

What's New About Time In Psychoanalytic Theory and Practice¹

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I. Introduction

In psychoanalysis as a treatment procedure, as a research method, and as a body of theory, concepts and phenomena related to time are essential. Memory, forgetting, regression, repetition, anticipation, presentation, representation, the influence on the present of the past in terms of thought, feeling, and behavior; delay of gratification, sleep-wakefulness rhythms, variations and abnormalities in the sense of elapsed time; the so-called timelessness of the unconscious; values, standards, ideals as future-oriented categories; concepts such as object constancy and self identity—all there are central to our work. Time is also of essence in the very arrangement of psychoanalytic treatment. Sessions begin and end at a fixed time, but the analysand is encouraged to “free associate,” to suspend judgment about the *correct* sequential connectedness between different thoughts that come to his mind. The analysand is asked to function in a tight conscious and a loose unconscious mode. This temporal polarity, the movements between these poles, obstacles to and limitations of these movements, is at the core of the psychoanalytic process that strives to modify them. I will explore various aspects of time from this psychoanalytic perspective. I also will examine connections between earlier and recent psychoanalytic and wider recent philosophical and scientific views on time.

The earliest and most widely known connection between psychoanalysis and the topic of time is Freud's notion of *timelessness of the unconscious*. Freud believed that the unconscious knows no time and that whatever has been repressed does leave permanent traces in the unconscious. (Freud 1925, 225ff) Late in his life, Freud wrote that he had not solved the paradox of this unchanging state and its modifiability when the analysand retrieves it from the unconscious. Freud thought that “the solution to this puzzle would have to wait for further scientific and philosophic development.” (Freud 1933, 74) Some such recent developments may contribute to the solution of this puzzle.

From a historical perspective, Freud's most explicit reference to the temporal *trace* is his paper on the Mystic Writing Pad, a forerunner of Etch-A-Sketch. (Freud 1925, 225ff) On a Mystic Writing Pad, one writes on a covering surface that leaves a *temporary* trace on that cover. This trace disappears when the cover is lifted from the underlying surface; however, it has left a permanent trace. Freud used the Mystic Writing Pad as a concrete representation of his early views on the functioning of the perceptual apparatus of the mind. The Mystic Writing Pad illustrated how permanent *traces* are laid down and how a perceptual conscious system is ready to receive new stimuli (perceptions) on what seems to be a blank page. In Freud's early model of the mind, the

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trace on one layer of the pad seemed to solve the problem of combining the functions of a permanent and a temporary memory.

II. Studying Memory, Studying Temporal Trace, Is Studying Time

All study of memory is a study of time. (*endnote 1*) Meaning depends on the traces of short-term memory. Usually, when psychoanalysts discuss memory, they think of relatively long-term memory. However, without short-term memory, there is no meaning and, without meaning, psychic life does not exist. All meaning, all thinking, all psychological functions are time-linked.

Let me give you an illustration of the loss of meaning that accompanies loss of short-term memory. Sernyl is a drug that interferes with short-term memory. It was once used as an anesthetic for animals and children, but research on the drug continued after its clinical use was stopped. In an experiment that I conducted (which was probably the last authorized research project on humans), Sernyl was given by injection to Kenneth Gaarder, psychiatrist and psychoanalyst, who participated in this research and who served as a voluntary subject. (Kafka 1989, 62ff) Dr. Gaarder was well acquainted with the literature about Sernyl, but had not seen the drug in use. Here is a taped record of Dr. Gaarder's words 10 minutes after the injection.

“...something is going on here and uh-uh-I'm alive-and uh-I'm doing something for some reason, , and I don't know what it is I'm doing and uh-what's happening to me now-and words are things like that what is happening? What is to say what is happening? Is a word-and people talk-and what is talking? And uh-I don't know what's going on... I'm experiencing something and I don't know what's going on, and I don't know what saying what's going on is saying...” (Kafka 1989, 65)

From this illustration of the loss of meaning caused by the short-time memory loss induced *timelessness*, let us return to Freud's most well-known psychoanalytic hypothesis relating to time. It is the notion of the of the so-called *timelessness* of the *unconscious*, and the ensuing paradox of the existence of change, a puzzle that the solution of which, as already mentioned, “would have to wait for further scientific and philosophical development.” Since Freud's time, the works of Matte-Blanco, J. T. Fraser, and Kurt Gödel are scientific and philosophical contributions to the solution of this puzzle.

An important recent development in psychoanalytic theory is the work of Matte-Blanco, a psychoanalyst and a mathematician, who has given us his understanding of the so-called timelessness. (Matte-Blanco 1988) He distinguishes symmetrical and asymmetrical mental processes. “John is the brother of Peter” is symmetrical because Peter is also the brother of John. “Peter is the brother of Mary” is asymmetrical because Mary is not the brother of Peter. (Matte-Blanco 1959, 2) “Yesterday is before today” is asymmetrical because today is not before yesterday. The unconscious, according to Matte-Blanco, does not distinguish between the symmetrical and the asymmetrical, and is, in this way, timeless. (Matte-Blanco 1988, 43ff) Of particular relevance to psychoanalysis and the psychoanalytic interpretation of dreams is that, in dreams, there is no directionality of time, no consistent before and after. Matte-Blanco's psychoanalytic view of the

unconscious is congruent with J. T. Fraser's *eotemporal umwelt*, the shaft of an arrow countable and orderable without a preferred direction. (Fraser 1981)

Freud knew about relativity theory, about the uncertainty principle, and about quantum physics, but he did not consider these scientific advances relevant to psychoanalysis and warned against facile use of these concepts. Neither Freud's nor Fraser's new understanding of time is based on post-Newtonian physics.

J. T. Fraser writes “ ... when psychoanalysts deal with time in the psychoanalytic situation, they assume the existence of an objective temporal matrix in which psychic processes take place and to which the subjective time of the patient is gradually attuned. A desirable result of therapy is an identification of the subjective time of the patient with the assumed, objective physical time. Psychoanalytic theory may, therefore, be seen as endorsing that view of time which was proposed by Issac Newton in 1687. He wrote that ‘absolute, true and mathematical time, of itself, and from its own nature, flows equably without relation to anything external, [that is, anything other than itself] and by another name is called duration ...’ But this understanding of time must be rejected, though not at all for reasons that come from post-Newtonian physics (*endnote 2*) but rather because of reasons that stem from evolutionary biology (Fraser, 1978c) and from psychoanalytic insight.” (Fraser 1981, 3) The relationship between Fraser's hierarchical levels of time and psychoanalytic approaches to time are the central subject of his 1981 paper, “Temporal Levels and Reality Testing.” One hierarchical level involves an unchanging state and another accommodates modifiability. In Fraser's system, no previous, no “lower” level of organization is lost. They are constantly recapitulated and co-exist although they may be in conflict with each other. This is congruent with Freud's view that the past permanent traces in the unconscious are constantly recapitulated. But, as mentioned, change in the unconscious that knows no time remains a puzzle for Freud while Fraser's system accommodates co-existence despite conflict.

Another scientific and philosophical development, that postdates Freud, is Gödel's conclusion that time is not a “physical reality.”² Gödel theorized that the maximum curvature in Einstein's space time leads to our return to the same point in space time in conceptual time travel. (Gödel 1931, 173ff) If we find ourselves at the same point in space time, he reasoned, time does not exist as a “physical” reality. This notion suggests that all time-related psychological activity, (and there is no time independent psychic activity), is constructed by us. In Fraser's theory, we construct all hierarchical levels of time in the course of evolution.

The human construction of time is the construction of mind, the construction of meaning. The Sernyl experiment described previously illustrated the loss of meaning that accompanies the loss of short-term memory. Even the word “now” lost its meaning. A “now” without short-term memory is meaning-less. It has no psychological existence; it is mind-less.

²For a most thorough discussion of Gödel's work and its philosophical implications, see Palle Yourgrau's book, *A World Without Time. The Forgotten Legacy of Gödel and Einstein*. (New York: Basic Books, 2005).

III. Psychic Reality

The psychological moment, the existence of a psychic reality, needs short-term memory to exist. The psychic reality of the moment is a building block of later memories. Therefore, our study of the memory trace is inescapably linked to the study of the building of psychic reality. Psychoanalysts are careful to avoid “reification” of their concepts, but nevertheless the psychoanalytic term “object” has some connotations of solidity, of “separate” tangible existence.

In this connection, I will summarize here some ideas that I have developed in much more detail elsewhere. (Kafka 1989) In general psychology, the concept of object permanence, or object constancy, refers to observations of the kind that a table is perceived as the same table when viewed from different angles despite the fact that the retinal projections of the table are different when the viewing angles change. In the context of our study of memory and the recognition that memories are not reproductions of a scene nor of an object, it is essential to note that time is involved in the movement from one position to another in viewing the table that will be a (permanent) object. This notion is not absent from psychoanalytic understanding of object constancy but psychoanalysts focus on affect and meaning when considering that object constancy has been achieved when, for example, the nourishing and the withholding mother is recognized as the same person. But here too the general psychological meaning of the term applies. Mother, seen from different angles and in different physical positions, also has different retinal projections. I emphasize that even object constancy has both a hermeneutic and a “tangible,” as it were, physical reality “component,” a theme to which we will recur when discussing *Nachtraeglichkeit*.

This discussion of object constancy leads to the conclusion that our psychological “object world” consists of subjective equivalences of different objects. *Different* time intervals may also be subjectively equivalent. The identical “linear” time interval may be experienced as shorter or longer and different time intervals may be experienced as similar or identical, depending on many different factors, including time linked affective factors, expectations, hopes, and fears. From this perspective, psychic reality consists of processes of forming networks of spatial and temporal subjective equivalences. “Object “ loses some of its “solidity.” Note that I speak about *processes* of forming subjective equivalences and I believe these processes recapitulate ontogenic development.

Freud’s notion that the past traces in the unconscious are permanent and are always available for repetition and recapitulation and –as already mentioned– in Fraser’s system, no levels of organization are lost. They are recapitulated and co-exist even if they are in conflict with each other. To illustrate my hypothesis of the recapitulation of onto-genetic development, I have used the story that the drowning individual (after he is saved) recounts that he experienced his whole life “in a flash” as an illustration of my hypothesis that every perceptual process is a recapitulation of the onto-genesis of perception. This conscious experience may correspond to the unconscious micro- or nano- second recapitulation of the development of the individual’s perceptual processes. This hypothesis is supported by tachistoscopic experiments, studies of perception using very short exposures of stimuli. (Westerlundh and Smith 1983, 597ff)

IV. *Nachtraeglichkeit*

The concept of *Nachtraeglichkeit*, (Freud's term for the retroactive modification of memory traces), has long been neglected in the English-speaking psychoanalytic world because the term had been poorly, at least very incompletely, translated as "deferred action." An attempt has been made to clarify the concept by speaking of "retroactive attribution of meaning." Kettner, who has studied Freud's use of the concept, finds that Freud sometimes gave it a hermeneutic meaning, referring to changes of interpretation of memories, and sometimes a "causal" meaning. The latter can be thought of in terms of the aftereffects, like a chain of effects on a series of billiard balls. Kettner finds that psychoanalysis operates in the "*Spielraum*," (the space for play), the place between these two meanings. (Kettner 1999, v. 4)

This *Spielraum* is also the area of confluence of unidirectional linear time linked to traditional causality and of bidirectional temporal processes. Bidirectional processes escape the narrow structure of a mechanical billiard-ball causality chain and involve the alterations of meaning produced by seeing old material in the light of new information and vice-versa, in the *Spielraum* between the concrete and the hermeneutic.

Another aspect of *Nachtraeglichkeit* is a relatively neglected one, the *nachtraeglich* modification of the sense of duration. Different senses of duration leave *traces* of different senses of duration. Shifts during psychoanalysis in what is understood as meaningful, be it in one analytic session or in a perspective on life developed during psychoanalysis, have profound consequences for our experience of time, because the judgments of the duration of intervals in which "meaningful" things happen differs from the judgments of duration of intervals of "accidental" events. (*endnote 3*)

The sense of duration is influenced by cognitive information, but it is profoundly influenced by affective elements. During a German speaking conference on time, I was asked what I thought was the opposite of *Musse*, a hard-to-translate term referring to a peaceful, utterly relaxed free time. I was surprised that, what came to my mind, was *boredom*. In effect, boredom is a problem for the military in certain situations when troupes are not active. In an armistice situation (not after a peace accord) when opposing troupe encampments face each other, soldiers have to be alert to notice any sign of a possible violation. At the same time, they must make sure not to do anything that the enemy could interpret as a threat. This is the perfect situation of inhibited aggression which, I believe, is the deep source of boredom, the utterly not relaxed free time. In psychoanalytic treatment, attention to the quality of experienced duration can contribute much to the understanding of emotional conflicts. This was the case in the psychoanalytic treatment of a man who was trying to decide whether to stay with his wife or to marry his mistress. It gradually emerged that a conflict between a situation in which he experienced *Musse* (with his mistress) and one of inhibited aggression (with his wife) best described his situation. This clarification permitted the patient to contextualize his current conflict, to recollect, re-examine and re-evaluate it *nachtraeglich* in the light of current understanding of some past situations.

V. Screen Memories

The concept of screen memories deals more explicitly than *Nachtraeglichkeit* with the polarity of overall actual temporal traces and living memory. In addition, however, screen memory also deals explicitly with false memories.

In his article on screen memories, (Freud 1899, 299ff), Freud refers to similarities between other memories and memories that he designates as screen memories. He highlights some characteristics, most of which are present in all memories, but are more prominent in screen memories, sensory intensity and the *delay* in developing them. (His own screen memory refers to events that occurred when he was three years old and to a screen memory that was formed when he was 17.) Freud also emphasizes that the wish he encounters in this screen memory is the wish to change the past rather than a wish for the future. He emphasizes that he returns to a past nostalgia. (My own favorite graffiti is “Nostalgia ain't what it used to be.”) Nevertheless, Freud's technique of analyzing his screen memory is not fundamentally different from the technique he employs in analyzing other memories. He emphasizes that the concept of screen memory owes its value as a memory not to its own content but to the relation existing between that content and some other that has been repressed. While this may be particularly salient in the analysis of screen memories, it is indeed part of all psychoanalytic study of memories.

Freud locates the source of his screen memory at age 3 when the financial collapse of the family's business leads to a quite sudden and unexpected move to Vienna. (Freud 1899, 309) The disguised autobiographical example of the partly confabulated memory runs as follows. “I see a rectangular, rather steeply sloping piece of meadow-land, green and thickly grown; in the green there are a great number of yellow flowers – evidently common dandelions. At the top end of the meadow there is a cottage and in front of the cottage door two women are standing chatting busily, a peasant woman with a handkerchief on her head and a children's nurse. Three children are playing in the grass. One of them is myself (between the age of two and three); the two others are my boy cousin, who is a year older than me, and his sister, who is almost exactly the same age as I am. We are picking up the yellow flowers and each of us is holding a bunch of flowers we have already picked. The little girl has the best bunch; and, as though by mutual agreement, we – the two boys – fall on her and snatch away her flowers. She runs up the meadow in tears and as a consolation the peasant woman gives her a big piece of black bread. Hardly have we seen this when we throw the flowers away, hurry to the cottage and ask to be given some bread too. And we are in fact given some; the peasant woman cuts the loaf with a long knife. In my memory the bread tastes quite delicious – and at that point the scene breaks off” (Freud 1887-1904, 311). Freud emphasises that the yellow of the dandelions and the delicious taste of the bread seemed disproportionately prominent.” (Smith, 2000, 9-10)

Freud's fundamental claims are “1. Retrogressive screen memories are produced when a *contemporary* thought is repressed and finds some associative contact with an earlier memory. The screen memory portrays the contemporary concern. 2. Screen memories take the form of scenes, involving visual representation. 3. Retrogressive screen memories can be interpreted only in light of the life-context during which they are recalled. 4. The fact that a memory assumes a screening

function does not mean that it is a complete fabrication, although this process may modify the content of the memory in some respects.

“In the final analysis, Freud wonders whether *all* of our childhood memories are not screen memories. “It may indeed be questioned whether we have any memories from our childhood; memories *relating* to our childhood may be all that we possess. Our childhood memories show us our earliest years not as they were but as they appeared at the later periods when the memories are aroused. (Freud 1887-1904, 322)” (Smith 2000, 11-12) For analysts, a screen memory is, or I would say, was once accepted by the subject as a “real” memory, but Freud and other students of screen memories emphasize to what extent the sensory intensity, (the yellow flowers in his screen memories), is particularly fresh, and current and, as it were, factually verifiable. The narrative of the screen memory is, however, particularly unlikely. The manifest story is false although, as already mentioned, analyzing the story, as one would analyze a dream, may make it understandable. While all memories are constructions, the more evident falseness of the screen memory makes it a confabulation. Psychiatrically, confabulation is considered a replacement of a gap in memory by a falsification that the subject accepts as correct.

I think that Freud's choice of the trauma of a particularly unexpected interruption, as the source of his emblematic screen memory, is not accidental. “Implicit” memories permit us to perform daily tasks without conscious focused attention. Implicit memory involves (the unconscious memory of) the correct timing in which these tasks have to be performed in a specific setting. Sudden changes of setting disrupt our expectations, force us to pay conscious attention where it was not needed previously, and disrupt the continuity in our sense of duration. This leads to pronounced gaps in narrative memory coexisting with particularly clear and vivid memory of sensory impressions, the hallmarks of screen memories. In discussing *Nachtraeglichkeit* in memory formation, we have referred to both the billiard ball like mechanical aftereffect of events and to hermeneutics, meanings and changes of meaning. A mixture of aftereffects, meanings and changes of meaning play a role in memory formation and our search to reconstruct the past. This is relevant to the analyst's listening during a psychoanalytic session. The psychoanalyst's suspended way of listening differs from the focused attention of ordinary listening. The analyst may even suspend the distinction between the recital of a dream and the description of real events. She may listen to everything as though it were a dream or a screen memory. In such a listening mode, the analyst's attention may shift back and forth to a focus on the description of the sensory experience and away from the analysand's story line that may be confabulated.

VI. Déjà Vu

The individual experiencing and describing a screen memory locates it, the confabulated story, in a specific point in time. This is one feature that distinguishes it from the *déjà vu* experience, another elaboration of a memory trace.

There is, however, also a close connection between the concept of screen memory and the *déjà vu* phenomenon. It is the emphasis on sensory experience. In the *déjà vu* experience, the individual is

convinced that the same sensory features were present in the past and are present now — the same location, the same colors, the same landscape. Yet, as we shall see, in a sense, *déjà vu* is the opposite of the screen memory. My hypothesis is that the apparent sameness of a past and current situation is based on the resemblance of formal patterns, precisely *not* the same sensory experience.

I have emphasized the uncanny nature of *déjà vu* experiences (Kafka, 1966; Kafka 1989, 46-47) and related it to simultaneous contradictory convictions such as “I am sure I have seen this, or I have been there” and “I am sure I have never been there.” Here, in brief, is my hypothesis which is supported by neurobiologic findings. *Contradictory convictions are the result of the repetition of the same pattern of stimulation, but in different sensory compartments.* Synesthesia is the blending of different sensory compartments. The *pattern* of a synesthetic perception may be the same as a pattern of a compartmentalized perception. Think of an oscilloscope that has the same wave pattern whether it represents an auditory, a visual, or a synesthetic stimulus pattern. Neuroscientific support for this hypothesis derives from the importance of temporal lobe functions in integration and differentiation of sensory “compartments” and the fact that individuals with temporal lobe abnormalities are often inundated by ongoing *déjà vu* experiences.

VII. A Clinical Example of *Déjà Vu* and Fugue States

A middle-aged woman without any previously observed psychiatric pathology rather suddenly was frequently absent from home, sometimes for several days. She could not give any explanations for this and apparently had no memory of her activities during these days. When I saw her for an evaluation, she described frequent and somewhat disorienting *déjà vu* experiences. Her family had traced her absences and found that she, very active in women’s clubs, had given several well received lectures at women’s clubs in other cities. As mentioned, she was amnesic of these trips and activities. Temporal lobe abnormalities have been linked with fugue states and great frequency and intensity of *déjà vu* phenomena. I referred her for a neurological evaluation that revealed a very large tumor involving the temporal lobes.

My work with schizophrenic patients has led me to believe that ongoing, steady immersion in *déjà vu* experiences may play a role in the profound temporal disorientation of some patients. Also, in connection with the study of schizophrenic thought disorder, I have already described the hypothesis that each perceptual act represents an unconscious recapitulation of the ontogeny of perception, and that, developmentally, synesthetic perceptions antedate sense specific (visual, auditory, etc.) perceptions. Interruptions, however, of some micro-temporal recapitulations lead to the subjective equivalence of completely and of incompletely recapitulated perceptions and therefore to the formation of bizarre psychotic uncanny “objects.” More specifically, my work with *schizophrenic* patients has led me to focus on a developmental sequence of the discrimination between outside and inside, the discrimination of the animate from the inanimate, the synesthetic from the sensory-specific, and the priority of temporal or of spatial ways of organizing sensory data. A patient described how the distance between two buildings had shrunk. I noticed that she walked faster. Such observations made me aware to what extent we usually give priority to spatial, over temporal, organization. (Kafka 1989, 14) These developmental stages are recapitulated in “object formation.” (Kafka 1989, 26-50) Furthermore, there is a congruity between, on the one

hand, animate, inside, temporal, and synesthetic, and, on the other hand, inanimate, outside, spatial, and sensory-specific objects. Tachistoscopic experiments, the study of perception of stimuli exposed for extremely short periods, permit a kind of temporal dissection of the recapitulative process. Extremely short exposure led adults to have responses that have characteristics in common with those of very young children and that longer exposures correspond to responses of older children. (Kafka 1989, 41ff)

Returning to “subjective equivalence” in object formation, if the psychic objects are not “real, tangible objects,” but represent subjective equivalences of different perceptions, then each perceptual act represents a travelogue –and therefore a micro-memory trail– through different “object formations.” If the recapitulation of developmental processes is “complete” in each perception, the subjective equivalences form “objects” that are recognizable by and can be shared by others. If the recapitulations of some perceptions are incomplete, as they may be in psychotic thought disorder, subjective equivalences between completed and partially completed perceptions form “bizarre” objects or what we may call atmospheric rather than sensory specific objects. Here is a clinical example of the latter. During an acute psychotic phase, a patient insisted on calling a nurse “Heidi” although that was not her name. After this acute phase, the patient explained to me that people were not the same for her from day to day. This nurse, however, was blond and had a foreign accent. The patient had loved the book, *Heidi*, since her childhood and a combination of characteristics, a kind of “Heidiness,” permitted her to hold on to something, incidentally something pleasant during a time of distress, disorientation, and loss of a sense of self. Atmospheric objects are more synesthetic than sensory specific. It was only in retrospect, *nachtraeglich*, *après coup*, that the patient understood the source and reasons for her misnaming the nurse.

VIII. Conclusion

We cannot talk about memories, about memory traces, without talking about time. Some modern conceptions of time are relevant to psychoanalysis, particularly to the notion of the timelessness of the unconscious. Memories are not copies of the past. Episodic memories are constructions. In that sense, all memories are false. We examined different ways in which they are false and how episodic memories unroll what has been temporally condensed. The concept of *Nachtraeglichkeit* received special attention. Clinical psychoanalysis and memory formation function in the *spielraum* “playroom” (or “playtime”) between the concreteness of mechanical aftereffects and hermeneutics, i.e., meaning and change of meaning resulting from new information.

There is an interesting congruence between the psychoanalytic concept of *Nachtraeglichkeit*, *après coup*, and recent developments in neuroscience. Here, *Nachtraeglichkeit* and neurobiology encounter one another. Nielsen and Stenstrom have observed that a different brain area is activated when an individual recounts a dream he had yesterday and when he talks about the same dream one week later. “...the dependence of newly acquired memories on the hippocampus decreases over time whereas their dependence on neocortical structures, such as the medial prefrontal cortex, increases in a complementary fashion. Memories are...relocated over time from the hippocampus to the neocortex...” The authors describe corresponding qualitative changes, in essence from “day residue” to cognitive elaboration, to emotionally relevant episodic memories. (Nielsen and

Stenstrom 2005, 1286ff) Here is a neurobiological finding connected to the construction of meaning, to the hermeneutic pole of *Nachtraeglichkeit* that contributes new information to the cognitive elaboration of memories. Furthermore, the finding that chronobiological factors at several levels influence the selection of memory sources, corresponds to “aftereffect,” the “billiard ball” external, mechanical, and concrete pole of *Nachtraeglichkeit*. The timing and the rhythms of cerebral functions in general correspond to linear clock time, precisely, the linear clock time in which billiard balls have their aftereffects. These “external” rhythms are gatekeepers to provide or deny access, at any one moment, to a multitude of cerebral activities. The brain itself functions with the polarity between aftereffect and hermeneutic transformations. This polarity of brain functioning is congruent with our psychoanalytic work. The fixed clock time of the beginning and ending of the psychoanalytic session forms the frame in which the hermeneutic search of the unconscious unfolds itself, an unfolding necessary for the construction of personal psychological time, an unraveling of the ultimate condensed timeless into the thread with which we weave our memory traces and our lives.

Endnotes

Endnote #1

My work with schizophrenic patients and my recent treatment of some dying patients have reinforced my interest in Kurt Eissler’s ideas about archaic time, the aging analyst, and the dying patient. Kurt Eissler considered that Freud’s ideas about time needed considerable re-examination and elaboration. Eissler’s preoccupation with time was apparent in his interest in the work of the aging analyst (Eissler 1993, 316ff) and his work with dying patients. In Eissler’s book, *The Psychiatrist and the Dying Patient* (1955), he writes: “Time is constantly in us and around us; nevertheless, we cannot grasp it. Probably there is a fundamental resistance in us to understanding it, a resistance, which goes far deeper and is far more basic than that which is encountered in the ego when it fights off a content in the repressed part of the personality. It is conceivable that this ego would be seized by fright when facing the true issue of what time really is. And again one can well understand when Augustine breaks out in the essentially blasphemous words: “O, my Lord, shall not here, too, Thy truth mock at man?” The primary experience of time, I would think, is entirely bound to the course of inner processes and occurs much earlier than perception of time. Perception of time is a function of a relatively high organization and is a later product, gradually formed out of an archaic time experience. The latter seems to be indelibly attached to the psyche; even if the individual has never experienced an external perception there still would be an experience of time.” (Eissler 1955, 266)

Endnote #2

Fraser writes “Relativity theory is silent on the origins of time. It only gives instructions on how to measure time and remain consistent with motional and positional variations of clocks, whose nature also remains unanalyzed. Newtonian (absolute) and Einsteinian (relativistic) time are identical in that they are both independent of the quality and complexity of the observer. This fact is never noted in physics texts because of the temperament of physical science, a projection of the unresolved conflicts of the physicist (Fraser 1975). If the interpretation of time in physics, as given

by physicists, is uncritically accepted and the vocabulary of relativity theory is carried over to psychoanalytic theory (e.g. Schneider, 1948), confusion results. Even such a meticulous scholar as Abraham (1976) mistakes the relativistic metaphor of the variability of the time metric for a qualitative, rather than quantitative, statement about time. (Fraser 1981, 3)

Endnote #3

An experimental demonstration of the retroactive effects of new information on judgment of past duration is the following. Subjects in one experimental group learned a series of apparently random numbers and then were asked how long it took them to learn the series. Subjects in another group learned the same series and then were given a code that transformed what was apparently a random series into an ordered one before being asked (to estimate) how long it took them to learn the series. The subjects, who were given the code and whose actual learning period was the same, estimated the learning period as shorter than did the subjects who were not given the information that would have permitted them to reorganize –recode– their experience retrospectively. It is well established that ordered numbers are learned more rapidly than random ones. Subjects given the code that transformed the apparently random series into an ordered one after learning them estimated their learning period as though they had known the ordering code at the time of learning. New information has had a retroactive effect on judgment of past duration. (Kafka 1989, 18)