certain effects on personality, may treat that individual in such a way as to elicit symptoms of maladjustment where none would appear otherwise; or alternatively, such a process might be instigated by the victim's identification of him- or herself as a victim. We know too much about the self-fulfilling prophecy (Darley and Fazio 1980; Jones 1986; Merton 1948; Miller and Turnbull 1986) to reject out of hand the possibility that identifying someone as a victim of abuse might create symptoms even in the absence of any actual history of abuse.

#### INFERRING HISTORY FROM IMPLICIT MEMORIES

What Freud called the return of the repressed we now call implicit memory. Even though cognitive psychologists usually think of implicit memory in terms of priming effects, the symptoms attributed to childhood incest or

sexual abuse do meet the formal criterion of implicit memories: changes in experience, thought, and action (in this case, complaints and symptoms) that are attributable to past events (in this case, episodes of incest or abuse). Of course, the notion of implicit memory enjoys considerably more support than the return of the repressed ever did (for concise summaries see Schacter (1987, 1995) and Schacter et al. (1993); for comprehensive surveys of the literature see Graf and Masson (1993) and Lewandowsky et al. (1989).

The classic illustrations of the dissociation between explicit and implicit memory are seen in brain-damaged patients with the amnesic syndrome (Schacter 1987, 1995). Other examples are surgical patients who have received general anaesthesia (Kihlstrom 1993) or conscious sedation (Polster 1994), and psychiatric patients who have been administered electroconvulsive therapy (Dorfman et al. 1995). The fact that implicit memory can be spared while explicit memory is profoundly impaired lends plausibility to the argument that images, feelings, bodily sensations, and behaviours can represent the unconscious influence of past traumatic experiences which have been repressed, dissociated, or otherwise forgotten. Put another way: it is not possible to argue against concepts like body memories, or feeling memories, simply on the ground that there is no evidence for unconscious memory. There is plenty of such evidence.

The case for implicit memory in the trauma-memory argument is strengthened by the fact that explicit and implicit memory can be dissociated even in the absence of any evidence of brain insult, injury, and disease. Consider, for example, the phenomenon of post-hypnotic amnesia (reviewed by Kihlstrom and Barnhardt 1993). After just a few words of suggestion on the part of the hypnotist, some subjects (those who are most highly hypnotizable) find themselves unable to remember the events and experiences that transpired while they were hypnotized. When the hypnotist administers a pre-arranged reversibility cue to cancel the amnesia suggestion, these memories come flooding back into awareness, and the once-amnesic subject is now able to remember what happened perfectly well. The fact that access to memories can be impaired and restored simply by means of suggestion shows that memories can be rendered unconscious, and later recovered to conscious awareness, by means of purely psychological processes.

Moreover, during the time that the amnesia suggestion is in effect, the events of hypnosis can influence the subject's ongoing experience, thought, and action, even though he or she cannot consciously remember these same experiences (for reviews see Kihlstrom 1995; Kihlstrom and Barnhardt 1993). For example, hypnotic subjects show priming effects on word-association and category-generation tasks, even though they cannot remember studying the targets while they were hypnotized (Kihlstrom 1980). Similarly, a problem-solving set established during hypnosis continues to influence the subjects' post-hypnotic problem-solving behaviour, even though they do not remember the trials by which that set was established (Huesman et al. 1987). In fact,

post-hypnotic amnesia is the only example of an amnesia in which explicit memory can be abolished, at the same time sparing implicit memory, and then later restored. In the organic amnesias, the failure of explicit memory is permanent and irreversible.

Similarly, the clinical literature contains several cases of functional amnesia which appear to reveal dissociations between explicit and implicit memory although it is not always clear that the patients eventually recovered memory for the instigating trauma (for complete reviews see Kihlstrom and Schacter, 1995; Kihlstrom et al. 1993; Schacter and Kihlstrom 1989) For example, M.R., a victim of homosexual rape, became distressed and suicidal after viewing a Thematic Apperception Test card which could be interpreted as one person attacking another from behind (Kaszniak et al. 1988). C.M., another rape victim, became upset when she visited the brick path on which she had been assaulted, and reported the intrusion of words such as 'bricks' and 'bricks and the path' into her stream of consciousness – even though she had no conscious recollection of being assaulted; furthermore, her memory returned when she later went jogging on a path whose physical features resembled the one on which she had been attacked (Christiansen and Nilsson 1989). Experimental studies of two cases of multiple personality disorder (also known as dissociative identity disorder) show that implicit memory can transfer across personalities, even when explicit memory does not (Ludwig et al. 1972; Nissen et al. 1988).

Although much more extensive experimental study will be necessary before we fully understand the vicissitudes of memory in these cases, the available research lends some support to some assertions, which are central to the trauma-memory argument and recovered memory therapy. In the first place, it is clear that dissociations between explicit and implicit memory can occur in functional as well as organic amnesias. Moreover, at least in post-hypnotic amnesia and genuine cases of multiple personality disorder, memories expressed only implicitly can be restored to explicit recollection. At the same time, the available research does not support other claims – such as that traumatic stress typically induces dissociative or repressive processes resulting in amnesia, or that children subjected to repeated trauma engage in defensive dissociation, or that exhumation of traumatic memories is important to therapeutic outcome.

Moreover, and this is a critical point, the research on explicit and implicit memory lends no support whatsoever to the notion that historical events can be inferred on the basis of mental and behavioural phenomena such as images and dreams, emotional feelings, bodily sensations, and intrusive behaviours. Such complaints and symptoms may be important elements of the patient's clinical presentation, and they may well have to be dealt with therapeutically, but in the absence of independent corroboration it is not legitimate to treat them as if they were implicit memories of the past. Nor, of course, is it legitimate to refer to these complaints and symptoms as evidence that the patient was in fact abused, in the absence of independent, objective evidence concerning the abuse itself.

In linking the clinical literature on the 'return of the repressed' to the research literature on implicit memory, it is important to remember that we know about explicit and implicit memory only because we already know the past, and it is this knowledge which allows us to make sense of what is happening in the present. Because we already know which items a laboratory subject has studied on a particular occasion, we are able to distinguish a genuine priming effect from a random fluctuation in test performance. Without such knowledge, we must remain agnostic. Where, as in many if not most clinical situations, the past is unknown or uncertain, the inference that a patient's images, feelings, or behaviours represent implicit memories of trauma is simply untenable. Given objective evidence of trauma for which the person is amnesic, the hypothesis that certain images, emotional feelings, somatic sensations, intrusive behaviours, and the like represent implicit memories of trauma is interesting and may well be true. In the absence of such corroboration, however, the same hypothesis is simply speculation. In the clinic as in the cognitive laboratory, the only way to test the hypothesis is to seek independent, objective corroboration.

Perhaps the most distressing aspect of the trauma-memory argument and recovered memory therapy is the apparent ease with which many of its proponents and practitioners reach the conclusion that incest and abuse occurred in the lives of their patients, in the absence of any objective corroboration of the inferred trauma. Once the practitioner has communicated this inference to the patient, or the patient arrives at it him- or herself on the basis of portrayals in the media and the popular press, the belief that one was abused can instigate additional images and feelings, which are also taken as implicit memories, providing further support for the belief that the patient was in fact abused, and instigating a process of reinterpreting the remembered past, and reconstructing new recollections around suppositions which, while perhaps making for a satisfactory narrative explanation, may not have been valid in the first place. The result can be that both patient and practitioner get enmeshed in a vicious cycle from which there can be no escape without shattering the most deeply held beliefs of both parties (this is, in part, the problem of false memory syndrome; see Kihlstrom (1994). Freud made this mistake 100 years ago (Bowers and Farvolden 1996; Crews 1995; Macmillan 1991), and there is every reason to think that it is being repeated today. The only way to prevent this mistake from recurring is to insist on independent corroboration of hypothetical implicit memories, and ostensible recovered explicit memories, of abuse.

#### IN CONCLUSION, A CAUTIONARY TALE

Jane Doe, a patient admitted to the hospital with psychogenic fugue, was unable to identify herself or give any helpful information about her identity. During routine interviews, Lyon (1985) performed some informal tests of her ability to recognize and use common objects. When Lyon asked Jane Doe to

show him how to use a telephone, he noticed that she dialled the same number repeatedly. When he called the number himself, the person who answered quickly proved to be the patient's mother. Thus, Jane Doe's telephone-dialling behaviour was, in fact, an implicit expression of knowledge which she could not consciously recollect. Lyon's idea, that Jane Doe might be dialling a particular person whom she knew, was a brilliant clinical intuition, and resolved the case. But the intuition could only be confirmed by the truth on the ground – the objective fact of whether the person on the other end of the line knew Jane Doe. In the absence of such objective corroboration, Lyon was in no position to tell Jane that she was obviously trying to dial someone she knew – nor could he inform the person who answered that she did in fact know Jane Doe, but was in denial about it. The crucible of memory, whether explicit or implicit, is the truth of history.

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# Recovered Memories and False Memories

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