Trauma and the Zero Process

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I would like to present in this paper some ideas about trauma – more specifically, some ideas about the form of mental functioning that is a consequence of trauma. This form of functioning, which I have designated the zero process, is a consequence of trauma defined more narrowly. That is, not merely distressing or conflictual experiences, but ones where there is a breakdown in the ego’s ability to process, integrate and store the experience properly in memory. At the experiential level, during and after such events, the person will say that they felt “numb” – comparing their mental situation to the physical one where normal skin and body sensations are not available, because of extreme cold, injury, or for some other reason.

The observation of a strikingly different form of post-traumatic mental functioning, and various attempts to conceptualize it, are older than psychoanalysis itself. Outside of psychoanalysis these attempts have often involved expanding the idea of trauma, and such concepts as dissociation, to explain a large range of psychopathologies.
Within psychoanalysis there has at times been a backlash against these over-extensions, and a reinvestment in core psychoanalytic ideas such as the importance of infantile sexuality and unconscious fantasy. At the same time, many of the most important findings and ideas related to trauma have come from psychoanalysis, including Freud's (1920) idea of a breach of the stimulus barrier, and the ideas of strain trauma (Kris, 1956), cumulative trauma (Khan, 1963), and intergenerational transmission of trauma, to mention just a few.

The aim of this paper is not to introduce new observational findings, but to clarify and deepen the psychoanalytic conceptualization of post-traumatic mental functioning. I will try to demonstrate later in this paper, however, that clarifying our thinking in this important area will also aid in our observational work, and will help us to see many things in a new light. I will begin at the beginning, with Freud's conceptualizations.

**Conceptualizations of Trauma**

Psychoanalysis began as a traumatogenic theory of the neurosis. Breuer and Freud (1893) noted that their observations “seem to us to establish an analogy between the pathogenesis of common hysteria and that of traumatic neuroses, and to justify an extension of the concept of traumatic hysteria” (p. 15). They felt that fright led to memories of the incident not being worked over and the affects not being abreacted, and therapy was directed toward bringing this abreaction about. After this beginning, Freud's interest turned elsewhere, as he made his monumental discoveries of childhood sexuality and the oedipus complex, of the differences between the primary and the secondary processes, and of transference. In the last phase of his theorizing, Freud turned again toward the phenomena of trauma, bringing it into focus in developing the idea of the repetition compulsion and the death instinct (1920), in his anthropological and historical works (1912-1913, 1939) and in his work on splitting of the ego (1938a, 1938b). In these works, Freud developed the idea that trauma involved a breech of the stimulus barrier that normally protects the mental apparatus from being overwhelmed by external stimuli. With this rent in the stimulus barrier, there is a general flooding of the psyche with excitations, and a shutting down of many ego functions, most notably the integrative function. Freud (1920) also described the shutting
down of the ability to develop affects (thus the “numb” feeling).

While in his late work, especially in “Beyond the Pleasure Principle” (1920), Freud developed a quite sophisticated conceptualization of trauma and the traumatic process, I think the influence of his earlier work can be seen in his reluctance to consider trauma on its own terms, as a process with a phenomenology and deeper mechanisms and structure that are quite distinct from the phenomena and conflicts connected with the primary and secondary processes. This is not to say that Freud never conceptualized trauma as distinct, but there was an ambiguity in his attitude and theorizing on this matter. As an example of this, I will mention one specific mistake in conceptualization that was a product of his lack of clear thinking in this area.

This mistake was the idea of traumatic anxiety, which Freud first described in “Inhibitions, symptoms and anxiety” (1926). In this work Freud posited two basic affect situations that act as motivators for defense: the danger situation, where the ego, sensing a potential internal danger, gives a signal of anxiety that sets a defensive process in motion, and the traumatic situation, where the ego is flooded with anxiety. Freud designated this anxiety “traumatic anxiety,” and argued that it set in motion a much more powerful form of defense that he called primal repression.

What is interesting is that Freud’s description of the traumatic situation and traumatic anxiety directly contradicted what he had said earlier in his detailed description of trauma (1920) about the nature of the traumatic situation, as well as what any clinician can observe about this situation: during trauma the person’s ability to generate affect comes to a complete standstill – thus the “numb” feeling. This contradiction has not escaped the notice of at least some analysts. The most thorough discussion of this issue can be found in a book by Yorke, Wiseberg and Freeman (1989), in which they trace the developmental line of affects, from diffuse vegetative bodily excitation, to the first mentalization of affects, to signal affects. They suggest the term “pervasive anxiety” for what Freud called “traumatic anxiety”. The term pervasive anxiety suggests it’s intense, overwhelming nature, which distinguishes it from signal anxiety, but deliberately delinks it from trauma. In doing this, the theory of repression and it’s motivation, and defense theory more generally, is delinked from the theory of trauma. (The full implications of this for...
the theory of defenses is beyond the scope of this paper, but has been explicated in detail by me in my book on defenses (Fernando, 2009)).

Thus In relation to the topic of anxiety and defense the idea of pervasive anxiety performs the function of separating out the defensive processes from the traumatic process at the conceptual level, which mirrors very well, I would argue, their actual separation. It’s not a question of replacement but of addition and expansion, as we would still keep the sequence of anxiety situates that Freud posited, with overwhelming pervasive anxiety being the motor for primal repression. This anxiety is overwhelming in the sense that the usual ways of dealing with affect, such as abreaction, symbolic processing, and suppression, are not enough, but unlike in the traumatic situation there is still a functioning ego which then mounts a powerful defensive response which we refer to as primal repression. Just to be clear on what I am asserting here: when I say that the defensive and the traumatic processes are separate, what I mean is that they are different and differentiable phenomena, not that they do not interact and intertwine in many ways.

Am I making too much of what might be just a case of sloppy terminology on Freud’s part? I think not, as the tendency to see the distinct characteristics of trauma at times, and then at others, especially when formulating basic theoretical concepts, to forget these characteristics, runs throughout Freud’s work. A study of his development of the concept of splitting of the ego demonstrates this very well. I will return to this particular example later in this paper.

[It is interesting that later authors, from quite different theoretical schools, usually tended to continue this confusion. Many authors from the Freudian, Kleinian, object relations, self psychological, French and other psychoanalytic traditions, even as they diverged from Freud and from each other in many other respects, carried forward his tendency to conflate trauma with other processes that are central to the causation of psychological problems.]

One of the new concepts I have developed, through considering the traumatic process on its own terms, as something quite distinct from, even though of course interacting with, other processes and dynamics, is the idea of the zero process. In order to explicate its characteristics, I will move from the more general ideas presented so far to a
description of the specific characteristics of the zero process, beginning with some illustrative clinical material.

**Clinical Material – J**

This female patient, J, had suffered serious ongoing sexual abuse in her childhood. We were about 6 months from a planned termination of a 5 times weekly analysis, when certain reactions to men propositioning her led us to revisit an incident from her early adulthood. She had been invited to a senior colleague’s house, apparently to discuss work. He had made a pass at her in his back yard, and she had run away, flustered and confused. She had generally left the details of this incident vague. I pointed out to her that as she brought up this incident she started saying, “I don’t know”, at the end of almost every sentence. This proclamation had been much in evidence as we approached the core of J’s earlier childhood traumas of sexual abuse, and the statement increased in frequency as we came closer to those core memories. I have observed this particular statement in similar circumstances in many patients, and see it as a form of denial with regard to these traumatic memories: an energetic turning away from what is seen.

I pointed out to J that her saying “I don’t know” might be an indication that something further had happened. Over a number of sessions we established that this man had put his hand on her knee and then had invited her to walk in his garden.

“So what happened then?” I asked.

“I just remember running away.”

“So he must have tried something further.”

“Maybe. I don’t know. I just don’t know.”

“Well, see what you think of. Remember how in looking at the abuse by [her abuser in childhood] it seemed you didn’t remember anything, but as you paid attention to it, more and more came up?”

A look of what seemed like a mixture of anger and anxiety passed over J’s face. “Nooo, Nooo” she said, combining the word no and a moan in one utterance.

“You look upset”

“I feel you’re pushing me. You’re pulling me into this, into
looking at this, but it’s not good.”

Previously, when we were looking at her childhood abuse, J had said she felt I was “bothering” her with questions and interpretations. We had traced this back to her feeling of being “bothered” by her abuser. As we talked at this later point about the incident with the colleague she complained a number of times about me and others “pulling” her into things.

Over the next few weeks J developed bronchitis-like symptoms and a feeling that she was having trouble breathing. In one session I said “I wonder if he grabbed you and pulled you?”

“No. I don’t know!”

“But if we look at your reactions, it might be that he grabbed you in the garden as you tried to run away. You said he was a very big man. Maybe he was on top of you and you could not breath.”

“I am feeling the weight of him on me. But I don’t see him.”

“What do you see?”

“Nooo, Nooo.” J moaned. You’re pulling me and pushing me now. Its not good.”

“So it feels like its now?”

“It is now. You’re just pushing me too hard and I can’t breath. There’s a burning in my throat. It hurts a lot.”

“Did he perhaps grab your throat? Or perhaps force oral sex on you?”

“No. I know that wasn’t it.”

“So he probably grabbed you and pulled you. Then what?”

“The grass was very soft on my back. I just said that. I don’t know really. How do I know?”

“Well, you just said it was soft on your back. Maybe in the end you were on your back. What did you see?”

“I didn’t see him. I didn’t see anyone.”

“But if you felt the soft grass, you must have been on your back, so he must have caught you.”
“Noooo, Nooo. I don’t know. You’re pushing me too. I feel I can’t breath. I see the sky and the flowers, that’s all. Its all very quiet.” J said all this in a quite angry tone.

The analysis of this incident – which turned out to be a rape – took a number of months and involved the analysis also of the repression of the weeks after the rape, when J was in a daze. During this time she eventually structured her life and her story of what had happened to avoid anything that would remind her of the rape. These avoidances were to her great detriment, as they shaped her entire life after this trauma. She had in fact been violently penetrated vaginally. The pain in her throat and a number of other physical symptoms that developed as we analyzed the rape were at first thought by us to be a displacement upwards of pain in her vagina, but eventually turned out to be the effects of having screamed so loud and long before giving up and going limp. She had been grabbed, pulled towards her colleague, and then pushed to the ground and, as he got on top of her, he has continued to beat her in a sadistic manner, as she screamed and struggled. Eventually, she had stopped struggling and concentrated on the sky and flowers, using the dissociation she had already become adept at during her childhood sexual abuse.

Only with our analysis of this trauma, including a detailed reconstruction of the events preceding, during, and after the rape, did the meaning of many of J’s inhibitions and other difficulties, and in fact the entire course of her life after this point, become clear. This was not a case of merely intellectual insight, however, as the reconstruction of this period and its connection to traumas and conflicts from earlier childhood as well as later adult issues led to a marked improvement in J’s inhibitions and phobic avoidances.

**Traumatic Memories**

I will at this point leave aside some of the aspects of this vignette that may especially interest clinicians, such as the way I pushed J to remember, which was no doubt at least partly an enactment taking place between us. I will rather first concentrate on explicating the basic nature of trauma and the zero process, and we will then be in a better position, I think, to look more deeply into issues of transference and countertransference in the analysis of trauma.

One of the striking things about traumatic memories such as those that emerged in J’s analysis is the way in which they
seem quite split off from the rest of the person’s mind, in a manner that differs from, for instance, repressed or denied aspects of a person’s life. There is good evidence that this original split is not a defensive maneuver, but rather an outcome of the particular mental (and neurophysiological) state that characterizes true trauma. The temporary shutting down of the ego’s coordinating and integrative functions is probably especially responsible for the lack of cohesion and integration of the memories of a trauma. These memories, along with their strong affective load, seem cut off from the normal connection with other memories, with the person’s self image, and with his or her life narrative. As Person and Klar (1994) point out, though, this lack of connection only applies in one direction: the split off traumatic memories continue to effect other mental products, and thus behavior; but they are walled off from the revision, retranscription, and melding with other memories that is the fate of non-traumatic memories.

Van der Kolk, Van der Hart and Marmar (1996) refer to this original laying down of unintegrated memories as primary dissociation. While they do not propose it for this reason, I find their terminology congenial because it differentiates primary dissociation from primal defenses. This is an important distinction, since primary dissociation is not an ego response to pervasive affect, as are primal defenses, but is rather a product of ego breakdown to the point that such responses as primal defenses are impossible. Van der Kolk (1996) describes how functional neuroimaging studies (PET scans) done at his lab show that the left hemisphere in general and Broca’s area (which subserves language production) in particular, are non-functional during traumatic memory recall, in contrast to their normal activity during the recall of other memories. Van der Kolk (1996) also hypothesizes a shutdown during trauma of the hippocampal area (which subserves the laying down of integrated memories) and the thalamus (the major relay and integrative station for stimuli coming into the neocortex).

At the clinical level, in material such as J’s, we see this lack of integration of the traumatic memories with other areas of the person’s psyche by the way in which at times these memories are usually quite absent, without even derivatives appearing in the patient’s free associations, and then at other times, when they are triggered by events or interpretations or questioning, they take over the persons mind to a frightening
extent. We can also see in the case of J the lack of integration of these bits of memory not just with the rest of the patient’s psyche, but also with each other. They exist seemingly as little bits and pieces: the feel of the grass, the sight of the sky, the pulling and pushing of the rapist, the pain in the throat from screaming, and the weight of the rapist on top of J.

This is not to say that what we see in this example is pure zero process, any more than we see pure primary process in a dream. There are clearly admixtures of both the primary process and of ego processes such as defenses and language. However in this example, as the traumatic memories emerge, one can get a glimpse of certain characteristics of the zero process. These characteristics are a product of certain characteristics of the traumatic process. [Before going on to explicate these, I would like to just briefly mention the conceptions regarding post-traumatic functioning of two analytic authors. The differences and similarities of their conceptions as compared to the idea of the zero process will hopefully allow me to clarify this concept.

**Bion and De M’Uzan**

Some listeners may already have thought of Bion’s concept of beta elements as I was describing the “bits and pieces” nature of the contents of the zero process. Bion (1962) described beta elements as perceptions and affects that had remained unchanged from their original raw (unintegrated and unsymbolized) state. These could not be used in dreams or thought, or be subject to repression. Beta elements could, however, be part of projective identification and acting out.

Bion thought that trauma was the source of beta elements. Certainly, beta elements could be considered as the contents of the zero process. The bits of memory J displayed could be seen as beta elements. However, in developing his theory, I would contend that Bion succumbed to the tendency to conflate the traumatic process with other dynamics. He thought that beta elements were present at the beginning of development and that the mother, through her reverie (her alpha function) processed them for the infant. He saw persisting beta elements as caused by the infant’s attacks on the breast and on the mother’s alpha function. These persisting beta elements Bion linked to psychotic functioning and to full blown psychosis. Thus he connected trauma and post traumatic mental functioning with the important developmental aid that a mother gives her infant in helping
him or her to learn to modulate affects, and in the development of so many other ego functions. My point is not that these phenomena are not important, but that we should not confuse the developmental process, nor even all of it’s derailments, with the traumatic process. These derailments may lead to trauma, in the sense of the sort of process I will describe later in this paper, and/or to other sorts of fixations or deficits, but the developmental process, including it’s crucial dyadic aspects, is a much larger set of phenomena than the traumatic process, while the traumatic process itself can be set going at any point in life, not just during infancy or childhood.

De M’Uzan, writing from the perspective of the French psychosomatic school, attempted to conceptualize the post-traumatic mode of mental functioning. He (2003) distinguished repetition of the same, which is seen in neurotics, from repetition of the identical, seen in other states such as psychosomatic disorders and perversions. This later form of repetition results from a rejection or non-functioning of symbolization. De M’Uzan introduced the concepts of disarray and turmoil. He said that he meant “by turmoil something that allows for memory to be reworked, that can enter as a pattern into a history and provides the nucleus of fantasy activity in the future” (2003, p. 724). He contrasted this state with that of disarray: “it is itself a consequence of a catastrophic traumatic situation, initially responsible for an evolution in which the state of disarray is ready to be reproduced at any time” (2003, p. 719).

De M’Uzan also traced the origins of disarray to very early traumas in the mother/infant interaction. I find I cannot agree, and I do not think the facts agree, with the idea that post-traumatic functioning – what I am calling the zero process – can always, or even usually, be traced back to these very early disturbances. In doing so I think Bion and De M’Uzan are expressing another of Freud’s basic ideas that has been carried forward, usually in a much exaggerated form, in almost all psychoanalytic schools, even through all their other divergences. This idea was that more severe disturbances were a product of earlier fixations than less severe ones. Hysteria was caused by a phallic/oedipal fixation, while obsessional neurosis emerged from regression to an anal phase fixation. In the Schreber case Freud (1911) suggested that paranoia was a product of a fixation at, and regression to, the narcissistic level of libido.
development, while schizophrenia was caused by a regression to an even earlier stage – that of autoerotism. Even as many later theories dispensed partially or wholly with the timetable of libido development, and often with libido theory itself, the idea of a very early cause for severe disturbances was carried forward, as it was in the theories of Bion and De M’Uzan.

This is not to say that there isn’t evidence to suggest the importance of early experiences in predisposing people to reacting to later events with more powerful dissociative responses. The key difference between what I am proposing about the zero process and the ideas of Bion and De M’Uzan is, however, that they see the specific form of post-traumatic functioning (beta elements or disarray) as being formed during at the time of these initial, very early difficulties. While it is certainly possible that a very early trauma would lead to an area of zero process functioning, I would disagree with this universal reduction to very early infancy. Rather, I think that later traumas can also lead to zero process functioning taking hold in an area of the mind. The propensity for this to happen can be influenced by early traumas and early developmental interferences, but I do not think that these are a necessary prerequisite, and on the other hand there are a number of other predisposing factors that can play a part, such as various constitutional vulnerabilities, other, later developmental and conflictual dynamics, the actual circumstances and timing and intensity of the trauma, and others as well. These issues are of course not at base conceptual, but are rather empirical ones, to be settled by observation. I merely wish to point out, and this is the conceptual aspect of the problem, that there is a propensity to take for granted that these areas of frozen, post-traumatic functioning must necessarily stem from very early traumas, while I think that this is an issue to be settled through unbiased observation. I make this point here, because I think that this assumption has been a major stumbling block to the formulation of a coherent and fruitful theory of trauma and of post-traumatic mental functioning. It is the most common present-day example of a problem I pointed out in Freud’s work, which is the conflation of trauma and post-traumatic functioning with other processes, either dynamic or developmental.

Trauma

So what would this more coherent theory of trauma look like?
For one thing, trauma should not be confused with developmental processes. Areas of zero process functioning can be formed by traumas occurring at any time in life. This is not to say that developmental stage, and many other nontraumatic factors, won’t influence both what experience reaches the level of trauma, and how large and persistent the trauma will be, but no developmental stage has an exclusive relation to trauma. We can see this in the traumatic effect of J’s rape in adulthood. Certainly her earlier traumas (which themselves did not occur in infancy) helped to fixate this area of zero process functioning, and influenced the manner in which it was dealt with, but the adult trauma could not be reduced to these past traumas, nor to various issues and conflicts, such as oedipal ones, that became subsequently entwined with it. (J had actually had excellent, attuned mothering, which certainly contributed to her resiliency in the face of very trying circumstances.) This is not only a theoretical point. It has important clinical consequences. If one thinks a trauma such as J’s can be reduced to the conflicts with which it has become entwined, or to earlier failures in mothering, as examples, then one will tend to skip too lightly over the actual traumatic event, and over the analysis of the zero process memories that it leaves in its wake. But why are these memories so crucial? Why won’t they just melt away as we unravel what may seem like deeper or more central issues?

There is no simple answer to this question, but a good place to begin is to look more closely at the nature of the traumatic process and the zero process. I have mentioned that the shut down of various ego functions is a part of the traumatic process. We can certainly see a certain "raw", unprocessed aspect to J's memories of her trauma. Generally we take for granted the quite extensive processing that is required for even the most simple experience. Like so much else in life, we only fully appreciate it when it is gone – and its largely gone during the height of trauma. When a confluence of factors (the suddenness and intrusiveness of the event, its meaning, connection to internal issues, constitutional factors, lack of supportive object relations, etc.) leads to a situation that completely overwhelms the ego’s processing abilities, a psychobiological reaction of an almost complete shutdown of this processing takes place. It is this shutting down that is the traumatic process, and it leaves in its wake the zero process.
Many authors have described the unprocessed nature of the memory fragments left after trauma. Two things that are generally stressed are the lack of integration and the lack of symbolic processing of these memories. The lack of processing goes further than this, however, as the bits and pieces of unintegrated perception are not fully processed in many other respects. Affects and drives are also normally processed in various ways, some of which shut down during trauma, and this non-processing becomes part of the nature of the zero process as well. The same is true for other forms of memory, such as procedural and emotional memory – both forms of implicit (non-conscious) memory. A number of authors have attempted to reduce the issue of post-traumatic functioning to the idea of implicit memories, but I think this far overextends the explanatory power of these forms of memory. This too is not only a theoretical issue. As most clinicians who work extensively with trauma understand, it is necessary to get at episodic memories, such as J’s memory fragments, and at “frozen”, unprocessed affects and impulses, in order to free the patient from the spell of the trauma. If one works with a theory that tells one that explicit episodic memories are largely unrecoverable from trauma, or unimportant, then one may not go after them so actively, assuming the trauma can be worked through largely at the level of implicit memories and a corrective emotional relationship (Nahum, 2005)

The Zero Process

The term zero process attempts to be descriptive, in capturing the frozen nature of post-traumatic mental functioning. At the same time, the name is meant to suggest some sort of equivalency between this form of mental functioning and the primary and secondary processes, in that the zero process should be considered one of the three great ways in which the mind organizes itself. I would hope that the term would lead us to consider trauma and post-traumatic mental functioning on their own terms, as having their own characteristics that should not be confused with, or reduced to, those of other processes such as drive/defense conflicts, or other forms of functioning such as the primary process. Rather, they should be seen as entering as independent factors into psychological dynamics and psychological structures such as symptoms. While in this sense the term zero process stresses the independence and importance of post traumatic mental functioning, looked at from another
angle, by stressing that it is only one among the three major forms of mental functioning, the term will hopefully guard against the danger of overgeneralizing findings related to trauma, and using them to explain too much. In fact most important psychological dynamics and symptoms are formed through the intertwining of the organized and organizing functioning of the secondary process, the much more mobile, drive and fantasy based functioning of the primary process, and the zero process, each contributing to a variable extent in each instance, but each almost always being present in at least some manner and measure.

So how could we characterize the zero process, in comparison to the other forms of mental functioning? Other than being either “on” or “off”, the contents of the zero process remain in a rather frozen state. There is none of the endless movement and interaction of elements seen in the displacements and condensations of the primary process, or in the higher level integrations, abstractions, and thought processes seen in the secondary process. I have already mentioned the shutdown of various ego functions that is the hallmark of trauma, and which actually creates an area of zero process functioning. The zero process, or areas of zero process functioning, are thus created through specific experiences, and in this too the zero process differs from the primary and secondary processes. These latter two have a constitutionally predetermined maturational unfolding during development, which of course is influenced by individual experience and especially interactions with others. In the case of the zero process there is, from the constitutional side, the inheritance of the propensity to react to overwhelming of the stimulus barrier and of the ego’s ability to cope by a shutting down of various functions that process the experience and the associated affects. This propensity seems to be part of our basic mammalian inheritance, as all mammals react to certain forms and levels of external overwhelming by what is basically a partial shutting down of the processing of the incoming stimuli, and especially of neocortical functioning. However, the unfolding of, or putting of this propensity into action, depends on individual experience, and is not tied to any developmental timetable. Which is not to say that there are not times when people are more prone to traumatization, because of such factors as ego immaturity and destabilizing developmental factors -- the rapprochement crisis in the second year of life is one such time -- but there are no normative phases during
which areas of zero process functioning are always formed, nor ones in which they are never formed.

It may be helpful in furthering our understanding of the zero process to dwell a bit more on what the shutting down of ego processing really means. One useful way to think about this is to consider the fact that normal experience is itself a construction. We often think that we first have raw experience, and then perhaps words are added, and the experience is compared to memories and integrated with previous experience and with thoughts and models of the world. This is true up to a point, but what it leaves out is that what we think of as raw perceptual experience is itself a construction: it is constructed from sensory input, but this is only selectively sampled, and compared to expectations, memories, and internal models, and is influenced by deeper unconscious drives and fantasies, in order to construct what feels like the immediate present experience. That this is the case is brought to light by various illusions that rely on us to construct what we expect, rather than what is before our eyes. Even a typographical error that leads to a word being repeated in print will rarely be noticed by the reader, demonstrating very well that we do not merely see the words on the page directly, with no constructional overlay.

In trauma, I would contend that this very basic, first order construction of present experience is interfered with. At what point this construction is halted varies not just from one traumatic experience to another, but also clearly in each ongoing trauma. If it is stopped early enough, there is probably truly a blank where the experience should have been. There might have been such a situation in J’s case for a short period, but we can also see that with the traumatic events sudden intrusion, there was a shutting down pretty early in the process of the construction of her experience, leading to bits and pieces of very intense but unconnected memory. This is what forms the core of the zero process. After the abuse had stopped, and J ran out of the garden where it took place, much more connected memories were eventually recoverable. These had been denied and repressed in more regular ways, since this experience had been constructed in a relatively normal way. I doubt very much that there is a sudden discontinuity between these two states. Clinical experience suggests that as the traumatic process gets under way, and again as it recedes, there are intermediate states, where the shutdown of construction and processing is not as
extreme, and these shade into normal experience, just as areas of zero process functioning shade into areas where the secondary and primary processes reign.

The lack of full construction of the experience of the core of the trauma has fateful consequences. It is not merely that the experience is unsymbolized, although this is certainly true, but that it is unconstructed in a more basic way as well -- at the psychical level, compared to other experiences, we might say that the traumatic experience has not yet happened. In the realm of the zero process the past is something that is always about to happen or is just happening. It never finishes happening, and is thus never finally in the past, as a memory that can then be integrated with other memories, reconfigured, abstracted, distorted, and repressed. This characteristic applies to affects and implicit memories as well as episodic memories. We can take J’s zero process memories of her rape as an example. These had the key quality of memory of being retained over time. In other ways, however, they behaved very much as present occurrences. For instance there is their on/off quality: as with a perceptual experience, one is either in the presence of the event, or not. And when the zero process memory is turned on, as it was in the sessions described with J, it is absolutely immediate – there is no sense of it being a memory. It cannot be repressed. As with a perception, one can only look away, or walk away. As J’s zero process memories emerged, she reacted as she would have to an overwhelming perception: trying to turn away mentally by saying “Nooo”, shutting her eyes, and looking like she wanted to run out of the office. I have observed in many patients that as zero process memories are beginning to emerge, the phrase “I don’t know” increases dramatically in frequency. I think this phrase expresses the psychical equivalent of shutting one’s eyes or turning away from an unwanted perception, and is a reaction to the perceptual, experiential nature of the zero process.

Applications

What has been said so far is a rough sketch of a few basic characteristics of the zero process. It is only the beginning of what I hope will eventually be a much deeper and more thorough exploration of this area, which will lead to a much more sophisticated view of this form of mental functioning than that presented above. My aim in this paper has been to introduce the term and the concept, and flesh out a few basic
characteristics of the zero process. I will end by using the concept to look at a few issues in psychoanalysis, hoping by doing this to demonstrate it’s usefulness in helping us to better understand certain other concepts and the phenomena they attempt to explain.

One such concept is that of splitting. Brook (1992) has pointed out that there are actually a number of different types or forms of splitting. We could use the distinction drawn between the three great forms of mental functioning (primary process, secondary process, and zero process) to understand something about these different forms of splitting. To do so we should also make another distinction, that between passive splits (a lack of integration) and active splitting processes. In terms of "passive" splitting I have already mentioned, as have many others, the bits and pieces nature of zero process, post-traumatic, functioning. Freud (1915, 1923) described how in the id, where the primary process reigns, different trends, such as love and hate, proceed quite separately from each other, without influencing each other or conflicting with each other. We can infer this from the manifest content of dreams and symptoms, and can see it more directly in people suffering from more severe borderline and psychotic disorders, who not only demonstrate this quite separate existence of their love and hate for others and themselves, but also are often so unaware of, and unconcerned by, this lack of integration.

In terms of active splitting processes, we can say in general that these are undertaken by the ego using the secondary process organization, but that the ego uses tendencies of the other forms of functioning for its own defensive purposes. The splitting between different drive tendencies in borderline disorders has been studied from the perspective of active defensive processes that use splitting of objects and self based on their separate investment with libido and aggression, love and hate. We could classify this as the ego using primary process splitting for defensive purposes. This has been described and conceptualize extensively from the perspective of object relations by Kleinians, in relation to separation individuation processes (Mahler et. al., 1971) and from a number of other perspectives. What I want to emphasize is that this form of active splitting, seen in borderline disorders, and more normally in toddlerhood and adolescence, should be distinguished from the use of the lack of integration of post traumatic zero process memories for
defensive purposes. Splitting of the ego, one of the basic defenses in the perversions, and splitting of the identity, the hallmark of dissociative identity disorder, are the best known of these. These use the primary (passive) dissociation that is a product of trauma, by combining it with other mechanisms. In the case of splitting of the ego, the lack of integration between elements seen in post traumatic functioning is combined with various attentional (denial) processes of the ego to keep at bay distressing realities, while in splitting of the identity, zero process lack of integration is combined with a powerful counterforce similar to that found in repression and reaction formation. This latter can be seen by the hatred and rejection of one identity by the other, which betrays this use of aggression to set up a countercathectic (counterforce) defense, very similar to the one set up in primal repression. Thus we could say that splitting of the ego is what denial looks like in the realm of the zero process, while splitting of the identity could be called zero process repression.

This particular formulation does not cover all cases of multiple identities, for instance the many instances in which one of the personalities has a major motivation of taking care of a number of other, weaker ones, but the more general point is that the splitting of the identity seen in dissociative identity disorder can be better understood if we look at it as a zero process phenomenon. Along with repression, the identities are probably also kept separate by the use of modulated aggression to establish self other boundaries, a process familiar to us from studies of the normal development of these boundaries during toddlerhood and adolescence (Mahler, Pine and Bergman, 1971). Here too, the very particular and peculiar characteristics of the zero process, so different from those of other parts of the mind, lead to the setting up of these boundaries between different selves that seem strange to the point that many still reject the reality of the multiple, separate identities that exist in dissociative identity disorder.

I realize the distinction that I have drawn between two basic types of active splitting defenses is not uncontroversial. I am making these points here merely as assertions, to hint at ways in which the concept of the zero process can be used to delve more deeply into, and clarify, aspects of psychoanalytic theory. Obviously, a more convincing presentation of them would require detailed clinical material.

[Related to the issue of splitting is the fact that a number of
defenses and processes related to trauma have been
designated as dissociation, including splitting of the ego and
changes in level of consciousness. I myself have suggested
the term "primary dissociation" for the original passively
suffered breakdown in integration and other ego functions
during trauma. Here too, the idea of the zero process may
help us to make some distinctions. We can see perhaps that
various consequences of the ego shut down during trauma
have been designated as "dissociation". These include the
lack of integration seen in the splitting defenses, and the
changes in levels of consciousness that also takes place
during trauma because of a shutting down of a number of
ego functions, and then can be re-experienced during reliving
of the trauma or used for defensive purposes. At the same
time, changes in level of consciousness can have other
causes as well, such as various drug states, changes related to
falling asleep or being tired, and various active ego defenses.
This is a complex area clinically and theoretically, and I will
not go into it here any further. I mention it here only to
indicate that from the theoretical side, a proper elucidation of
the characteristics of the zero process and their
differentiation from other mechanisms will be of help in
coming to a more coherent set of conceptualizations of the
various processes that we at present designate as
dissociation.]

In relation to defenses, I would like also to mention another
zero process defense -- that is, an instance of the ego using a
key characteristic of the zero process for defensive purposes -
that has not been described in any detail, at either the
clinical or theoretical level, as compared to the various
splitting defenses. I would tentatively designate this as the
defense of temporal shifting. It plays an enormously
important part in responses to trauma, especially in what is
looked upon as a compulsion to repeat the trauma, and is
also used, once it has been set up in relation to a particular
trauma, as a defense against all sorts of other conflicts as
well. This defense is based on the fact that, because of the
partial shutting down of the first order, primary construction
of the traumatic experience, the zero process memories are,
at the psychical level, not yet in the past. In a very real sense,
they have not yet happened. This is a basic characteristic of
the zero process, and to begin with is a passive outcome of
the traumatic process. The defense that I have designated as
temporal shifting makes use of this characteristic for it's own
purposes. The traumatic incidents themselves are the first
objects of this defense. There is a powerful aversion to re-experiencing the trauma, because of the extreme regression, passivity and helplessness of the situation. Analysts have described various defenses, such as turning passive into active, and identification with the aggressor, that act to keep the helplessness of the trauma at bay, and at the same time lead to situations quite similar to the original trauma. The defense of temporal shifting is usually used in conjunction with a number of these other better known defenses, adding to them the ability to put the core of the trauma into the future. The motivation for the defense is the wish that the trauma could have been anticipated and thus averted, but the mechanism of this defense is not merely the putting into action of this as a fantasy; in other words it is not just a denial. In fact, at the psychical level, the zero process memories of the trauma have not yet been constructed, and thus at this level the trauma has actually not happened. The trauma is, as I said previously, always just beginning to happen or about to happen in the future. The defense of temporal shifting makes use of this aspect of zero process memories to move the entire traumatic incident into the future. The person using this defense lives their lives as if they were at a point just before the trauma.

To give a brief example of this: J became involved with a number of men who used her money and abused her psychologically. The causes of this behavior were complex, as one might imagine for a patient who had suffered so much trauma in her life. But, as we looked more closely at the details of the behavior and feelings, her strong conviction emerged that in fact these relationships were protecting her from attacks and traumas. This conviction had many functions, but it’s analysis revealed that it made use of the "not yet happened" nature of her traumatic memories, to push the actual attacks, both in her childhood and the rape from adulthood described earlier, into the future. She felt she was dealing with a difficult man, whom she had to manage, but that the dangerous and scary attack was yet to come, most likely not from him. The reason that she could not leave these men, or in other ways move into a more fulfilled adult future, was that then these attacks, which in an absolutely real sense for her were in the future, would now become part of her past. Her mission -- the mission of everyone who has been seriously traumatized -- was to change the past. Through the magic of the zero process, the past becomes the future and one has only to live at the point just before this
future for the project of changing the past to be felt as a possibility. This project protected J from the feelings of utter helplessness and hopelessness that were at the core of her trauma. But it also trapped her, as it traps all victims of trauma. She could not move into what should have been her regular adult life, since this future was inhabited by her trauma. As the analysis led her to a point where her actual future seemed possible, the traumatic memories threatened to flood in on her, especially now in the transference. It was at that point that the defensive use of temporal shifting, of keeping the trauma in the future, became clear. It now became explicit that she wanted to keep herself in a difficult but not completely traumatic situation, which was the point just before the trauma had truly overwhelmed her, and that the future could not be inhabited by her in the more regular way, because she kept it all the time filled with her traumas. This temporal shift allowed her not only to keep the overwhelming traumatic feelings at bay, but allowed her to cling to the hope that the past, since it was still in the future, could be changed.

I realize that this is a very abbreviated sketch of the analysis of a temporal shift defense, but it is my impression that anyone who has worked in any depth with trauma is aware of this defense at the clinical level. What the concept of the zero process allows us to do is to bring it into focus theoretically. It has been my experience that this deeper theoretical understanding allows one to spot this defense more easily and to analyze it much more effectively. The issue of the temporal shift and other zero process defenses is a large topic, and a very important one at the clinical level. I hope to devote further works to their exploration. It is only with this more detailed explication that the full clinical value of the concept of the zero process will become clear. I will end by saying a few words about therapeutic issues related to the zero process.

**Therapy**

The quasi-experiential nature of zero process memories is on display in transferences based upon them. For J, it did not just feel as if I were pulling her, as her abuser had. When I said “so it feels like its now,” she answered, “it is now. You’re just pushing me too hard and I can’t breath.” These transferences do not develop slowly over time, through displacement onto derivatives, as do primary process, drive based transferences, but are either absent or all too present.
Counterresponses, whether countertransferences or intuitions by the therapist, also have a perceptual flavour when the zero process is especially active. In the case of intuitions, one either has no idea what is going on, or knows in a flash, like a perception, exactly what a specific connection or past event was like. This “knowing” is not always correct, although it often is, but I describe it here to show that even the therapist’s insights, whether wrong or right, partake of the quasi-perceptual nature of the zero process.

Countertransferences as well are more immediate and action based when under the sway of the zero process. Thus I actually did push J quite forcefully, which was not at all my usual way of interacting with her. And as I became more pushy with J, I had less than the usual amount of insight or ability to reflect on what was happening. Of course it is not only with zero process countertransferences that one gets pulled into enactments, but it is especially with them that the enactment explodes into the analysis suddenly and without warning, and then can disappear just as quickly. Mutual enactments based to a greater extent on drive based conflicts develop more slowly over time, and have a way of seeping into the texture of the what one is doing in the analysis, rather than simply taking over the whole process.

The work of therapy involves facilitating the processing that was cut short during the trauma. A lot of the work is centred around analyzing the various resistances against remembering and reexperiencing the trauma, such as the zero process defense described above, and the denials and repressions surrounding the trauma as well. Doing this allows the normal movement towards the processing of the bits and pieces of zero process memory and the construction of the traumatic experience. This construction should be distinguished, however, from the constructions described by Freud in his paper on constructions in analysis (1937). These are relatively large scale informed speculations about the analysand’s past that the analyst offers, in order to stir up repressed material and resistances, and thus further the analytic process. I made a number of these in relation to J’s rape, for instance, as did she for that matter. After the sessions that have been described and others had brought to light not only the details of the rape but the radical changes in her life that had happened after it, I said, "I wonder if the rape shattered a sense of safety and of being able to protect yourself that you had carried forward from childhood since you were in the end able to confront your abuser and end the
abuse, and that this led you to the period that we are starting to dimly perceive, of drinking and isolating yourself as you were both overwhelmed and tried to both repress the rape and to reformulate your life story and how you lived your life from that point forward, so as to try to regain that sense of safety." As Freud pointed out, these sorts of constructions are not made in order to convince the patient or get their agreement, but rather to in the end stir up defended against material and thus move the process forward as this material emerges and can then be interpreted. Even though we use the same word, this sort of construction is quite different from the construction of the reality of the traumatic event that we aim for in the analysis of trauma. By analyzing defenses and fixations, which I was attempting to do with the construction I offered to J, and by offering an interpersonal setting of emotional safety, we hope to set in motion a process which was cut short during the trauma -- the normal first order construction of the traumatic experience. This is not only an intellectual endeavor, nor is the construction an invented narrative picked out among many possible ones. Rather, one helps the patient construct, from their zero process protomemories, the regular memories, affects, and impulses that would have come into existence if the traumatic process had not intervened. The traumatic experience then becomes part of the patient’s past, rather than haunting them as a perpetual present.

**Conclusion**

These comments are only a beginning in the task of describing the zero process. There is a whole world of phenomena to be explored. Of course many analytic and non-analytic authors have done this. The major difficulty standing in the way of deeper exploration, however, is not a lack of data, but a lack of conceptual clarity. As long as aspects of the primary process, of early ego functioning and the development of the secondary process in infancy, and of ego deficits and deformations, are conflated with characteristics of the zero process, I believe that a deeper understanding of the unique characteristics of post-traumatic mental functioning will elude us. At the same time, I think the concept of the zero process can aid this deeper exploration, by giving us a conceptual tool that we can use in understanding trauma and post-traumatic mental functioning, and in developing better clinical techniques for the analysis of trauma.
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