DISSOCIATION AND MEMORY: A TWO-HUNDRED-YEAR PERSPECTIVE

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#### ABSTRACT

Since it first came under systematic scrutiny two hundred years ago, dissociation has pointed out certain peculiarities of memory. The discovery of magnetic sleep in 1784 revealed that there are separate consciousnesses that operate within an individual, each with a distinct memory chain. The lack of awareness of one consciousness for the experience of the other was called amnesia. Further experimentation showed that those consciousnesses could be multiple, and that different experiences could be assigned to different centers of consciousness. This indicated that the terms "amnesia" or "forgetting" do not really apply, since information assigned to one center was not known by the other centers in the first place. In the 1890's this "dissociated" way of functioning came to be seen by many as normal and common to all human beings. The theory of state-related memory, arising in the 1960's confirmed this view. Later, the BASK model provided a framework for synthesizing a broad array of data about dissociation. Most recently, the concept of cultural dissociation points out the need to retrieve and reclaim a wide variety of human experiences that have been interdicted by our culture and barred from mainstream thinking.

# DISSOCIATION AND THE DISCOVERY OF MAGNETIC SLEEP

Dissociation as a systematically studied phenomenon dates back two hundred years. In the late 1770's, the Viennese physician Franz Anton Mesmer devised and promoted a healing system that envisioned the physician as a healer, not prescribing potions and medications, but using his own organism to direct healing energy throughout the body of the ill patient. That energy Mesmer called "magnetic fluid," and his system was named "animal magnetism" (Mesmer, 1779).

Then in 1784, one of Mesmer's pupils made a momentous discovery. He was the Marquis de Puységur, an aristocrat living near Soissons in France. Puységur noticed that when he applied animal magnetism to heal Victor Race, a local peasant, of a lung infection, an odd thing occurred. Victor fell asleep, and yet, in a peculiar way, he was still awake. In this sleep-waking state, Victor showed certain remarkable qualities. He was very suggestible, and at the mere word of Puységur could be made to think he was hunting or at a

dance. Also, he seemed to be able to read Puységur's thoughts, and could, for instance, hum a tune that was in Puységur's mind. Third, he underwent a transformation in personality, so that this man, whom Puységur described as slow and most ignorant, became mentally alert and strikingly insightful. And finally, when Puységur woke him up from this state, Victor could remember nothing of what had occurred. This was the discovery of "magnetic sleep" (Puységur, 1784, p. 180), or what would much later be called hypnotic trance.

For a historical exploration of memory and dissociation, two things are important in this narrative: first, that Victor was, in Puységur's own words, a different person (Puységur, 1784, p. 80) while in magnetic sleep, and second, that when awakened, Victor could remember nothing of what had occurred during that sleep. In fact, it soon became clear that there were two distinct memory chains involved, corresponding to the two different states. The memory chain of the waking Victor included nothing of that of the sleeping Victor. While the memory chain of the sleeping Victor included all that happened in that sleep and every previous sleep state, and in addition included a knowledge of Victor's waking life.

After that, magnetizers by the hundreds repeated Puységur's experiment, and they confirmed what he had found (Crabtree, 1988). It soon became clear that human beings have two different states of consciousness — one their daily state of awareness, and the other a state of consciousness that is ordinarily hidden, but can be brought to light by inducing magnetic sleep.

Magnetizers called this dual state "double consciousness." It is interesting to note that the more they experimented with double consciousness in magnetic sleep, the more they discovered *naturally* occurring double consciousness. And in the 1790s the first true cases of dual personality or multiple personality were reported.

#### DISSOCIATION AND FORGETTING

Now the question of memory arises: when the magnetic sleeper awakes, does he or she *forget* what occurred while they were entranced, or is something other than forgetting going on? A peculiar case that occurred around the middle of the nineteenth century will help to clarify the question.

William James reported the case of a woman treated in 1860 for most unusual symptoms (James, 1889). Anna Winsor's trouble began with a sharp pain in her right arm. The pain grew, and then, suddenly, the arm fell limp at her side. Anna looked at the arm in amazement, thinking that

it belonged to someone else. She could not be convinced that it was her own right arm, which she believed was drawn back along her spine. No matter what was done to the right arm — cutting, pricking — she took no notice of it whatsoever.

Anna Winsor believed that her right arm was indeed an arm, but not her own. She treated it as an intelligent thing and wanted to keep it away from her, biting it or hitting it and generally trying to get rid of it. She saw it as an interference in her life, since it sometimes used things that belonged to her. She called that right arm "Old Stump."

At the same time Anne's *left* arm carried out very violent self-destructive acts. It would tear her hair, rip the bedclothes, and shred her nightdress. The right arm, "Old Stump," would protect the woman against the left arm, grabbing the vicious

member and restraining it.

When things were quieter and Anne was either asleep or in a state of magnetic somnambulism, "Old Stump" would engage in all kinds of constructive activities. "Old Stump" often wrote, sometimes producing poetry, sometimes messages from departed persons. The poetry included original pieces. For instance, "Old Stump" wrote a set of verses with English and Latin phrases cleverly combined, although it was reported that Anna knew no Latin.

"Old Stump" also wrote letters, some of them quite amusing. At times, it would answer questions put to it. At other times, it would give directions about how to care for Anna. "Old Stump" never slept, but was always available to help, sometimes adjusting the bedclothes of the sleeping Anna, sometimes knocking on the headboard to get the attention of Anna's mother if some special need arose. When Anna was at her most delirious, "Old Stump" remained completely

rational and helpful.

The usefulness of the case of Anna Winsor for the examination of dissociation and memory arises from the fact that her two consciousnesses did not alternate back and forth, first one and then the other, as in cases of double consciousness and multiple personality reported through that period. "Old Stump" embodied Anna's somnambulistic consciousness and was totally alien to Anna, but it was active at the same time as Anna's normal consciousness. The two consciousnesses were present simultaneously and one could observe them both at once.

What did this mean? It hinted that in this somnambulistic duality no *amnesia* was involved: Anna did not at first *know* and then *forget* the thoughts, intentions, and actions of "Old Stump." Rather she *never* knew them. They never formed a part of her experience; they were never associated with her ordinary consciousness in any way.

## DISSOCIATION AND CONCURRENT STREAMS OF CONSCIOUSNESS

It was Pierre Janet who finally clarified this aspect of memory and dissociation. In an article written in 1887, Janet for the first time used the term "dissociation" in the sense that we use it today. Janet worked with hysteria and, in the process, discovered that the psychological organization of hysterics incorporates a multiplicity of egos or personalities. He pointed out that these personalities co-exist in the individual, and because they exist and function separately, they can rightly be said to be "dissociated" from each other.

Janet noted that each personality had its own set of memories. In the process of investigating those memories, he discovered an important fact: dissociation is *not* the breaking down of an already-existing whole into parts. Rather, it consists of the building up of the parts through assigning experiences to different ego centers.

Here is how it worked. As Janet's subjects were developing their hysterical condition, they formed different ego centers, separate from ordinary consciousness, to handle particular experiences. Certain events were experienced by one center, other events were experienced by another center. These centers gradually became more and more complex, to the point that they could be called "personalities." The process of assigning one kind of experience to one center and another kind of experience to another center resulted in dissociation. This meant that dissociation was not "disassociation" or a "separating off" of segments of experience that had previously been together. Rather, dissociating was really the process of associating or assigning experiences, as they occurred, to specific ego centers or personalities.

What does this mean for memory? It means that in dissociation that involves the formation of multiple ego centers, there is no such thing as *amnesia*. The experience of a secondary ego center is not and never was available to the primary ego center or ordinary consciousness. And since you cannot forget what you never knew, there is no forget-

ting in dissociation of this type.

Now Janet said that dissociation is pathological, occurring only because of a weakening of the synthesizing power of the psyche. But this view did not hold among those who were working in the same area at the time. The Frenchman Alfred Binet (Binet, 1890, 1892), the German Max Dessoir (Dessoir, 1889), the Americans William James (James, 1890, 1901, and James in Taylor, 1983), Boris Sidis (Sidis, 1898), and Morton Prince (Prince, 1907, 1914), and the Briton Frederic Myers (Myers, 1903), all believed that dissociation was a normal human function, and that multiplicity was a fact of ordinary life. Myers, the most articulate of these researchers, wrote in the 1880s and 1890s (Myers, 1885, 1887, 1889, 1892a, 1892b, 1893, 1895) that normal consciousness is only a small, and not even very privileged, part of the of the whole human psyche. He believed, and William James (James 1901, 1903) supported him in this, that the future of psychological research would be concerned with exploring the parts of the human mind that are ordinarily dissociated from our daily consciousness. Those parts, he said, are the repository of the true richness of human nature.

Unfortunately, the view that dissociation is normal did not hold its own in the decades that followed. The overwhelming influence of Janet and of Charcot (who also believed that dissociation was pathological) militated against it.

The rising star of Sigmund Freud also obscured this insight. Freud believed that human consciousness was unitary—that one person can have but one consciousness. He said that all mental activity is in the first instance unconscious (Freud, 1964b), and described consciousness as a "sense-organ for the per-

ception of psychical qualities" (Freud, 1964a). In this way, Freud saw the consciousness of an individual as a search-light roving the inner psychic landscape, illuminating now this set of mental events, now that. In this framework of unitary consciousness, there is no satisfactory way to account for multiple mental streams that are *simultaneous* or *concurrent*. Freud could explain neither pathological dissociation—such as multiple personality, the phenomena of Janet's hysterics, and the machinations of "Old Stump"—nor the dissociative data of the normal amassed by Myers, James, Prince, Binet, and others. A more detailed description of this material is available (Crabtree, 1986).

# A COMPREHENSIVE APPROACH TO DISSOCIATION

In the late 1960s, a new wrinkle on dissociation and memory was introduced. It was the discovery of "state-dependent" effects in human beings. The notion, briefly stated, is that when people learn information, undergo an experience, or develop a skill in a specific state of consciousness, they can recall that information, reclaim that experience, or exercise that skill most easily when the original state of consciousness is re-established. The earliest experiments in this area investigated the effects of certain drugs on memory in animals (Overton, 1964, 1968). These were followed by investigations of the effects of alcohol or barbiturate intoxication on human memory (e.g., Goodwin, Powell, Bremer, Hoine, & Stern, 1969; Eich, 1977). The results proved the old saw that if a person when sober could not remember where he put his keys when drunk, the best way to get the memory back was to get drunk again.

Roland Fischer, a pioneer in this field of investigation (Fischer, Kappeler, Wisecup, & Thatcher, 1970; Fischer & Landon, 1972; Fischer, 1976, 1977), attempted to place our understanding of state-bound memory in a framework that takes into account both *context* and a spectrum of *psycho-physical arousal*, ranging from hypo- to hyper-arousal (Fischer, 1971). He speculated that the more discontinuous the states of arousal, the less ability to retrieve a memory in one state of an event in another. In 1971, Fischer stated: "The implications of this amnesia between disparate levels of arousal for criminology, jurisprudence, and psychotherapy have not yet been realized" (p. 33). That statement seems to be quite valid yet today.

The implications of the notion of state-dependent learning and state-dependent memory are vast. It can be said that for *all* people, the so-called normal and the disordered, memories are attached to specific states of consciousness and gaining access to memories depends on returning to the proper state of consciousness. Memory as state-dependent serves as an experimental model for verifying the understanding of dissociation and memory of Janet. It also confirms the notion that "amnesia" or "forgetting" are misleading concepts to use in attempting to describe dissociative experience, and points instead to dissociation as a partitioned assimilation of information and experiences. The rise of a state-dependent model for memory also goes a long way to bridge the gap between those who operate within a psy-

chodynamic psychotherapeutic framework, accepting the notion of a subconscious or unconscious sphere of mental activity, and those who are more cognitively oriented. An important gap-closing study in this area is Bowers and Meichenbaum (1984).

So this is what it comes down to: dissociation, normal and disordered, is the partitioned assimilation of information and experiences. And memory is the retrieval of information and experiences by returning to the compartment into which they were assimilated. There is no "forgetting" followed by "remembering." Instead, we move from state of consciousness to state of consciousness and retrieve information or experiential data with greater or less efficiency, depending on the "disparity" of the present state from that in which the information was obtained or the experience was undergone. If the disparity is too great, retrieval will fail.

This way of looking at dissociation and memory fits in well with the most comprehensive and useful contemporary framework for understanding dissociation: the BASK model of Bennett Braun (Braun, 1988a, 1988b). The BASK model of dissociation identifies four aspects of dissociative experience—Behavior, Affect, Sensation, and Knowledge—and allows for their independent manifestation. This model, based on a solid phenomenological approach, makes sense of the confusing variety of memory experienced by dissociated individuals and completes the task begun by the magnetizers. It complements speculations begun by investigators of state-related memory by pointing out that, when dealing with dissociated experience, knowledge is only one of the aspects that is separated off from the main stream of the psyche.

The BASK model also has immediate therapeutic implications, since it indicates that the psychotherapist should work to restore all four aspects of dissociative experience to the ongoing flow of consciousness and re-establish its integrity (Braun, 1988b).

### CULTURAL DISSOCIATION

At this moment in the evolution of our understanding of memory and dissociation, a new and most promising aspect is coming to the fore. It has to do with memory and dissociation in a *cultural context*, and it involves the identification of a disorder on the collective level that corresponds to multiple personality disorder on the individual level.

Colin Ross brought this issue to our attention in a striking way in an article titled "The Dissociated Executive Self and the Cultural Dissociation Barrier" (Ross, 1991). In the tradition of Myers, Ross points out that multiplicity is a normal organizational principle of the human psyche, and that the executive self or ego is just one of many parts that make up the whole human being. But in the Western industrialized world the executive self has suppressed all the other part selves. A *cultural* dissociation barrier has been erected that effectively removes from consideration those parts of the self that deal with experiences that are unacceptable to Western thinking. These rejected experiences fall into three main categories: paranormal experiences, deep intuitive consciousness, and programs responsible for running the physical organism. Because of the cultural dissociation barrier,

the executive self—what we ordinarily call "I"—is disconnected from these very important experiences and must relegate them to second-class status or risk feeling at odds with what is culturally accepted as real.

Colin Ross's notion of a dissociated executive self generates a framework surprisingly close to one proposed by Charles Tart (Tart, 1987). Tart says that human beings are in a perpetual state of trance induced by the society they live in. He calls this state "consensus trance" or "the sleep of everyday life." Consensus trance is our normal consciousness; the culture is our hypnotizer. Because we live in a state of trance, we are highly suggestible. In this state, we accept as real what our culture, our hypnotist, has agreed to call real, and we deny the reality of what our culture ignores. The consensus trance is deep, and we are totally absorbed in the feelings, images, and impressions that our culture has agreed to designate "reality." This state is terribly limiting and basically pathological. To overcome the limitations placed on us by our culture, says Tart, we must wake up from our trance state and get in touch with the broader range of experiences that is possible for us.

The framework indicated by both Ross and Tart calls attention to the need for a new and imaginative kind of therapy. The problem cannot be dealt with merely on an individual basis. What we have is a cultural pathology, a pathology that none of us completely escapes, since to some degree we all dissociate from the culturally forbidden.

A cultural pathology requires a cultural therapy. What does removing the cultural dissociation barrier and waking up from consensus trance entail? Here is where our understanding of dissociation and memory can help.

Dissociation is the partitioned assimilation of information and experiences. When we work with dissociation on the level of the *individual*—for example, with multiple personality disorder—we must listen to all the parts, all the alters, and let them bring forward their knowledge and experience. Only in that way can eventual integration take place.

The same approach must apply when dealing with cultural dissociation. Those elements of the culture that have been alienated from the mainstream—the alter personalities of the culture—must be allowed to tell their story, give us their information, and describe their experiences. If we are to take seriously the message of Colin Ross, Charles Tart, and others, there needs to be a greater openness to those voices in our culture that speak of paranormal experiences, deep intuitive awareness, and other experiences that do not readily fit into accepted paradigms. These voices are alienated from the center, from the mainstream of our culture. Because of that they may speak with a discordant or unpleasant tone. But just as with alters in an individual, we must tolerate those distortions to hear the central vein of truth in their stories. This is a demanding task, for it means being willing to listen to what the culture considers unspeakable. The task will be well rewarded by the retrieval of a lost treasure—the totality of human experience—from its state of cultural oblivion.

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