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The Recovery of Memory in the Laboratory and Clinic

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The recovery of memory has been a topic of considerable interest to both clinicians and experimentalists for well over 100 years. This year, in fact, we celebrate the centenary of the work that brought this problem to the attention of clinicians, researchers, and the public at large -- Breuer and Freud's (1893-1895, 1955) *Studies on Hysteria* -- or, at least, that of their *Preliminary Communication*, published in the January 1 and January 15 1893 issues of the *Neurologiches Centralblatt*. Reporting on their treatment of Anna O., Emmy von M., and other patients suffering from a variety of neurotic disorders collectively labelled "hysteria", these pioneers of psychotherapy claimed that their patients' symptoms were relieved when they remembered, usually under hypnosis, the traumatic incident that precipitated their illness -- provided that the accompanying affect was also aroused, as an abreaction leading to a catharsis.

From these observations, Breuer and Freud concluded that "hysterics suffer from reminiscences" (p. 7). Their famous passage is worth extended quotation:

> We may reverse the dictum '*cessante causa cessat effectus*' [when the cause ceases the effect ceases] and conclude from these observations that the determining process continues to operate in some way or other for years -- not indirectly, through a chain of intermediate causal links, but as a *directly* releasing cause --

> just as a psychical pain that is remembered in waking consciousness still provokes a lachrymal secretion long after the event. *Hysterics suffer mainly from reminiscences* (p. 7).
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> Our observations have shown... that the memories which have become the determinants of hysterical phenomena persist for a long time with astonishing freshness and with the whole of their affective colouring. We must, however, mention another remarkable fact... that these memories, unlike other memories of their past lives, are not at the patients' disposal. On the contrary, *these experiences are completely absent from the patients' memory when they are in a normal psychical state, or are only present in highly summary form.* Not until they have been questioned under hypnosis do these memories emerge with the undiminished vividness of a recent event.

The Role of Memory in Psychotherapy

In the interests of historical accuracy, it is important to note that the notion that memory and psychopathology are linked was not original with Breuer and Freud. Pierre Janet (1889), Charcot's protege at the Salpetriere and Freud's great rival, also traced the problems of hysterical patients to their past experiences, though he treated these memories quite differently. Consider the case of Marie, who experienced attacks of hysterical delirium, hallucinations, and automatisms following the onset of her menstrual periods. While hypnotized, Marie reported that she had been surprised and ashamed by her menarche, at age 13, and in an attempt to stop the flow of blood had plunged herself in a bath of ice water. This had the effect of stopping the menses, but it also produced an episode of delirium. In response, Janet used hypnotic suggestion to alter her memory of the formative incident to something less traumatic; when he did so, the hysterical symptoms disappeared, never to return. Janet did not rely on abreaction and catharsis, as Breuer and Freud did, but his technique shows clearly that he felt that memory played an important role

in the development and maintenance of symptoms. In a recent historical analysis of psychoanalytic theory, Macmillan (1991) has suggested that Freud may well have known of Delboeuf's and Janet's findings before he began his treatment of Emmy von M. in 1889.

After Freud's triumph over Janet, psychoanalysis and similar psychodynamic theories dominated psychotherapy from the 1920s onward, but toward the end of the 1950s a new point of view arose, namely behavior therapy. Behavior therapists taught that the symptom *is* the disease, and that it may be treated as a bad habit, independent of its origins (although, arguably, knowledge of the formative experience might be of use in the construction of a desensitization hierarchy). Similarly, beginning in the late 1960s and early 1970s, cognitive therapists claimed that mental illness derived from a set of maladaptive beliefs and expectations held by the patient, and that these could be corrected by quasi-educational interventions without inquiry into where and how they were acquired. Still and all, the implication of conditioning theory, or of cognitive-social learning theory, was that there must have been a learning experience sometime in the past, and even if therapists could remain disinterested in origins, theorists could not. Thus, there was considerable puzzlement when, to take one example, relatively few phobic patients were able to remember the circumstances under which their pathological fears were acquired.

More recently, psychodynamic forms of psychotherapy have been revived, thankfully without much reference to such surplus conceptual baggage as infantile sexuality and the Oedipus complex, in the treatment of posttraumatic stress disorder. Thus, for example, it has been claimed that a whole host of problems, including anxiety, depression, and eating disorders, have their

origins in childhood experiences of incest and other sexual trauma, abuse, neglect, and deprivation -- memories of which have been repressed by the patient. Therefore, many therapists seek to recover these memories, and bring them into conscious awareness, so that the patient can deal with them more adaptively. It should be understood that, in essence, these are Breuer and Freud's assumptions, and this is essentially Breuer and Freud's technique of catharsis and abreaction: the patient recovers repressed material and re-experiences the associated emotion, a sequence that purifies the mind and frees it from conflict.

Of course, the fundamental idea that memory lies at the root of neurosis underwent modification as psychoanalysis developed. One change concerned the nature of the traumatic memories in question. Although the *Studies on Hysteria* contained hints of a sexual origin of neurosis, the memories detailed there are not always (or even often) particularly sexual in nature. But by 1896, in his essay on *The aetiology of hysteria*, Freud had firmly conceived the idea that the most important etiological factor was sexual abuse inflicted by an adult (almost always the father) when the patient was a young child -- a memory which had been lost to consciousness, but to which the patients symptoms were attributed. But then Freud almost immediately rejected his own notion, and substituted the theory of seduction fantasy -- formally announced in the *Three Essays on Infantile Sexuality* of 1905.

We all know the reasons that Freud himself gave for these revisions: that the recovery and abreaction of seduction memories did not result in cure; that cases of infantile seduction were rare; that the unconscious mind had difficulty distinguishing reality from imagination; and that no evidence of infantile seduction was found in the recollections of psychotic patients, whose

thought processes were not subject to repression. Whatever the reasons, it is a good thing that Freud abandoned the seduction theory, because in fact he never had any positive evidence for it. In the three 1896 papers announcing the seduction theory, Freud describes a total of 18 new cases. But in fact, as Macmillan (1991) notes, the majority of the seductions reported by Freud were at the hands of other children, or of adults who were unrelated to the patient.

Moreover, and more to the point, Schimek (1987) has shown convincingly that most of these patients didn't report any seductions at all (for a detailed analysis, see Macmillan, 1991). Rather, what was recorded by Freud were his *interpretations* of their memories. Rarely was a seduction spontaneously remembered by his patients. Rather, the recollection of the past, and the interpretation made of those recollections, was clearly guided by Freud. The following passage from *The aetiology of neuroses* is particularly revealing:

> If the memory which we have uncovered does not answer our expectations, it may be that we ought to pursue the same path a little further....

And just so the reader will not miss the point:

> If the first-discovered scene is unsatisfactory, we tell our patient that this experience explains nothing, but behind it there must be hidden a more significant, earlier experience.

It should be clearly understood that by this time Freud already had a well-developed theory that there was a sexual etiology for all the neuroses, and that he pressured his patients to produce memories that conformed to his expectations. This process was not subtle, and it continued after the theory of infantile seduction was thrown over for the theory of infantile sexuality.

Memory in Psychotherapy

Anyone who doesn't believe this should reread the Dora case, published in 1905 as *A Fragment of an Analysis of a Case of Hysteria*. Here is a young woman, brought to Freud by her father for treatment of a number of dramatic symptoms. Dora is quite clear about the source of her problems in living: she has been effectively traded to Herr K. in return for his wife, Frau K., with whom her father is having an affair. Today we would call this a dysfunctional family. But it was not enough for Freud, who considered her rejection of Herr K., and her symptoms in general, as evidence of Dora's "infantile affection for her father", as well as a latent bisexuality. The fact that Dora repeatedly denied his interpretation only confirmed to Freud that he was correct. Freud even informs Dora that "No" might well mean "Yes". Freud made it clear to Dora that the analysis must continue until she accepted his interpretation, or she had no hope of getting well. Much to her credit, Dora summoned the strength to terminate treatment on New Year's Eve, 1900.

The old joke about Freud is that he made two mistakes: first he believed his patients, and then he didn't believe them. It's a good joke, but it's not right. It should be clear that Freud always assumed that his patients' memory reports were accurate. What changed was what Freud considered to be a memory. In the *Studies on Hysteria*, and in *The aetiology of neuroses*, the memories in question are of events that occurred in the real world outside the person. In the *Three Essays on Infantile Sexuality*, the memories in question are of thoughts, images, and impulses that passed through the mind of the child. But the memories are always considered to be accurate -- *provided that they conform to Freud's expectations*. The fact of the matter, then, is

that Freud only made one mistake: he believed his own theory. This is a mistake that, I believe, is being repeated by many in clinical practice today.

Hypnoanalysis and Narcosynthesis

The contemporary revival of Breuer and Freud's technique was foreshadowed in the efforts of psychiatrists and psychologists, themselves mostly psychoanalytically inclined, to treat cases of war neurosis (Grinker & Spiegel, 1943/1945, 1945; Hadfield, 1920; Kardiner, 1941; Watkins, 1949) in World War II. One of the legacies of the First World War was a large number of cases of traumatic war neurosis, now known as post-traumatic stress disorder. Such cases had been observed in the past, but not in such large numbers; and, in any case, the lack of an adequate psychological theory in the 18th and 19th centuries led them to be attributed to cowardice rather than diagnosed as instances of psychopathology.

The new psychological theory, itself heavily influenced by psychoanalysis, was that the victims of war neurosis had a personal or family history of neurosis that acted as a kind of diathesis, or predisposition, to mental breakdown. In civilian life these individuals made a more or less adequate adjustment, but they decompensated under wartime conditions of extreme and prolonged stress. This breakdown of established defense mechanisms leading to the war neurosis itself. The theory of treatment was analogous to Breuer and Freud's original: for the short term, the goal of treatment was to get the patient to recover memories of trauma, and promote abreaction and catharsis: this would put the patient back the way he was before the war. The long-term goal of treating the underlying neurotic disposition was left

for others, later, after the patient was discharged from the military. The same approach was taken to cases encountered in the civilian sector.

Especially in the military hospitals, abreaction and catharsis had to be accomplished quickly, so that the patient could be returned to duty or discharged to civilian life. For this reason, clinicians returned to the very technique that had been pioneered by Breuer and Freud: hypnosis. Of course, they knew that Freud had rejected hypnosis; but they also felt that hypnosis could facilitate treatment in at least some cases, and therefore ought to be returned to the clinician's armamentarium. This decision was itself influenced by the development of a psychoanalytic theory of hypnosis, that hypnosis was a regression *in the service of the ego*, involving a transference-like relationship between subject and hypnotist. The combination of regression, permitting access to the unconscious, and transference, fomenting obedience and dependence, was irresistible for those who wanted to hasten the process of psychoanalysis.

Thus was born the technique of *hypnoanalysis*, so named by J.A. Hadfield, and used by him in the apparently successful treatment of anxiety and conversion hysteria. Hadfield's technique consisted of two phases: *abreaction*, in which the patient was hypnotized and instructed to recall and relive the experiences leading to his or her breakdown, and to retain access to this memory in the normal waking state; and *adjustment*, in which the patient worked through the experience, accompanied by hypnotic suggestions for ego-strengthening. The technique was successful in some cases, but clinicians were immediately reminded of why Freud had abandoned hypnosis in the first place. When patients are not hypnotizable, or resist hypnosis, hypnosis doesn't help. Thus, in a classic study of psychogenic fugue, Abeles and Schilder (1935) reported that

hypnosis was completely successful in only eight of the 25 cases in which it was attempted, and partially successful in only another six.

What was needed was a technique that would work for everyone, and a possible solution quickly presented itself in the old aphorism, *in vino veritas*. In the early 1930s, two simultaneous lines of work led to the development of a pharmacological technique that came to be known as *narco-synthesis*. In the early 1930s, the American psychiatrist and psychologist Eric Lindemann, then working at the University of Iowa, reported the first experiments on the psychological effects of a new class of cortical depressants, the *barbiturates*. The psychiatrist Blackwenn had already reported that when these drugs were administered to catatonic schizophrenics, the patients became lucid and able to discuss their illnesses. Working with both patients and normals, Lindemann observed an increased tendency toward self-disclosure; the fact that his subjects were unable to refuse to answer his questions was apparently the origin of the label *truth serum* for these drugs.

At around the same time, J.S. Horsley, a British physician and psychoanalyst, observed that pregnant women who had been sedated with Nembutal were amnesic for the events of childbirth; but that this amnesia could be reversed by a subsequent administration of the same drug -- apparently an early observation of what we now know as *state-dependent learning*. In later experiments, he also observed that by virtue of barbiturates he could extract confessions from persons who were guilty of a crime, but not those who were innocent. Based on the analogy to hypnosis and post-hypnotic amnesia, Horsley initially called his technique *narco-hypnosis*. When he turned from obstetrics to psychiatry, he developed the technique of *narco-analysis*, in which barbiturates were used to facilitate transference and recover memories of both

repressed traumatic events and forgotten experiences of childhood that might relate to the patient's current troubles.

The technique quickly caught on. In 1938, Morris Herman reported on six cases of psychogenic amnesia, in which only sodium amytal succeeded in restoring the patient's memory, including recovery of the event that precipitated the amnesia. And of course, Grinker and Spiegel, among others, used the technique widely in the treatment of war neuroses encountered in World War II. Grinker and Spiegel's technique was as follows: After a low dose of barbiturate had been slowly infused intravenously, the clinician would suggest to the patient that he was back at the scene of the trauma; he himself might even play a role in the scene. Grinker and Spiegel observed that under these conditions, the patient typically recovered and abreacted a traumatic memory, at which time the neurotic symptoms would spontaneously disappear. But Grinker and Spiegel argued that it was not enough to recover the memory: steps must be taken to make the memory accessible in the undrugged state, work through the memory, and reintegrate the patient's personality. Because the recovered memory had to be synthesized with the patient's conscious personality, Grinker and Spiegel renamed their technique *narco-synthesis*.

World War II also revived the use of hypnosis in the treatment of war neurosis: there was lots of war neurosis, and relatively few psychiatrists, and so clinical psychologists used the psychological techniques that were available to them. This work is well represented by Jack Watkins' classic *Hypnotherapy of War Neuroses* (1949). The success of hypnosis in the war led to its revival in civilian psychotherapy as well. The signal event was the publication in 1944 of Robert Lindner's *Rebel Without a Cause* (the source of the 1955 Nicholas Ray movie starring James Dean, Natalie Wood, and Sal Mineo),

in which a "neurotic psychopath" was regressed to the first year of his life, where he recovered a memory of witnessing his parents having sexual intercourse -- the kind of primal scene that, according to psychoanalysis, lies at the heart of neurosis. Within the psychoanalytic community, hypnosis was revived by Margaret Brennman and Merton Gill, first in their *Hypnotherapy: A Survey of the Literature* (1947) and later in *Hypnosis and Related States: Psychoanalytic Studies in Regression* (1959). This tradition has been continued by Erika Fromm and Doris Grunewald, at the University of Chicago, and their many students, among others.

So far as barbiturates are concerned, their use also continued after the war. One aspect of this history has been chronicled by the investigative journalist John Marks in *The Search for the Manchurian Candidate* (1978), which documents the quest by the US Central Intelligence Agency for a "truth drug" to be used in the cold war. Under the umbrella of the Human Ecology Fund, a large number of psychiatrists and social scientists, mostly in the United States and Canada, were involved in a CIA-sponsored program of behavioral research -- originally named Project BLUEBIRD, then ARTICHOKE, then MKULTRA -- intended to develop new methods of interrogation, and the means of resisting them.

It's a good story, and I could go on about it, but I want to turn our attention to the primary question about these techniques: are the memories recovered by hypnosis and barbiturate valid? That is, do the memories bear any positive relationship to what actually happened? Here I have to report that the evidence is just not there. There is, to my knowledge, not a single published study that attempted to verify the memories recovered by hypnosis and drugs. Rather, the memories are considered to be valid because they are

vividly detailed and recalled with emotion. Thus, in his 1943 monograph, Horsley writes:

> In spite of the difficulty of establishing the validity of narco-hypnotic hypermnesia, there is abundant clinical evidence of its occurrence. This power of recalling seemingly forgotten incidents, especially those of childhood, is one of the most valuable results of this use of narcotics.

Similarly, Grinker and Spiegel wrote in their 1945 report on war neurosis:

> The minuteness and wealth of detail which flood the memory, even of events which took place many months and even years before, is always impressive. The events which are depicted with the realistic impact of an expert dramatic production are probably always true counterparts of what actually took place, rather than fantasies such as are produced in dreams or hypnotic states. The emotional reactions, however, do not necessarily represent the actual behavior... during the original episode, but rather what he repressed and controlled in order to carry on his job.

Of at least equal importance, it appears that the memories were believed because the symptoms disappeared when the memory was recovered -- a variant on the doctrine cited by Breuer and Freud: *cessante causa cessat effectus*. Finally, it should be understood that the memories were considered to be valid because they made sense -- that is, the memories were believed *because they confirmed the clinicians' expectations of what they would find*. This, of course, is what Adolph Grunbaum, in his discussion of the scientific status of psychoanalysis, has called the "tally argument": the memories are believed because they tally with our theory of the case. It should go without saying that none of this -- the vividness of the recollection, the fact that the symptom disappeared, or that the memory conforms to our a priori beliefs -- substitutes for objective evidence, independently obtained, that the memory is an accurate representation of some event that actually occurred in the past.

"Repressed" Memories and the "False Memory Syndrome"

Now all of this history may seem obvious, but I go through it because it is crucially relevant to a highly visible problem in contemporary clinical practice: the recovery of ostensibly "repressed" memories of early childhood incest, sexual assault, and other forms of trauma, abuse, neglect, and deprivation. In recent years, the claim has been frequently made that such memories, long denied entry into consciousness, lie at the heart of many cases of depression, anxiety disorder, eating disorder, and substance abuse -- that, in many cases, these syndromes represent a form of post-traumatic stress disorder similar to that observed in the sufferers of war neurosis. Accordingly, it is claimed, the proper treatment of these problems involves the recovery of these repressed memories, accompanied by abreaction, and followed by catharsis. Furthermore, these therapeutic processes are no longer confined to the consulting room: catharsis often involves confronting the parent or other figure who allegedly perpetrated the abuse, even to the point of bringing criminal or civil charges in a court of law. Sometimes the accused admits guilt, and sometimes independent evidence is found to corroborate the patient's memory and impeach the denial of the accused. But sometimes the accused denies the charge, and no corroboration is available. In this case, the question is: whom is to be believed?

In many ways, public attention to this problem begins with the 1990 murder trial of George Franklin, in San Mateo County, California. Franklin had been accused by his daughter, Eileen, of killing Susan Nason, her childhood friend, in September 1969, when the two children were eight years old. According to her account, she was reminded of the incident when an expression on the face of her own five-year-old daughter, Jessica, reminded her of Susan's facial expression at the time she was killed -- some 20 years previously. Gradually

a fully detailed memory of the incident emerged. There being no statute of limitations on murder, Franklin was tried and subsequently convicted -- even though there was no physical evidence to corroborate Eileen Franklin's memory, and her account of the episode changed from time to time; and even though some of the details in her memory had been published in local newspapers at the time of Susan's death. A similar trial occurred in Pennsylvania in 1991, with similar results. At about the same time, Marilyn Van Derbur, a former Miss America, revealed previously repressed memories of sexual assault by her father, and the actress Roseanne Barr Arnold announced that she had recovered repressed memories of abuse by her mother.

Over the last two years we have witnessed a virtual pandemic of such reports, accompanied by a host of television dramas based on the theme of repressed memories. And we are beginning to see other forms of repressed memories as well: of ritual satanic abuse, of abduction by aliens in unidentified flying objects, and of trauma in past lives. Some of these ostensibly repressed memories have begun to find their way into the courts -- not necessarily as criminal charges, where the statute of limitations applies and the standard of evidence is "beyond a reasonable doubt", but often in civil suits where claims can be brought at any time, and the standard of evidence is the looser "reasonable certainty". In some jurisdictions, like Washington State, repressed memories have been allowed into evidence under the doctrine of "delayed discovery", by which cases may be brought if new evidence is uncovered after the statute of limitations would ordinarily have expired.

In trying to respond to this phenomenon as psychologists, we need to do two things immediately. The first thing is to agree that child abuse, neglect, and deprivation, including incest and other forms of sexual trauma,

are much more common than we might like to think they are, and constitute a serious social problem. Revised data from the 1988 Study of National Incidence and Prevalence of Child Abuse and Neglect provides an estimated incidence of 14.8 to 22.6 abused children per thousand, including 1.9 to 2.1 children per thousand who are victims of sexual abuse; and there are reasons to think that these numbers may be increasing. The second thing is to agree that claims of incest and other forms of child abuse, when corroborated by independent objective evidence, are fair game for pursuit in the courts as well as the consulting room -- and that the perpetrators of such crimes should be hanged by their toes. But in the case of uncorroborated memories we are presented with a further, and more difficult problem of resolving the conflict between the accuser and the accused -- a conflict which boils down to that one between one person's memories and those of another.

It should be understood that while the notion of repression is intuitively plausible, the evidence for the delayed recovery of valid repressed memories of incest and other forms of abuse is rather thin. Certainly there is considerable evidence that therapy patients report histories of incest and sexual abuse with considerable frequency. So, for example, in a study by Judith Herman and her colleagues, fully 81% of a sample of 21 patients with borderline personality disorder reported physical abuse, sexual abuse, witnessing domestic violence, or other traumata before age 18, and in most cases before age 6; 73% of 11 patients with borderline traits, but not borderline personality, gave similar reports; for 23 patients with antisocial or schizotypal personality disorders, the figure was 57%. These figures are comparable to those obtained by others. Unfortunately, it is not clear that these patients are representative of their diagnostic categories. And, in

any event, there was no independent validation of these retrospective self-reports.

With respect to the validity issue, perhaps the most commonly cited study is that of Herman and Emily Schatzow (1987), based on 53 participants in a therapy group for incest survivors. Of these, 14 patients had a "severe" amnesia for the incidents (Herman and Schatzow indicate that some patients "strongly suspected" that they had been abused, but "could not remember clearly"). As part of the therapeutic process, the patients were offered the opportunity to gather evidence that would corroborate their memories, or suspicions, of abuse. Herman and Schatzow report that such efforts were successful for 39 of the cases, or 74%. But remember that 39 of the group members had little or no amnesia to begin with: it wouldn't be surprising if these individuals were able to validate their memories. Confirmation of abuse is not the same as confirmation of repressed memory, of course, and it is repressed memory that is at issue here.

Herman and Schatzow report that their amnesic patients reported an average age of onset for the abuse of 4.9 years of age, while the nonamnesic patients reported onsets at about 8 to 11 years of age. How the amnesic patients arrived at the age at which they were abused is not described. Interestingly, these authors conclude that "massive repression appeared to be the main defensive resource available to patients who were abused early in childhood...". But there are other possibilities. For example, the authors fail to consider the impact of infantile and childhood amnesia arising from physiological, cognitive, and environmental changes occurring normally over the course of early development. Consider yet another alternative: Certainly these patients believed that they were incest survivors; lacking actual

memories for abuse, knowing something of the concept of repressed memory but nothing of normal infantile and childhood amnesia, they may have *assumed* that their abuse occurred during that period, early in childhood, when their memories were poorest. Thus, the dating of their abuse may be based on attributional processes, not fact retrieval.

The difficulties with repressed memories are further exacerbated by the patient's strategies of coping with them. A childhood history of incest or other forms of abuse certainly provides a compelling explanation for his or her current problems in living. Upon drawing the conclusion that they were abused, patients (sometimes acting on professional advice) may withdraw from their families, which effectively prevents false recollections of abuse from being challenged by those implicated in them. They may also go so far as to reconstruct their lives and personalities around the memories of abuse, and their new identities as survivors of trauma.

This is all right if the memory is accurate -- although in her recent book, *I'm Dysfunctional, You're Dysfunctional: The Recovery Movement and Other Self-Help Fashions*, Wendy Kaminer has written compellingly of the dark side of the survivor and recovery movements. But when the memory is distorted, or confabulated, the result can be what has been called the *False Memory Syndrome* -- a condition in which a person's identity and interpersonal relationships are centered around a memory of traumatic experience which is objectively false but in which the person strongly believes. Note that the syndrome is not characterized by false memories as such. We all have memories that are inaccurate. Rather, the syndrome may be diagnosed when the memory is so deeply engrained that it orients the individual's entire personality and lifestyle, in turn disrupting all sorts of other adaptive behaviors. The

analogy to personality disorder is intentional. False memory syndrome is especially destructive because the person assiduously avoids confrontation with any evidence that might challenge the memory. Thus it takes on a life of its own, encapsulated, and resistant to correction. The person may become so focused on the memory that he or she may be effectively distracted from coping with the real problems in his or her life.

On Validating Memories

What are we supposed to make of all this? Psychologists are supposed to be experts on things like memory, and in fact we know a great deal about how memory is encoded, stored, and retrieved. In describing how memory works, psychologists often resort to the metaphor of a library: memory traces are like books that must be purchased and catalogued; the prospective user must look up the book in the catalog in order to know where to find it; and in order for the search to succeed, the book must not have been eaten by worms, or displaced by a careless user. The library metaphor will take us a long way, but the notion of memory retrieval obscures the fact that memories can be distorted, biased, and otherwise changed by changes in perspective and other events that occur after the time of encoding. In the final analysis, memory isn't like reading a book; it's like *writing* a book from fragmentary notes. The principle of memory reconstruction (Kihlstrom, 1993; Kihlstrom & Barnhardt, 1993) is of utmost importance in the present context, because it means that any particular memory is only partly derived from trace information encoded at the time of the event. Recall that most if not all of the verifiable information recalled by Eileen Franklin about Susan Nason's murder had been available for 20 years in various newspaper accounts; and also that her memory changed over time, in conformance with known facts of the case. This does not mean that Eileen Franklin's memories are the product of confabulation; but it does mean that the possibility of confabulation cannot be ruled out.

Do we have any way of telling which memories are valid, and which are the products of imagination? The short answer is *no* (Kihlstrom, 1993). In the final analysis, then there do not appear to be any internal criteria -- that is, standards that can be applied to the statements themselves -- that

can serve to distinguish between accurate recollections and fabrications and confabulations. Nothing substitutes for external criteria -- that is, the verification of individual statements by objective evidence. In the absence of such independent corroboration, we have no means of reliably distinguishing between fact and fantasy.

The point is that the techniques used by many counselors and therapists to promote the recovery of memory *might* succeed as they're intended to do. But they may also promote confabulation, and in such a manner that neither the counselor nor the patient will be able to determine, with accuracy, whether the recollection is accurate. Because by their very nature these memories are often not subject to independent corroboration, therapists and their patients, and counselors and their clients, are treading on very thin ice. So far as the therapy is concerned, the patient may be distracted from grappling with issues that are centrally involved with his or her presenting complaint; the patient's family relations may be inappropriately disrupted; and if the recollection is brought into the legal system, people may be unjustly accused and lives unjustifiably ruined.

Consider, first, the cultural atmosphere that surrounds the recovery of these memories. It is perhaps only a slight exaggeration to say that we are living and working in a time when a history of childhood incest or sexual abuse is the default option. That is, is it widely believed that a large majority, or at least a substantial minority, of individuals have been victims of incest or sexual abuse. If a majority, or even a substantial minority, of people are believed to have been abused as children, then it becomes easier to believe, or to be convinced, that you yourself have been abused.

Then there is the claim that specific symptoms are the effects of childhood sexual abuse. In *The Courage to Heal*, Ellen Bass and Laura Davis offer a kind of checklist to be used for self-diagnosis, consisting of 74 different attributes ostensibly associated with sexual abuse. The list includes 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. Taken together, these attributes constitute a kind of "Barnum description", in that they are so general that they apply to some extent to everyone. It may be true that abuse victims show these signs and symptoms; but it does not follow that everyone who displays these attributes is an abuse victim.

The problem occurs when well-intentioned counselors conclude, from their patients' symptoms, that they are victims of abuse -- *in the absence of any independent evidence for the abuse*. We should remember that patients come to therapists because they are puzzled and concerned about what is happening to them, and about what they are experiencing. They are looking for answers. If the therapist responds to the patient's complaint with an authoritative diagnosis of child abuse, it should surprise nobody that reports of abuse will ensue. *Therapists are supposed to know about these things.* But whether these reports reflect the patient's actual experience, or simply unfold by virtue of the self-fulfilling prophecy, remains undetermined -- and, frankly, they remain indeterminate.

The situation is compounded by the media attention given to childhood incest and sexual abuse, and the adult recovery of ostensibly repressed memories

of these experiences. In much the same way as the anticommunist films of the 1950s (e.g., *My Son John*, 1952) created a society in which there seemed to be a subversive under every bed, these media portrayals provide a distorted representation of repressed memories -- typically complete with so-called "experts" who testify before the camera about the high incidence of child abuse, and the inerrancy of late-recovered repressed memories. Bass and Davis, in *The Courage to Heal*, note that "As the media focus on sexual abuse has increased, more and more women have had their memories triggered". But the fact is that memories aren't *triggered* at all. They are *reconstructed*. Whether the reconstruction is historically accurate is an empirical question; in individual cases, including many cases of repressed memories of childhood abuse, it is also an unanswerable one.

Further difficulty is created by the fact that we remember very little of our early childhoods. The theory of repressed memories is that the abused child defends against his or her experience by erecting a repressive or dissociative barrier, which blocks the memories from conscious awareness. But infantile and childhood amnesia are universal phenomena: they occur even in laboratory rats. For most of us, our earliest recollection is dated between the third and fourth birthday, and the first signs of a continuous record of autobiographical memory do not appear until sometime between five and six years of age. Thus, the theory offers a ready explanation of why some patients, who manifest symptoms ostensibly characteristic of abuse, remember nothing of the kind: memory for the incidents has been repressed. Sometimes a hand is waved in the direction of infantile and childhood amnesia. Thus, Bass and Davis offer the following caution:

> If you ask friends who weren't abused, you will find that most of them also don't remember a great number of details from their childhood.

But just a couple of pages later, they assert:

> If you don't remember your abuse, you are not alone. Many women don't have memories, and some never get any memories. This doesn't mean they weren't abused.
>
> If you don't have any memory of it, it can be hard to believe the abuse really happened. You may feel insecure about trusting your intuition and want "proof" of your abuse. This is a very natural desire, but it is not always one that can be met....

And elsewhere they write:

> If you are unable to remember any specific instances... but still have a feeling that something abusive happened to you, it probably did.... If you think you were abused, and your life shows the symptoms, then you were.

And in another place:

> Many survivors suppress all memories of what happened to them as children.... Survivors often doubt their own perceptions. Coming to believe that the abuse really happened, and that it really hurt you, is a vital part of the healing process.

Thus, in a peculiarly perverse logic, the very fact that someone cannot remember instances of abuse is turned into proof that they were in fact abused. There are no warnings here about infantile and childhood amnesia, or the strong possibility that one's inability to remember much from childhood may reflect nothing more than universal facts about the maturation of brain structures, the growth of information-processing capacity, and the absence of environmental cues to space and time that are necessary for the encoding of memorable episodic memories.

Sir Frederick Bartlett, in his classic monograph on *Remembering*, concluded that recollection begins with an attitude, around which the memory is reconstructed. In the present instance, the attitude is conveyed by a

popular culture which embraces child abuse as a widespread fact of life, and the therapist's suggestion -- it's often much more than just a hypothesis -- that the patient was in fact abused. Remembering continues with further reconstructive activity. Bass and Davis write:

> If you don't remember what happened to you, write about what you *do* remember. Re-create the context in which the abuse happened even if you don't remember the specifics of the abuse yet. Describe where you lived as a child. What was going on in your family, in your neighborhood, in your life? Often when women think they don't remember, they actually remember quite a lot. But since the picture isn't in sequence and isn't totally filled in, they don't feel they have permission to call what they know "remembering". Start with what you have. When you utilize that fully, you usually get more.

The general idea here is a good one: according to the encoding specificity principle, reinstating the context in which an event occurred can improve memory for the event. The problem is that in reinstating the context, the person's speculations about what *might have* happened may well be confused with the person's memory about what *did* happen -- especially in the presence of an authoritative, supportive therapist who assumes that the speculations are true.

The process continues with dreams, images, sensations, feelings, and thoughts. As with Freud, these phenomena are supposed to represent the return of the repressed -- the first glimmerings of repressed memories emerging into consciousness. And, again, the idea is good: we know that memories can be expressed implicitly in thoughts, images, and dreams. But again, it does not follow that every thought, image, and dream about incest and abuse is an expression of a repressed memory of incest and abuse. These things may simply reflect what Freud called "day residues" of conscious experience. It should

surprise no one that an anxious and depressed person, who has been informed by his or her therapist that he or she is likely to be a victim of child abuse, and who is offered the theory of repressed memory to explain why he or she has no memory for such abuse, and who is the recipient of countless messages from the media that says that both abuse and repression are ubiquitous, should start thinking and dreaming about incest and child abuse. Victims of the San Francisco Earthquake suffered nightmares for many months; many teachers have "schoolmares" before the beginning of classes each fall; students dream about the exams they are to take the next day; we all ruminate over the insults that have been inflicted on us, or the social blunders we have made. Why shouldn't someone who is concerned about incest and abuse do the same? The problem comes when these phenomena are attributed to actual past experiences, in the absence of any independent corroboration of these memories.

Near the beginning of their chapter on "Remembering", Bass and Davis write:

> There is no right or wrong when it comes to remembering.

Unfortunately, that's not remotely true. Memories are personal, and nobody can say to someone else that they don't have a particular memory. And, for that matter, nobody can say to someone else that they *do* have a particular memory, but they just can't remember it. But that doesn't mean that there is no right or wrong in memory. The crucible for memory is the truth about what happened, the fact of the matter. Incest and other forms of abuse and trauma occur all too frequently in our society, and the survivors of these experiences deserve our respect and support. But uncorroborated memories of these sorts of things have no special status. They should be taken seriously, and they should be investigated, but they should not be accepted uncritically

by either by the patient who remembers them or the therapist who receives the report. There is a fact of the matter, and the truth sometimes lies elsewhere.

Unfortunately, the vagaries of memory are such as to make it impossible to get at the truth by remembering alone. Many people, including many counselors, don't seem to understand this. In many cases, therapeutic work with patients is based on a view of memory processes that is simply, but wildly, incongruent with established principles. Many therapists, and their patients, are satisfied with a story that provides a plausible explanation of current difficulties. But, as Donald Spence has argued, narrative truth is no substitute for historical truth. It does not help a patient to persuade him or her to believe something that isn't true. Not only will the belief have unpleasant consequences for innocent people; but the patient will be effectively diverted from confronting issues that *are* important to his or her current problems in living. Doubtless, Breuer and Freud were right: the problems of many clinical patients can be traced to their life histories, including the experiences of early childhood. Memory remains important for psychotherapy, or at least some forms of it. The problem is in figuring out which memories are true, and which are not. That is a problem that will engage us, in both the laboratory and the clinic, for a long, long time.

Author Notes

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