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Psychological Trauma, or Unexperienced Experience

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"I call this sphere. . . the sphere of "between." Though being realized in very different degrees, it is a primal category of human reality. This is where the genuine third alternative must begin." Martin Buber (1938)

My thesis is such that it is hard to understand why it is not already part of our everyday knowledge. Simply, when something happens to us, we do not experience all of it at once. Experiencing is a process that takes place over time. It involves neurophysiological and somatic work on the part of the person to whom the experience happens. Further, the amount of work that is involved depends on how serious the nature of this external challenge is and several other internal factors that I will go into later.

I have perused much of the voluminous literature that has appeared in recent years in relation to posttraumatic stress disorder as well as the literature on traumatic neurosis written during the nineteenth century. And yet, this simple awareness that experiencing something is a process that takes place within us over time seems to have been missed. Simply, when something happens to us we do not experience all of it at once. This is all the more strange because if we consider our everyday experience of life, we know that if something disturbing happens to us -- say, for example, an unpleasant argument with someone on a Friday afternoon -- we may find ourselves going over and over it during the weekend and unable to escape the unpleasant feeling attached to it or resolve the problem. But then, having slept on it for a couple of nights, we wake up on Monday morning no longer troubled, even though we may have had no further communication with the person involved. Somehow the problem is now solved. This to me is clear evidence that some work has been going on within us during this couple of days so that the experience is now integrated into ourselves, is becoming memory, and has moved from something in the present, something unsettled and current, into the past.

There appear to be two main reasons why this simple phenomenon of everyday experience has been overlooked. The first reason involves certain historical factors that

surrounded the early work of Sigmund Freud, now just a hundred years ago, for it was he who first clearly drew attention to the whole issue of traumatic neurosis. The second reason has to do with the way in which we use language. I would like to deal with each of the reasons for this oversight in more detail.

HISTORICAL DEVELOPMENT OF THE CONCEPT OF TRAUMATIC NEUROSIS

From ancient times, the adverse emotional effects of trauma have been well recognized by philosophers and writers, but in the psychiatric literature the earliest reference I can find is that of Briquet, who in 1859 first put forward the notion that hysterical symptoms came as the result of traumatic events. It was he who first formulated the concept of dissociation. Around the same time, Ambroise Auguste Tardieu (1818-1879), who was professor of legal medicine at the University of Paris, first raised the question of child sexual abuse. His Etude Medico Legale (a medico-legal study of assaults on decency) was published in 1857; it drew attention, for the first time, to the frequency of sexual assault on children, mostly young girls. In France during the years 1858 to 1869, there were 9,125 persons accused of rape or attempted rape of children. The vast majority of the cases Tardieu described were between the ages of four and twelve, and almost all of them were girls. His was a medico-legal study and offered no implications as to the psychological effect of such trauma. This would have to wait.

I should mention here that Tardieu was a medical specialist who did not doubt the authenticity of the sexual assaults on children that he was called upon to deal with by the courts. However, within thirty years, his successors, Alfred Fournier (1832-1914) and P. C. Brouardel, who was dean of the faculty of medicine during the period when Freud was in Paris, took a starkly different view, casting serious doubt on the reality of sexual abuse of children. Articles by Fournier (1880) ("Simulation of Sexual Attacks on Young Children") and Brouardel (1883) ("The Causes of Error in Expert Opinions with Respect to Sexual Assaults") had a major effect on all later thinking. To give just one example of these views, which, as I say, were current at the time of Freud's stay in Paris, here is a quote from the Brouardel article:

Hysteria plays a considerable role in the genesis of these false accusations, either because of the genital hallucinations which stem from the great neurosis or because hysterics do not hesitate to invent mendacious stories with the sole purpose of attracting attention to themselves and to make themselves interesting.

Freud later had a change of heart about sexual abuse. He would have been only too familiar with the views of Fournier and Brouardel when the pressures came upon him to change his mind in regard to the reality of sexual abuse of children and his theory of seduction in the genesis of hysteria and other adult neuroses. Yet again, in our time, this debate regarding child sexual abuse is coming full circle.

From a different source, physicians such as Dr. Jacob Mendez Da Costa (1871) were beginning to describe the traumatic effects of war experiences. Da Costa studied a group

of physically sound, yet symptomatic, American Civil War veterans: these men complained of palpitations, increased pain in the cardiac region, tachycardia, cardiac uneasiness, headache, dimness of vision, and giddiness. He found no evidence of myocardial disease and labeled the condition "irritable heart," which became known as Da Costa's syndrome. Following World War One, Sir Thomas Lewis (1919) described a group of soldiers with a similar cluster of symptoms; he called this the "soldier's heart or the effort syndrome." Oppenheimer (1918) referred to similar psychoneurotic and cardiac manifestations in soldiers of the First World War as "neurocirculatory asthenia."

It was Charcot (1825-1893) who first related the symptoms of dissociation to brain changes following a traumatic event. This paved the way for Freud's early theories as to the importance of seduction and child sexual abuse in the etiology of hysteria and other neuroses. Freud was in Paris from October 1885 until February 1886 to study under the great French neurologist. In discussing the seduction theory in 1914, Freud wrote, "Influenced by Charcot's use of the traumatic origin of hysteria, one was readily inclined to accept as true and aetiologically significant the statements made by patients in which they ascribe their symptoms to passive sexual experience in the first years of childhood -- to put it bluntly, to seduction."

In the years following his return to Vienna, Freud began serious work on his theories of the traumatic origin of the neuroses. This was the period of his fruitful collaboration with Joseph Breuer. In their preliminary communication, printed in Studies in Hysteria (1893), Freud and Breuer stated that "traumatic experiences owe their pathogenic force to the fact that they produce quantities of excitation and these in turn call for discharge in accordance with the principles of constancy." They maintained that affect remains attached to the memory and that these memories were "found to be astonishingly intact, to possess remarkable sensory force and when they returned they acted with all the affective strength of new experience." Although the writers use the term memory here, they were describing the retrieval of experience -- or the present, in the sense in which this word is used in this paper.

This brings me to a central question about Freud's work, to which for many years I could find no answer. In 1959, when I was working in London with Joshua Bierer, I was first introduced to the study of the possible therapeutic effects of LSD. I witnessed patients powerfully experiencing traumatic events that had taken place many years before as if they were happening at that moment. Later, when in the United States for the first time, I laid hands on Freud's early papers (written in the years from 1893 to 1896) and was astonished to find him describing virtually identical scenes that his patients underwent in the process of analysis. In "The Aetiology of Hysteria" (1896), which was presented to the Society for Psychiatry and Neurology in Vienna on 21 April, Freud said, "We must take our start from Joseph Breuer's momentous discovery; the symptoms of hysteria (apart from the stigmata) are determined by certain experiences of the patient which have operated in a traumatic fashion and which are being reproduced in his psychical life in the form of mnemic symbols."

Freud went further, and in doing so parted company with Breuer, for he insisted that "whatever case and whatever symptom we take as our point of departure, in the end we infallibly come to the field of sexual experience." In this way, he was hoist with his own petard, and he prepared the way for the difficulties in which he soon found himself, for he went on:

The two investigators as whose pupil I began my studies on hysteria, Charcot and Breuer, were far from having any such presuppositions; in fact they had a personal disinclination to it which I originally shared. Only the most laborious and detailed investigations have converted me, and that slowly enough to the view I hold today. If you submit my assertion that the aetiology of hysteria lies in sexual life to the strictest examination, you will find that it is supported by the fact that in some eighteen cases of hysteria I have been able to discover this connection in every single symptom, and where the circumstances allowed, to confirm it by therapeutic success.

In a paper published even earlier in the French paper Revue Neurologique on 30 March 1896, Freud enlarged on this. "In none of these cases was an event of the kind defined above [seduction in childhood] missing. It was represented either by a brutal assault committed by an adult or by a seduction less rapid and less repulsive but reaching the same conclusion."

Freud then anticipated objections that would undoubtedly be raised when he asked, "How is it possible to remain convinced of the reality of analytic confessions which claim to be memories preserved from the earliest childhood and how is one to arm oneself against the tendency to lies and the facility of invention which are attributed to hysterical subjects." The answer he gives is striking in view of his later volte-face and is worth quoting in full:

The fact is that these patients never repeat these stories spontaneously, nor do they ever in the course of the treatment suddenly present the physician with the complete recollection of a scene of this kind. One only succeeds in awakening the psychical trace of a precocious sexual event under the most energetic pressure of the analytic procedure and against an enormous resistance. Moreover, the memory must be extracted from them piece by piece and while it is being awakened in their consciousness they become the prey to an emotion which it would be hard to counterfeit.

What I could not understand at the time, and which remained a question with me for many years afterwards, was how in little more than a year Freud apparently underwent a complete change of heart, something he confided in a letter to Wilhelm Fliess, who was his closest and most trusted friend at that time. In his biography of Freud, Ernest Jones describes dramatically what happened:

Up to the spring of 1897 Freud still held firmly to his conviction of the reality of child traumas, so strong was Charcot's teaching on traumatic experiences and so surely did the analysis of the patient's associations reproduce them. At that time doubts began to creep in although he made no mention of them in the records of progress that he was regularly sending to his friend Fliess. Then quite suddenly he decided to confide in him "the great

secret of something which in the past few months has gradually dawned on me." It was the awful truth that most -- not all -- of the seductions in childhood which his patients had revealed and on which he had built his whole theory of hysteria, never occurred. The letter of September 21st 1897, in which he made this announcement to Fliess, is the most valuable of that valuable series which was so fortunately preserved.

Much later, in "The History of the Psychoanalytic Movement" (1914), Freud wrote the following:

When this ideology broke down under the weight of its own improbability and contradiction in definitely ascertainable circumstances, the result at first was helpless bewilderment. Analysis had led back to these infantile sexual traumas by the right path and yet they were not true. The firm ground of reality was gone. At that time I would gladly have given up the whole work just as my esteemed predecessor Breuer had done when he made his unwelcome discovery. Perhaps I persevered only because I no longer had any choice and could not then begin at anything else. . . . If hysterical subjects trace back their symptoms to traumas that are fictitious then the new fact which emerges is precisely that they create such scenes in fantasy, and this psychical reality requires to be taken into account alongside practical reality. This reflection was soon followed by the discovery that these fantasies were intended to cover up the auto-erotic activity in the first years of childhood, to embellish it and raise it to a higher plane and now from behind the fantasies, the whole range of a child's sexual life came to light.

What was this new evidence under which Freud's theory of childhood sexual trauma broke down? No answer to this was forthcoming until, in the early 1980s, Masson published the full correspondence from Freud to Fliess, certainly the key parts of which had been suppressed up to that time. In his book The Assault on Truth, Masson also made clear for the first time the degree to which Freud had been ostracized by his medical colleagues following the presentation of his paper "The Aetiology of Hysteria" to the Society for Psychiatry and Neurology in Vienna in April 1896. In one of the unpublished letters to Fliess, Freud had this to say: "A lecture on the aetiology of hysteria at the Psychiatric Society met with an icy reception from the asses, and from Kraft-Ebbing the strange comment, 'It sounds like a scientific fairy tale.' And this after one has demonstrated to them a solution to a more than thousand year old problem, a 'source of the Nile.' "In a further letter to Fliess on 4 May, Freud wrote, "I am as isolated as you could wish me to be; the word has been given out to abandon me and a void is forming around me."

Masson also brought to light for the first time the strange story of Emma Eckstein. She was one of Freud's first analytic patients. Because of his idealized view of Fliess at the time, Freud agreed to let the Berlin ear-nose-and-throat surgeon operate on the nose of his patient. Fliess had the crackpot theory that the nose and the sexual organs were intimately connected and that sexual problems could be cured through nasal surgery.

In the first week of February 1895, Fliess arrived in Vienna and operated on Emma Eckstein. He left soon afterward. The operation was not a success, and the patient

developed a purulent discharge with intermittent hemorrhage; her condition deteriorated so markedly that Freud had to call in another surgeon. Freud described this in a letter to Fliess: "I asked Rosannes to meet me. We did so at noon. There still was moderate bleeding from nose and mouth, the fetid odour was very bad. Rosannes cleaned the area surrounding the opening, removed some sticking blood clots, and suddenly he pulled out something like a thread, kept on pulling and before either of us had time to think at least half a metre of gauze had been removed from the cavity. That moment came a flood of blood. The patient turned white, her eyes bulged and she had no pulse." The letter goes on to describe how extremely shaken Freud was, and yet he is at pains to exonerate Fliess and assure him that he was not in any way to blame for carrying out this, to say the least, ethically dubious operation.

The relapsing course of Emma Eckstein's illness continued for a number of months. Masson points out that Freud's concern was not primarily for her health but rather for Fliess's reputation. Emma, however, gradually recovered, and then we find perhaps the most surprising turnabout of all in this strange saga. In an early letter following the operation, Freud was lamenting to Fliess "that this mishap should have happened to you, how you will react to it when you hear about it, what others could make of it, how wrong I was to urge you to operate in a foreign city where you could not follow through on the case, how my intention to do the best for this poor girl was insidiously thwarted and resulted in endangering her life - all this came over me simultaneously."

Then, on 16 April 1896, Freud told Fliess that he had found "a completely surprising explanation of Eckstein's haemorrhages which will give you much pleasure. I have already figured out the story. . . . I should be able to prove to you that you were right, that her episodes of bleeding were hysterical, were occasioned by longing and probably occurred at the sexually relevant times." On 4 May, Freud explained further: ". . . so far I know only that she bled out of longing. She has always been a bleeder, when cutting herself and in similar circumstances. . . . When she saw how affected I was by her first haemorrhage . . . she experienced this as the realization of an old wish to be loved in her illness. . . . [T]hen in the sanatorium, she became restless during the night because of an unconscious wish to entice me to go there, and since I did not come during the night she renewed the bleeding as an unfailing means of rearousing my affection."

So what had been a life-threatening complication of a botched operation was changed in one masterly stroke to fantasy bleeding out of her longing for Freud himself. Freud showed himself on a number of occasions during his lifetime capable of turning a former position upside-down. He not only resolved a painful position, which had caused him considerable anxiety and guilt over a number of months, and exonerated his friend and himself from any responsibility for, or recrimination over, the mess; this new "insight" also opened the way to turn painful reality into fantasy and to blur the distinction between them. Thus, inadvertently and I am sure unconsciously, he found the means to rehabilitate himself in the eyes of his medical colleagues so that he, a Jew, could once again find himself accepted among the conservative medical establishment of Victorian Catholic Vienna. For it was shortly after this that he began to have serious doubts about the reality of seduction and child sexual abuse on which rested his whole theory of the etiology of

hysteria, and a little more than a year later, in September 1897, we find him writing the extraordinary letter to Fliess, already quoted above.

For Freud to blur the distinction between external reality and fantasy was in itself a tragedy.

Although in this way Freud rehabilitated his social and medical position, I feel he did so at the cost of several fundamental errors.

First, in claiming, as distinct from Breuer, that the underlying trauma in the etiology of hysteria and other neuroses was always sexual, involving abuse of small children, he left himself little room to maneuver and made certain that his views would be attacked from all sides. We now know that this was incorrect and that a whole variety of traumata occurring in childhood and later -- such as unresolved grief, various physical assaults, operations and injuries, experiences of war and natural disasters, and so forth -- can give rise to problems and neuroses in adult life.

Second, had Freud been aware of the thesis that I am putting forward -- that experiencing is a process involving work over time and that only at the end of that process has the experience been integrated into the self as memory -- then he could have answered the arguments that were raised against him and that he eventually accepted and used against his original theory. I do not feel that Freud is to be criticized for not being aware of this possibility, for most of what we now know of the neurophysiology of the brain, of the relationship of the cortex to the primitive brain, the limbic system, and of its interconnections with the whole endocrine and autonomic nervous system was still largely unknown at that time. But his most serious error was made in 1897 regarding Emma Eckstein, when he blurred the distinction between reality and fantasy. I believe that Masson was quite correct (although he has been vilified from all sides by psychoanalysts and others) in seeing this change in position on Freud's part as pivotal. Indeed, I am convinced that the later development of psychoanalysis and the whole psychotherapeutic movement has remained in a state of confusion because of this right up to the present day. I do not mean to detract in any way from Freud's later achievements and those of other creative geniuses in the psychoanalytic movement (such as Carl Jung) but simply to stress that to blur the distinction between external reality and fantasy was in itself a tragedy.

In that same critical letter to Fliess in September 1897, Freud demonstrated clearly his fundamental change of position when he stated: "Then, the certain insight that there are no indications of reality in the unconscious, so that one cannot distinguish between truth and fiction that has been cathected with affect. (Accordingly, there would remain the solution that the sexual fantasy invariably seizes upon the parents.)" And further down in the same letter: "... it seems once again arguable that only later experiences give the impetus to fantasies which hark back to childhood." To confirm that this became increasingly Freud's position, let me quote from a letter Freud wrote to Lohenfeld, which the latter published in 1904 in a paper on psychic obsessions: "As a rule it is the experiences of puberty which have a harmful effect. In the process of repression these

events are fantazied back into early childhood following the pathways of sexual impressions accidentally experienced during the illness or arising from the sexual constitution." Or again, from Freud's introductory lectures on psychoanalysis (1916): "If, in the case of girls who produce such an event in the story of their childhood, their father figures fairly regularly as the seducer, there can be no doubt either of the imaginary nature of the accusation or of the motive that has led to it. . . . [U]p to the present we have not succeeded in pointing to any difference in the consequences, whether fantasy or reality has had a greater share in the events of childhood."

These later statements of Freud's were a direct reversal of the very arguments he put forward in his original paper on the etiology of hysteria (April 1896) where he stated that "we have learned that no hysterical symptom can arise from a real experience alone but that in every case the memory of earlier experiences awakened in association to it plays a part in causing the symptoms." Further on in the same paper, Freud wrote, "[O]r again, let us take the instance of a young girl who blames herself most frightfully for having allowed a boy to stroke her hand in secret, and who from that time on has been overtaken by neurosis. . . . [A]nalysis shows you that the touching of her hand reminded her of another, similar touching which had happened very early in her childhood and which formed part of a less innocent whole, so that her self reproaches were actually reproaches about that old occasion."

Freud continued, "[O]ne has an impression indeed, that with hysterical patients it is as if all their old experiences . . . had retained their effective power as if such people were incapable of disposing of their psychical stimuli. . . . You must not forget that in hysterical people when there is a present day precipitating cause, the old experiences come into operation in the form of unconscious memories."

So we see that Freud had completely reversed his position (although it took him a number of years to fully do so), had changed real events of childhood into fantasies, and had blurred the distinction between these. As already quoted, he had explained this change later in 1914 as follows: "When this ideology broke down under its own improbability and under contradiction in definitely ascertainable circumstances. . . . " But what was this evidence and this contradiction? Nowhere did he actually give any evidence to explain this change of heart, except in the original letter in 1897 to Fliess where he wrote, "Then the surprise that in all cases, the father, not excluding my own, had to be accused of being perverse -- the realization of the unexpected frequency of hysteria, with precisely the same conditions prevailing in each, whereas surely such widespread perversions against children are not very probable." But this is precisely what the disclosures from all parts of the Western world during the past number of years has shown to be so -- that sexual abuse of children (in the vast majority of cases, of girls), back to their earliest years, is extremely common, with figures as high as one in ten being cited in the general population. Freud's earliest intuition has indeed been proved correct after all, although the same old forces of male-dominated society are trying once again to minimize or even deny these disturbing findings.

UNEXPERIENCED EXPERIENCE

Before going on to the second reason why I feel that the true nature of "experiencing" something has been neglected and misunderstood, I must advert to another fundamental aspect of this problem. Even if "experiencing" is a process, if after a short time all experiences were integrated into long-term memory, the hypothesis I am raising in this paper would have little practical importance. But if the process of "experiencing" can be blocked at an early stage and the inchoate experience can remain in this state for months, years, or indefinitely, then an entirely different situation is involved.

Modern human beings have retained, to a surprising extent, the bodily constitution, physiologic responses, and emotional drives that we have inherited from our Paleolithic or Stone Age ancestors. What is even more surprising is that a large and functioning part of the human brain belongs to an earlier lineage of our ancestors, namely, the reptiles and mammals. While these inner regions, collectively called the limbic system or temporolimbic system, have been somewhat overshadowed by the development of the neo-cortex, and of course are now intimately interconnected with the latter, they are not to be outdone as they not only harbor the instinctual and emotional drives but maintain all the vital survival functions of the body. In a sense, the neo-cortex sits astride the primitive brain like a rider on a horse and tries to direct it with tenuous reins. Remarkably, most of the time this partnership works out well enough, considering the rider's inexperience. But in a sizeable minority of situations, given the marked change in modern human conditions, this uneasy partnership runs into difficulties.

In the late 1920s, Walter Cannon studied the psychophysiologic aspects of trauma. He termed these phenomena homeostasis and demonstrated how, when a living creature was faced with a threat to its physical integrity, it responded to the challenge with what he called a "flight or fight" response. This involved a mobilization of the neuro-endocrine system (with an outpouring of adrenalin) and of the sympathetic nervous system. The organism was thus prepared for flight or fight with a general physiological arousal - exaggerated respiration, dilation of the arteries to the skeletal muscles, increased heart rate and cardiac output, and so forth.

For some reason, he failed to draw attention to an equally ancient and basic strategy for survival that is seen in many species as we go down the evolutionary ladder to even the most primitive organisms. That is the capacity, when faced with an overwhelming external threat, against which there would be no possibility of either flight or fight, to "freeze" or "play dead" - that is, the ability to inhibit or suspend all reaction that would normally be appropriate. Pavlov (1924) perhaps came closer than anyone else to an awareness of this phenomenon when he described how some of his dogs were accidentally trapped in their cages when the Neva River flooded Leningrad. The water entered Pavlov's laboratory and nearly reached to the top of the cages containing his dogs. All the dogs had met the frightening experience with initial fear and excitement, but after their rescue some were in a state of severe inhibition, stupor, and collapse.

According to Pavlov, the strain on the nervous system had been so intense that the fearful excitement aroused had resulted in a final emotional collapse. But it would seem more

likely that the animals had gone into a state of inhibition in order to protect their nervous systems from going through an experience that would have threatened disintegration.

Every child is aware of this capacity in many animals to inhibit or suspend a serious external threat. We have all seen how the spider, the caterpillar, and the hedgehog will curl itself into a ball when threatened. But this reaction has been described as far down the evolutional scale as the amoeba by the biologists Max Hartmann and Ludwig Rumler. In a series of experiments, they exposed amoebas to a variety of stimuli. Depending on the quantity and quality of these stimuli, the amoebas reacted in one of two ways. Either they sought these stimuli (moved toward them), or they avoided them and assumed a spherical shape -- "played dead." So it would seem that this is a basic capacity in living organisms, and it is not unreasonable to assume that, like other survival mechanisms, it is to be found in some modified form also in human beings, precisely because it has survival value. But like so many of our primitive reactions, it is likely that this capacity has been modified to serve a different purpose in modern human conditions.

What I am suggesting is that the capacity to suspend and inhibit an overwhelming threatening experience may now serve a quite different purpose. Instead of a way of avoiding external danger, it is now utilized to deal with the threat of internal destabilization; whenever we are faced with an overwhelming experience that we sense as potentially disintegrating, we have the ability to suspend it and "freeze" it in an unassimilated, inchoate form and maintain it in that state indefinitely, or for as long as necessary. Our biological structure seems able to specify in advance that to fully experience the meaning of the threatening encounter would destroy or disintegrate its core organization. The clinical evidence would suggest that this capacity to suspend the progress and integration of experience in some way involves the limbic, or temporolimbic, system, for it is this part of the brain that controls the vegetative nervous system through which we express all our emotions and that is still responsible for the basic mechanisms of survival.

In this regard, it is interesting to refer to Wilder Penfield (1959) experiments involving direct electrical stimulation of the temporal cortex and hippocampal area of the brain. Penfield pointed out that "the patient has usually recognized that this was something out of his own past. At the same time he may have been acutely aware of the fact that he was lying upon the operating table." Thus one patient, when the superior surface of his right temporal lobe was being stimulated, cried out, "Yes Doctor, Yes Doctor. Now I hear people laughing, friends in South Africa." Penfield continued, "Some patients call an experiential response a dream. Others state that it is a 'flashback' from their own life history." All agree that it is more vivid than anything that they could recollect voluntarily.

Another patient (Penfield and Jasper 1954, 137) "was caused to hear her small son, Frank, speaking in the yard outside her own kitchen, and she heard the 'neighbourhood sounds' as well. Ten days after the operation she was asked if this was a memory. 'Oh no,' she replied. 'It seems more real than that.' Then she added, 'Of course I've heard Frankie like that many, many times -- thousands of times.' This response to stimulation was a single experience, her memory of such occasions was a generalisation."

Further on, Penfield had this to say: "When, by chance, the neurosurgeon's electrode activates past experience, that experience unfolds progressively, moment by moment. This is a little like the performance of a wire recorder or a strip of cinematographic film on which are registered all those things of which the individual was once aware - the things he selected for his attention in that interval of time. . . . Time's strip of film runs forward, never backward, even when resurrected from the past. It seems to proceed again at time's own unchanged pace."

The anticipation of the potentially disintegrative effect of the external threat, were it to be fully experienced, is probably achieved through the initial expression of emotion and painful feeling, for it is thus that we are able to recognize the significance of threatening or traumatic events. The "unthinkable" has occurred, and the fear engendered elicits a primitive defensive maneuver. It is a desperate attempt by the individual to forestall a crisis by making the intrusion of threat inadmissible by a process of inhibition. The critical work of working through the experience is suspended, thus subverting assimilation, integration, and adaptation. This state of "suspended animation" produces the symptoms of emotional blunting and numbing and the other clinical phenomena as listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM III). As the process of experiencing tries to happen and the inevitable leakage of emotion occurs, panic attacks, agitation, and restlessness supervene. Because the original traumatic event has been actually perceived, and a trace has been laid down (in some form of unstable, short-term storage) but not worked through in reflection to long-term memory, it remains "active," and, again, in spite of denial, it leaks, breaks through, and causes "flashbacks" on the screen of perception. This in turn triggers a painful emotional response, which is once again blocked and suspended as in the original event. Thus, from both the cognitive and emotional systems leakage occurs, necessitating their immediate shut-off. These vicious cycles repeat ad infinitum, leaving the individual feeling fatigued, worn out, anxious, fearful, experiencing vivid nightmares, complaining of poor concentration and attention span, and all the other phenomena as listed in the DSM.

ON OUR EVERYDAY USE OF LANGUAGE

Let me turn now to the second reason why I feel that the true nature of "experiencing" something has been neglected and misunderstood. In spite of the confusion engendered by Freud's early difficulties and the ensuing development of psychoanalysis, the very real effects of traumatic situations on human beings simply would not go away. The phenomenon described by Da Costa in 1871, and by Oppenheimer and Lewis following the First World War, as "irritable heart," "effort syndrome," and "neurocirculatory asthenia" surfaced again during the Second World War. But now with the better understanding of neurosis that had developed since the work of Freud and others, the phenomena encountered were described as "traumatic war neurosis" or "combat neurosis" (Kardinder and Speigel 1947). Others used terms such as "combat or battle stress," "battle fatigue," "combat exhaustion," and "acute combat reaction" (Grinker and Spiegel 1945). Erich Lindemann (1944) published his seminal paper, "Symptomatology and

Management of Acute Grief," following the Coconut Grove fire in Boston, and a little earlier Kardiner (1941), under the term "physioneurosis," for the first time described the full picture of what has since been enshrined in the DSM III as posttraumatic stress disorder. In all of these descriptions, and in many others that have appeared since then in regard to natural disasters, accidents, child sexual abuse, kidnappings, and rape, to mention but a few, we repeatedly find descriptions of how the traumatic "memories" are "re-enacted," "re-experienced," or "re-lived." The fundamental error that I am struggling to demonstrate is all contained in this prefix re and in the use of the term memory, or repressed memory, for once we use these words in this way, we already are making the assumption that the traumatic event has been fully experienced and is now integrated in the self as "memory." This is precisely the assumption, however, that I believe we are not entitled to make, for it assumes, be it all inadvertently, that experiencing and the transfer of information into memory happens "all at once" rather than that it is a process involving work that takes place over time.

I cannot illustrate this better than by quoting at some length the diagnostic criteria of posttraumatic stress disorder as laid out in the DSM III (revised edition):

Section A. The person has experienced an event that is outside the range of usual human experience and that would be markedly distressing to almost anyone, e.g., serious threat to one's life or physical integrity; serious threat or harm to one's children, spouse, or other close relatives and friends; sudden destruction of one's home or community; or seeing another person who has recently been, or is being, seriously injured or killed as the result of an accident or physical violence.

Section B. The traumatic event is persistently re-experienced in at least one of the following ways:

- 1. recurrent and intrusive distressing recollections of the event (in young children, repetitive play in which themes or aspects of the trauma are expressed)
- 2. recurrent distressing dreams of the event
- 3. sudden acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative [flashback] episodes, even those that occur upon awakening or when intoxicated)
- 4. intense psychological distress at exposure to events that symbolize or resemble an aspect of the traumatic event, including anniversaries of the trauma

Section C. Persistent avoidance of stimuli associated with the trauma or numbing of general responsiveness (not present before the trauma), as indicated by at least three of the following:

1. efforts to avoid thoughts or feelings associated with the trauma

- 2. efforts to avoid activities or situations that arouse recollections of the trauma
- 3. inability to recall an important aspect of the trauma (psychogenic amnesia)
- 4. markedly diminished interest in significant activities (in young children, loss of recently acquired developmental skills such as toilet training or language skills)
- 5. feeling of detachment or estrangement from others
- 6. restricted range of affect, e.g., unable to have loving feelings
- 7. sense of a foreshortened future, e.g., does not expect to have a career, marriage, or children, or a long life.

Section D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by at least two of the following:

- 1. difficulty falling or staying asleep
- 2. irritability or outbursts of anger
- 3. difficulty concentrating
- 4. hypervigilance
- 5. exaggerated startle response
- 6. physiologic reactivity upon exposure to events that symbolize or resemble an aspect of the traumatic event (e.g., a woman who was raped in an elevator breaks out in a sweat when entering any elevator)

Section E. Duration of the disturbance (symptoms in B, C, and D) of at least one month.

As a description of the clinical picture presented by those who have been traumatized, and where the trauma remains unresolved, this could hardly be bettered, for it describes clearly all the essential clinical features -- were it not for the fatal intrusion of the apparently innocuous syllable re over and over again. It is important to realize, however, that while the clinical picture of posttraumatic stress disorder delineated in the DSM III is accurate and comprehensive, it provides no understanding as to why the clinical phenomena should occur.

This is essentially the same difficulty that Freud faced in his early work, for although he clearly described the clinical symptomatology and furthermore correctly stressed the importance of early sexual traumata in many of these cases, he was unable to explain why people were adversely affected and emotionally crippled many years after the events in question. Nor was he able to explain why some people were affected adversely, and

others were not, by the same traumatic situation. Had he had available to him our present understanding of neurophysiology with all its endocrinological ramifications and had he been aware of our capacity to suspend the processing of experience in its early stages, he would have been able to answer the attacks of his critics, and, in spite of the ostracism and social pressures upon him, he might never have succumbed to the temptation to renege on his original theory of early sexual traumatization.

What then is the clinical evidence of the hypothesis that I am putting forward?

1. First of all there is the clinical picture that these people present as very fully and comprehensively described in the DSM.

Section A. This section simply points out that these events, for the reasons listed, are such that it is likely they "would be markedly distressing to almost anyone."

Section B. If one thinks about it, this only makes sense if the traumatic experience has not yet fully happened for the person. Had it been fully experienced, why should it need to be re-experienced? In particular, for the first time, this makes clear why events that symbolize or resemble an aspect of the traumatic event would tend to "activate" the process of "experiencing" and the movement of the suspended information through the brain.

Section C. Again we can now see why there should be avoidance of stimuli associated with the trauma; also, numbing of general responsiveness for these behaviors is essential if the process of experiencing is not to be set in motion. It is possible now to understand the need for restriction of activities and the danger of feeling any emotion. It is also for the same reason that we find "psychogenic amnesia," both cognitive and emotional. (And, as we shall see later, this amnesia disappears when the experience is fully worked through into memory.)

Section D. We can also understand now why there should be symptoms of increased arousal, for the suspension of the natural process of experiencing has to be actively maintained and blocked; there is a constant tendency for "leakage" to occur and for the experience to begin to move, at any time of night or day, with activation of the limbic system and emotional discharge - hence, the increased arousal and hypervigilance.

Section E. The duration of the disturbance will be for as long as the experience is suspended-for months or years or even a lifetime.

2. When, by whatever means, an altered state of consciousness is achieved (hypnoid or dreamlike state), the person moves into a full "experience," living through the original traumatic event as if it were happening at this moment and manifesting the full emotional response that would have been appropriate at the time when the event took place; that is, when the suspended encounter is triggered, the threatening event is experienced as happening now, in full present time.

This is exactly the type of catharsis that Freud described in his early papers and that has been described by Sargent (1976) and many others since that time. They all make the mistake, Freud included, of referring to these "experiences" as "memories reexperienced." But the descriptions bear no resemblance to remembering in the sense in which we would ordinarily use that term.

- 3. When, as part of therapy, the person has "gone through" the traumatic experience one or more times to the point where it has been fully experienced, the traumatic event moves from the present to the past. It is now an ordinary memory (albeit not a very pleasant one) like any other memory. The person is no longer concerned with it nor troubled by it. There is no longer any amnesia, and the full story can be recalled at will. The experiential catharsis is finished and will not appear again in therapeutic sessions.
- 4. When one elicits the account of the original traumatic event from the person concerned it is found that he or she did not experience the appropriate emotion that would be expected at the time but was in a state of "psychic numbing," both during and after the event in question.
- 5. During therapy, it frequently happens that a person starts to experience something of which he or she had no previous inkling whatsoever, either cognitive or emotional. The person may have had some knowledge of a more recent traumatic event, and when this new experience supervenes, he or she is completely taken by surprise. In these situations, what comes first is very often an intense emotional and bodily experience, but neither the person nor the therapist will have any idea what the extreme emotional and physiological reaction means. It is only in the days following the session, and sometimes only after three or four full therapeutic sessions, when most of the work of "experiencing" has taken place, that the story unfolds bit by bit, and it is only then that the person will be able to say what the traumatic experience is all about. Not only will he or she then know the nature of the traumatic experience, but typically every minute detail of what happened will now be available to the person as if what took place happened only yesterday, although the actual occurrence may have been many years before in childhood.
- 6. If one follows the patient over the coming weeks and months, it will be found that while the traumatic experience is now readily available to consciousness, just like any ordinary memory, the clarity and detail begin to blur and merge with other childhood memories, and it loses its characteristics as a distinct experience.
- 7. Finally, there is the same old question as to how we can know whether these traumatic events really occurred and are not simply fantasies. First of all, there is the internal consistency of the traumatic account, once this has been elucidated and becomes available to consciousness. This was lucidly argued by Freud in his original paper on the etiology of hysteria before he inexplicably reversed his opinion and joined the opposition. In many instances, it is simply not possible to verify the story because the other participants in the drama are no longer available, may be unwilling to speak, or are actually dead. But, in a sizeable minority, there is someone available who was a witness to the event and who is willing to cooperate. Where this has been so, I have found that, in

every instance, the traumatic events that the patient has now brought out through experience, and of which they may have had no former knowledge whatever, turn out to be true.

Because of the above diverse clinical evidence, I feel that the hypothesis put forward in this paper is soundly based. Furthermore, I believe it is a hypothesis that is capable of being scientifically verified and tested in neurophysiologic terms, although, given the present state of our knowledge, this is still likely to present difficulties. We are at present just beginning to look at a number of neurophysiological parameters. It may be that part of the way in which we block or suspend the integration of painful experience is by the release of endorphins. On the basis of this hypothesis, we have been giving moloxone to some subjects prior to the experiential session, and the clinical evidence so far suggests that the blocking of endorphin sites in the brain does facilitate the release of painful experience. It is our intention now to carry out a double blind trial to further elucidate this question. We have now begun to look at the possible role of central noradrenergic, Alpha 2 receptors and also serotonergic and cholinergic receptors. A particularly hopeful line of investigation would be to undertake positron emission tomography, injecting the altered glucose at a point where the person is experiencing a suspended traumatic episode, which might have occurred many years previously, in an attempt to show in what part of the brain activity is going on. All of this work is only a tentative beginning, but I am hopeful in regard to the future, for in recent years there has been a virtual explosion of knowledge of biochemistry and neurophysiology of the central nervous system, and almost every week one hears of new advances.

THERAPEUTIC ASPECTS

Before ending, I would like to say a word about the therapeutic aspects of this work. Any method that brings about an altered state of consciousness of a hypnoid or dreamlike kind (the similarity of such altered consciousness to temporal lobe epileptoid states has been noted) will open the way to the movement of inchoate experience through the brain into memory. This therapeutic work of experiencing can surface, therefore, in the course of a wide range of therapeutic procedures:

- 1. In psychoanalysis of the various theoretical traditions or in analytic psychotherapy
- 2. In various forms of group therapy, perhaps with particular reference to Gestalt therapy
- 3. In family therapy
- 4. During hypnosis or, more specifically, hypnoanalysis
- 5. In the course of behavior therapy programs -- flooding, reciprocal inhibition, and so forth
- 6. In the course of various somatic therapies, such as bioenergetics, rolfing, or other forms of deep massage (It should be remarked here that there is clearly a peripheral

extension into the muscles and bodily organs from the endocrine and autonomic nervous systems, with interconnections back to the limbic system and hence, ultimately, to the cortex. Wilhelm Reich was the first to draw attention to this muscular or character armoring, and it is not difficult to see that a pressure on, or a stimulation of, a muscle or bodily organ may activate a suspended experience and set in motion movement of information through the central nervous system.)

- 7. Exposure to the site where a traumatic event took place or to events or places that symbolize or resemble an aspect of the traumatic event8. The use of psychedelics or other chemicals that induce an altered state of consciousness or the use of various procedures that have been known to tribal communities from ancient times (procedures that utilize music, rhythm, and dance, with often fatigue and deprivation of sleep) The use of various methods of sensory deprivation will give similar results.
- 9. Finally, methods more specifically geared to this end, such as holotropic therapy, developed by Christina and Stanislav Grof (1988), from their study of the above methods used by so-called primitive societies, involving hyperventilation accompanied by evocative music and other sounds

While, as I have said, a state of altered consciousness with activation of suspended, unresolved experience can occur inadvertently in any or all of the therapeutic procedures listed, in most instances this occurs haphazardly, is unreliable, and, because what is happening is not clearly understood, is not differentiated from other aspects of therapy. For a therapeutic approach of this kind to be effective, therefore, the first prerequisite is a proper understanding of what is meant by the "experiential" component of therapy as put forward in this paper. This dimension of psychotherapy then can be clearly distinguished from other aspects of therapeutic work that are equally valid and necessary in their own right. For simply to fully experience a suspended and unresolved trauma is not the whole of therapy.

If a person is to become fully well, then the constricted patterns of living, attitudes, and behaviors, which have developed over the years in an effort to maintain the inhibition and avoid the pain of experiencing the trauma that has been suspended, will also have to change. These do not automatically disappear because the original traumatic experience has now been fully resolved.

There is, therefore, a place, once the experiential aspect has been taken care of, for the use of various cognitive and behavioral strategies, such as assertiveness and vocational training, in order to help the person to bring about significant change in his or her patterns of living and relationships.

Experiential work, then, can never be considered as more than part of therapy and must, I believe, always be undertaken in the context of a trusting therapeutic relationship. It is, however, important that we know what we are doing and when and that the proper sequence of therapeutic approaches is put in place. In persons who have a history of unresolved traumatic experience, it is not only useless but cruel to try to help them

through cognitive or behavioral methods to change their attitudes and living patterns, when they are exploding with unresolved painful experience.

Unfortunately, there are several other complications if one is getting involved in this type of work. In situations where there has been a sudden catastrophe, traumatic war experience, or a sudden loss of a loved one affecting persons who up to then had a reasonably normal adaptation, it can be quite simple to bring the person through the painful unresolved experience so that he or she can resume an everyday way of life. But what we have been finding in dealing with the long-term, chronic cases of posttraumatic stress disorder going back to childhood is that there is not simply one traumatic event but a whole series of painful insults, going back to the earliest years (just as Freud pointed out in his original early papers), and that these traumatic events tend to follow a theme, such as child sexual abuse, repeated rape, and so on, or a series of painful losses of dear ones, or again a succession of repeated physical insults; so that the person suspends or inhibits one traumatic insult after another, until with the holding back of the final trauma, the nervous system is literally exploding. It is usually also found that only one or more of the more recent traumata are available to consciousness and there is little or no awareness of all that has gone before, right back to early childhood. It is because of this fact that most of the posttraumatic stress literature is pessimistic about intervention in these chronic cases, whereas, in fact, the task is essentially the same. It simply means that the work and suffering to be endured is to be more tedious and prolonged, but there is actually no alternative to guiding the person through a whole chain of unresolved experiences, for until this is done there is no hope of real improvement or recovery.

Another difficulty one encounters is that, where there is a secret in the family that other members are unwilling to face honestly, then in my experience the unfortunate patient can be blocked from progress no matter what experiential therapeutic approach is undertaken. In these cases, through family therapy or by whatever means, it is essential to try to open up the hidden area and collusion going on within the family where it is often seen as necessary to hold the patient in his or her sick and painful state as scapegoat and guardian of the secret. It would be nice if this work were simple and straightforward and just involved the experiencing of one traumatic event, but then life is seldom like that, and, in the end, it is worth going through the full rigors of therapy with the person so that he or she fully experiences all that has been blocked, even if this takes several months or a year or more, rather than condemn the person to a lifetime of chronic illness, constricted lifestyle, or even suicide and death, for these are the alternatives.

Finally, let me return to another serious shortcoming in the description of posttraumatic stress disorder as in the DSM III and most of the other posttraumatic literature. The DSM III defines this disorder almost entirely in terms of the characteristics of the external traumatic event. This is exemplified in the statement that the person has experienced an event that is "outside the range of usual human experience and that would be markedly distressing to almost anyone." The manual of the American Association of Psychiatry gives a long list of "stressors" that may help to produce what they call posttraumatic stress disorder. It is interesting to note that the stressors or events are all inherently life threatening. What is not taken into account is the internal set of the individual at the time

the event occurred; this is a function of all the learning and experience of that individual up to that time, including of course whether there have been previous insults or experiences of a similar kind that were blocked or suspended (something that Breuer and Freud had noted). Thus it is possible for events that are not inherently life threatening in themselves to be perceived by a particular individual as threatening disintegration and thus as being unacceptable. In other words, it is as if the person has knowledge of the implications of an event for his or her total being in advance of its being experienced. Instead of integrating the components (both external and internal) of the event, the person retains these subsidiaries in an unorganized or inchoate form. In Michael Polanyi's terms, there is no movement from the parts to the whole. By refusing to integrate the particles of the encounter, the person never consciously identifies the threatening experience.

IN CONCLUSION

In this paper, I have attempted to deal with one, rather mundane, aspect of this work. There are much wider and deeper implications that relate to the trauma of birth - to the experience of the birth/death dimension and to the question of the collective unconscious as described tentatively by Carl Jung (1959). His insights have been extended and further clarified by the significant contributions of Stanislav Grof, both in regard to the trauma of birth and his work on transpersonal experiences. This work will, I believe, be seen in time as a major contribution to this field and will establish him as the true successor to Carl Jung. These wider aspects, however, go well beyond the scope of this paper.

What I am attempting to describe here, then, is, in Martin Buber's words, "the sphere of 'between'." It is not to be understood, therefore, in the language and concepts of the behaviorists, that is, in terms of conditioned responses, reciprocal inhibition, and so on. Nor can it be understood in terms of the usual psychodynamic theories or the current concepts of cognitive psychotherapy. In the posttraumatic stress literature, attempts are made, unsuccessfully, to explain the clinical phenomena along both these lines of approach. It is our hope that the ideas put forward here will act as something of a bridge between psychodynamic theory on the one hand and some of the current concepts of cognitive and behavioral psychotherapy on the other.

Perhaps if these ideas are well founded, their importance lies more in what they exclude than in what is covered. My hope is that they may also help to clarify those aspects of psychiatry and psychotherapy to which they do not apply.

To put it in simple terms, what is being put forward here is essentially a cognitive process, the question of how information moves or is moved through the central nervous system when an event is being experienced. It is as if a piece of the external world, which is now within the person but is not part of that person, constitutes a continuing focus of stress acting from within. This internalized stressor now exists outside of time, in an unstable state, and, unless and until it is fully experienced, it will continue to exert its effect indefinitely. Clearly, if this is the case, the individual is going to have great difficulty in sustaining this suspended internal reality against evidence from the outside

world. Thus, inhibition and the subsequent constriction that occurs serve the function of a refusal to acknowledge a certain reality in the outside world. The views of the Chilean biologist Francisco Varela (1988), although written in a different context, would seem to be particularly appropriate here:

"Our cognitive relationship with the world is neither one of picking up information and processing it and having some kind of output or result, nor is it one of having some very smart and rich network inside. This is not to say that I don't believe in some kind of sense of reality. Clearly existence is there. That's to say, is neither here nor there, it is an emergence. . . [E]xistences are not a matter of the inside mapping the outside and the outside mapping the inside, nor the inside constructing the outside, but in fact this stable dance which is multiple. . . "

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