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Unconscious Fantasy and Emotion Schema

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Abstract
In the clinical situation, there are both verbal and non-verbal interactions. Patients express themselves, whether in words or otherwise, in direct or disguised ways, whether consciously or unconsciously. Such conscious or unconscious ideas and feelings are related to personal desires, relationships with important people in their present or past life, or in the transference relationship. These ideas and feelings are organized in the brain/mind as emotion schemas. Wilma Bucci argues that emotion schemas derive from subsymbolic and symbolic processes, which may be conscious or unconscious. It is important to note that the term "emotion schema," is used much less frequently than the term "mental representation." Since too many people consider the term "mental representation" a static concept, the term "emotion schema" can be a shorthand for "emotionally infused mental representation." This paper proposes that the construct of unconscious fantasy overlaps with that of emotion schema. The importance of priming phenomena between the members of the therapeutic dyad is discussed. Each person's unconscious fantasy can serve as a prime for the other.

Keywords Emotion schema · Mental representations · Unconscious fantasy · Referential process

Introduction

Wilma Bucci's Multiple Code Theory (MCT) is based on the view that humans have multiple systems for experiencing and processing the world, with substantial but incomplete integration of these systems (Bucci, 1997, 2021; Bucci & Maskit, 2006, 2007). These systems include symbolic (language and imagery) and subsymbolic processes (emotions, visceral and autonomic responses). Symbolic processes may be verbal or nonverbal. Subsymbolic processes (including sensory, visceral, and motor experiences) are characterized

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as continuous and analogic. These are the types of processing to which people may not have direct access. The Referential Function or Process (RP) refers to the linking of such bodily experiences with non-verbal symbolic imagery and with words. The RP enables individuals to process and express a variety of emotional experiences, which are stored as memories in the brain/mind in an organized way, such as in schemas containing affects, symbolic, and sub-symbolic elements. As Bucci (2023) explains, "The organization of experience is based on memory schemas, including *emotion schemas*, organized through episodes that involve related sensory and bodily experiences with particular people in particular contexts" (p. 3).

The three phases of the RP are the Arousal, Symbolic, and the Reflection/Reorganization phases. In the Arousal phase, the patient experiences their affective core, as well as the characteristic protective defensive actions. In the Symbolic phase, the patient's episodic memory becomes actively engaged. Here, experiences are processed within a variety of systems: sensory modalities, motor, visceral, autonomic, and are connected with the linguistic system. Language in this phase is vivid, imagistic, detailed, and contains sensory information. In the Reflection/Reorganizing phase, patient and analyst reflect on the narrative material, hopefully leading to emotional insight and change, ideally culminating in a summing up. An alternation between language indicative of the Symbolic phase and language indicative of the Reflection/Reorganization phase denotes that there is an active RP in the patient during an analytic or therapeutic process (Hoffman, 2019).

In this paper, I suggest that the construct of unconscious fantasy is similar to the concept of emotion schema. Although there will be references to non-verbal events within one person and between the dyad, the unique aspects of the verbal interactions between patient and psychodynamic therapist will be highlighted. The paper will be organized into several sections. I touch on some aspects of memory and emotions and address the constructs of schema, emotion schema, and compare that to the concept of mental representation. I briefly review selected psychoanalytic theories of unconscious fantasies and compare the construct of unconscious fantasy to the construct of emotion schema, suggesting that both concepts, even though they emerge from two different theoretical perspectives, are similar concepts. I conclude by addressing the importance of priming mechanisms and attempt to reconcile the notion of unformulated experience and that of unconscious fantasy.

Mutative Agents in Psychodynamic Treatments

In a classic paper, Kris (1956) describes the "good hour" as follows:

> "Many a time the "good hour" does not start propitiously. It may come gradually into its own, say after the first ten or fifteen minutes when some recent experience has been recounted, which may or may not refer to yesterday's session. Then a dream may come, and associations, and all begin to make sense. In particularly fortunate instances a memory from the near or distant past, or, suddenly, one from the dark days may present itself with varying degrees of affective charge. At times new elements are introduced as if they had always been familiar, so well do they seem to fit into the scheme of things. And when the analyst interprets, sometimes all he needs to say can be put into a question. The patient may well do the summing up by himself, and himself arrives at conclusions" (p. 446).

In this schematic vignette, Kris describes an ideal process in a psychoanalytic session (which we can label with the more general rubric "psychodynamic" session). Kris begins with a description of the patient's difficulty translating their inner non-verbal experience into words. At some point, the patient can tell a story; they may remember a dream or reveal a memory from the recent or distant past. Kris does not specify how the patient shifts from a difficult-to-put-into-words state to one in which their experience can be verbalized. He does not describe whether the therapist intervened in one way or another, or whether the patient spontaneously shifted to directly verbalize a narrative (that is, we do not know the process whereby the patient's episodic memory system awakened).

Kris then reports that a summing up occurs (perhaps by the patient themselves) after the therapist makes a comment or asks a question. In other words, the therapist verbally communicates something to the patient, presumably something of which the patient may have not been fully aware. There are several central ideas in this vignette: the session does not start propitiously (that is, verbal communication is in some way constrained or not understandable), a story then follows, the memory system is activated, the analyst interprets, and there is a summing up based on the verbal communication between patient and therapist.

The three phases of the Referential Process (Arousal, Symbolic, Reflection/Reorganization) can be identified in Kris' description (Bucci, 2021). The Arousal Phase corresponds to the first 15 min, where subsymbolic activity is most likely prominent as the patient has difficulty putting feelings into words. In the second phase, the Symbolic Phase, the patient's episodic memory is actively engaged. Finally, in the third phase, there is a summarizing, indicative of the Reflection/Reorganizing Phase.

An important clinical and empirical question is how such a shift occurs (as in the process described by Kris) from a state where the patient has difficulty expressing themselves in words (the Arousal phase) to an ability to put their thoughts into words (the Symbolic phase). In the first study attempting to evaluate such a shift, Tocatly (2023, *This Journal*) found that in her sample of taped and transcribed analytic work, the analytic interventions which were most effective in promoting the patient's shift from Arousal to Symbolizing (storytelling) were those in which the analyst's language was in the Reflection/Reorganizing phase, including the utilization of direct questions.

From the perspective of the Referential Process (Bucci et al., 2015), in an "ideal" session, there is a cycle of evolutions in which a patient is connected to their emotional core but either unable to describe their experience in words or is motivated to avoid describing the experience in words. The patient's sensory, motoric, and visceral experiences may be mirrored in the therapist. Eventually, these experiences may be linked to a narrative which can be reflected and reorganized by the patient, either independently or with the therapist's aid.

In contrast to such an approach which stresses the centrality of verbalization or interpretation for mutative changes (Zilcha-Mano et al., 2024; Hoffman, 2024), many contemporary approaches often consider the greater importance of a variety of implicit interpersonal interactions such as: Implicit Relational Knowing between patient and therapist (Process of Change Study Group et al., 1998), Authentic Relational Moments and Moments of Meeting (Békés & Hoffman, 2020), and the centrality of the interpersonal field (Stern, 2008, 2018). From the perspective of an implicit, non-verbal interaction between patient and therapist, one would have to be able to examine what occurred during that period of the session, which Kris describes as a "non-propitious," beginning before the verbal interchange dominated the session. Many analysts regard that the essential therapeutic factor in therapy lies not in the

words but in the "something more than interpretation," as developed by the Boston Change Process Study Group (2005). In my reading, regardless of differences among various relational or field perspectives, the interpretation or the words the therapist utters are not the central mutative elements. Rather, something else (a non-verbal event) is the therapeutic agent and the analyst's or therapist's verbal interpretation is a result of, not the cause of, the non-verbal therapeutic impact on the patient.

Stern (2018) describes the importance of changes in the therapeutic field in the promotion of therapeutic progress. The following vignette is from a patient he was treating who wished to interrupt her treatment because of her work schedule, whose meaning he addressed.

> "I believe that the impact I had on the patient required a "spontaneous gesture" on my part (Winnicott, 1963). In this case, that spontaneous gesture emerged from my recognition of the patient's attachment to me, and from my sense that she needed to be protected from her willingness to leave behind something precious. For her part, the patient was able to be open to what I said in a way that allowed what I offered to become what we might call an effective therapeutic reply to the obliviousness and lack of caring in her history. I am quite sure that if I had done the same thing deliberately, as a corrective—that is, if I had done it to have a transferential impact "on purpose"—the intervention would have been useless, or worse. What I did was a spontaneous manifestation of the same field that it influenced, and the result has been not only the recovery of memories and the construction of what cannot be remembered, but also an expansion and deepening of the patient's entire history. Could there be a more eloquent testament to historical reconstruction as an emergent product of the interpersonal field?" (p. 505).

D. B. Stern believes that the content of the words he uttered would not have been therapeutically effective if he had not developed a feeling of concern for the patient, which had been absent beforehand. He also believes that the relational field contributed to the patient being more receptive to Stern's suggestion that she does not leave the treatment.

From the perspective which D. B. Stern describes, the therapeutic essence of the session, described by Kris, may have occurred during those "non-propitious" first 10–15 min. One could hypothesize that the non-verbal (subsymbolic) interaction between therapist and patient enabled the emergence of a verbal interchange between the two, concluding with an understanding of the patient's productions. In other words, the therapeutic agent in the session was not the interpretation which the analyst offered but the nonverbal interaction which allowed the analyst's words to emerge.

How do we assess the differential impact of the therapist's utterances and the non-verbal cues? It is hard to imagine that both are not central (Hoffman, 2024). In this paper, I discuss the nature of the communication between two speakers, especially in psychotherapy, and how the manifest words, as well as the non-verbal cues utilized by both speakers, may touch upon central emotion schema or unconscious fantasy of the other, which then leads to therapeutic progress.

The important role of non-verbal interactions between patient and analyst is undoubtedly crucial. Unfortunately, like many psychodynamic constructs, the nature and impact of relational non-verbal interactions are difficult to evaluate (Békés & Hoffman, 2020). Békés (2024, Personal Communication) has developed a coding method for rating Authentic Rela-

tion Moments (ARM's) and is in the process of validating it on therapy sessions. In addition, Zilcha-Mano (2024) has discussed the impact of the balance between in-sync and out-of-sync interaction between a therapist and their patient. Trying to empirically evaluate the unique aspects of the mutative impact of such implicit interaction between patient and therapist is beyond the scope of this communication. The Referential Process group at the Pacella Research Center at NYPSI is attempting to develop measures which will aid in understanding the impact of the subsymbolic (non-verbal) between therapist and patient.

Memory, Emotions, & Schemas (Emotion Schemas)

Memory

There are various kinds of memories. Semantic memory refers to memories of information, while episodic memories refer to stories. These may be related to what one has experienced. They are narratives which incorporate 'what,' 'where,' and 'when' elements. Both semantic and episodic memories are manifestations of explicit, or declarative, memory systems. They are consciously accessible and depend on the median temporal lobe memory system. In addition, there is an implicit memory system which may become consciously accessible. These include associative conditioning, habits, skills, and priming (LeDoux, 2016, p. 190). LeDoux (2016) notes that,

> "just as episodic memory depends on semantic memory, semantic and episodic memory both depend on implicit memory. For example, each time we consciously recognize a stimulus, we are drawing upon implicit processes operating in the median temporal lobe memory system. Sensory cues…activate a memory via the medial temporal lobe system; then, through a process known as pattern completion, a memory is assembled in a way that can be retrieved into working memory, where it can be consciously experienced" (pp. 190–191).

Emotions

The intertwining of emotions and memory is a result of the intimate relationship between the limbic system, including the hippocampus and amygdala with the cerebral cortex, as well as with the basal ganglia and cerebellum. The episodic remembrance of one's own life experiences is filled with a pervasive affective consciousness associated with specific times, places, and events. It involves a detailed sensory affective-perceptual reexperiencing of events. The reliving of the subjective experiences is closely linked to an affective evaluation of the significance of these past experiences for oneself and with respect to one's previous and present position in the world.

Theories of psychoanalysis and psychotherapy need to incorporate the understanding of memory storage, whether memories are linked to pleasurable, unpleasurable, or neutral feelings, and what happens when they are retrieved, particularly in therapeutic sessions. Lane (2018), for example, notes that when they are recalled, memories can become labile or malleable and new elements can be incorporated into the original memory—memory reconsolidation. This modern concept is like Freud's, 1896 (1985) concept of retranscription,

> "Our psychic mechanism has come into being by a process of stratification: the material present in the form of memory traces being subjected from time to time to a *rearrangement* in accordance with fresh circumstances — to a *retranscription*. Thus, what is essentially new about my theory is the thesis that memory is present not once but several times over, that it is laid down in various kinds of indications" (p. 207).

Lane (2018) notes that emotional arousal is a potent way to update memories because synaptic plasticity is enhanced by way of neurotransmitters and hormones (norepinephrine, cortisol) (p. 509). In a therapeutic situation, there is a reactivation of old memories and their, usually painful, associated affect. New emotional experiences occur during treatment, which are incorporated into the reactivated memories, with a reconsolidation of the memory. Gradually, a new way of behaving reinforces the updated memory.

Mental Schema and Emotion Schemas: Emotions Connected to Language

Mental or memory schemas are organizations in the brain/mind which allow knowledge to be stored in an organized and systematic way (Tse et al., 2007; Gilboa & Marlatte, 2017). These knowledge structures consist of abstracted commonalities across multiple experiences and multiple sensory modalities. As a result, the schemas exert powerful influences over how events are perceived, interpreted, and remembered. In addition, schemas can be modified by new information, encoded, retained, and later retrieved as memories. Past and present experience dynamically interact with one another. The prefrontal cortex and the hippocampus are involved in the formation of schemas.

The presence of schemas leads a person to view reality in a particular way. On one hand, schemas can help address situations in a more adaptive manner. On the other hand, they may also bias decision-making (consciously or preconsciously). Emotion schemas are a subset of the general category of schemas. Izard (2007) defines emotion schema as an interaction between emotion and cognition. Bucci, Maskit, and Murphy (2016) describe the nature of emotion schemas from the perspective of the Referential Process. They note that emotion schemas are, "defined as clusters of representations of events incorporating similar bodily, sensory and motoric processes activated in relation to different people in different contexts" (page 359). They note that, "episodes with similar affective core components, activated in various contexts and with various people, will cluster to form an emotion schema" (page 365).

It is interesting to note that the term, "*emotion schema,"* is used much less frequently than the term "*mental representation"* both in the analytic literature as collated in PEP, as well as in the general scientific literature as illustrated by a search using Google Scholar. Unfortunately, too many analysts believe that the concept of mental representation refers to a static memory state devoid of affect and evolution throughout development. In my mind, the term "emotion schema" could very well be translated to mean "emotionally infused mental representation." The term "emotion schema" has the advantage in that it is a short hand for the term "mental representation," highlighting the inclusion of emotions. For example, Auerbach (2019) notes that Sidney Blatt, "in accordance with most psychoanalytic thinking, saw mental representations not as static structures or images, but as organizations of lived experiences that not only derived from emotionally significant relationships but also served

to structure and guide such relationships throughout life" (p. 295). Interestingly, Blatt et al. (1997) have used both terms. They state,

> "*Mental representation* is a central theoretical construct in cognitive science, in developmental and social psychology, and also in psychoanalytic theory and research… we consider *mental representation* from psychoanalytic and cognitive developmental perspectives and demonstrate the usefulness of this theoretical construct in understanding aspects of personality *development*, psychopathology, and the therapeutic process. Investigations in psychoanalysis and cognitive developmental psychology indicate that children, using early interactions with primary caregivers, construct cognitive-affective schemas of self and other and that these schemas regulate and direct a wide range of subsequent behavior, especially in interpersonal relationships" (p. 351).

What we can state definitively is that, regardless of the particular term that is used, the brain/mind is structured in such a way that memory storage occurs in some systematic manner, particularly memories involving interactions with emotionally important people in one's life, with emotions playing a central role in the organization of memory. In fact, Bucci et al. (2015) state that D. N. Stern's (1985) representations of interactions that have been generalized (RIGs) is most similar to the concept of emotion schema. Below, I illustrate that the centrality of interactions with emotionally important people, beginning in infancy, are also central to contemporary ego psychological models of unconscious fantasy. Unconscious fantasies are examples of mental representations (Erreich, 2015). In fact, Erreich (2024) notes that infants have an innate capacity for representing their subjective experience. She provides a great deal of developmental data supporting the idea that infants have this capacity for symbolic activity. She notes that infants have "highly accurate perceptual discrimination capacities and an innate ability to register and represent subjective experience in both procedural and declarative memory" (p. 9).

Psychoanalytic Theories of Unconscious Fantasies

From the very beginning of psychoanalysis, Freud's main thrust involved an attempt to develop treatments that would counteract the pessimism endemic to theories of degeneracy (Hoffman, 2010). A tension existed in the search for neurogenesis between: (1) the nature of the impact of the environment on a patient's development of psychologic symptoms in contrast to (2) the centrality to pathogenesis of the patient's inner experience or fantasy life. On the one hand, Freud (1896) considered the cardinal importance of memories of actual infantile sexual experiences to the development of psychopathology. Freud (1908) noted that neurogenesis occurs when conscious daydreams and fantasies become unconscious via repression. Hysterical symptoms are thus a disguised compromise between a hysterical wish and a repressive force. Freud (1908) notes that

> "Unconscious phantasies have either been unconscious all along and have been formed in the unconscious; or—as is more often the case—they were once conscious phantasies, day-dreams, and have since been purposely forgotten and have become unconscious through 'repression'" (page 161).

Boehler et al. (2015) provide an outline of a variety of analytic approaches to the concept of unconscious fantasy. The Kleinian orientation stresses the centrality of the inner world; self-psychology, the centrality of the environment; contemporary Freudian and modern American ego psychology consider the interaction among outer and inner determinants to the development of unconscious fantasies.

In the Kleinian view, the unconscious exists prior to the acquisition of verbal language. The non-verbalized unconscious fantasies are expressed primarily through feelings, sensations, corporeal states, and movements. Boehler notes that in Kleinian theory, projection precedes introjection. This conception of projection preceding introjection implies a preformed mentation in the child's mind. For example, Boehler writes that, according to Isaacs (1948), unconscious phantasies are not limited to the repressed phantasies, but are the mind's content underlying - and accompanying (at least) from birth onwards - the entire structure of mental functioning (p. 707), an idea similar to Bion's (2013, 1962) idea of "pre-conceptions" (p 708).

Bion (2013, 1962) classifies thinking in a developmental manner: pre-conceptions, conceptions or thoughts, and concepts. He hypothesizes that pre-conception is an inborn expectation which leads to a conception when brought together with a reality. For example, the infant has an "inborn expectation of a breast, the a priori knowledge of a breast…when the infant is brought in contact with the breast itself, mates with awareness of the realization and is synchronous with the development of a conception" (p. 301–302). Eliminating the notion of "a priori" knowledge of content, Bion's idea of pre-conception may be consistent with contemporary ideas related to the genesis and development of schemas, emotion schemas, mental representations, and unconscious fantasies, in which, to use the term from the referential process, subsymbolic processes initiate the development of symbolic representations (similar to Bion's idea of pre-conception and conception).

Field theory and relational theory stress that the concept of unconscious fantasy as an entity within a person's brain/mind is unhelpful in the treatment situation. Rather, one should consider that what emerges in a therapeutic situation is not an uncovering of the patient's unconscious fantasy, but rather, a co-created production by patient and therapist.

Field theory emerged out of Kleinian theory by M. and W. Baranger (M. Baranger, 2012). Civitarese and Ferro (2013) note that their basic idea was that patient and analyst generate unconscious field fantasies, or couple fantasies which cannot be reduced to the unconscious fantasies of either member of the dyad. M. Baranger (2012) states that the structure in a bipersonal field,

> "cannot in any way be considered to be determined by the patient's (or the analyst's) instinctual impulses, although the impulses of both are involved in its structuring. More importantly, neither can it be considered to be the *sum* of the two internal situations. It is something created *between* the two, within the unit that they form in the moment of the session, something radically different from what each of them is separately." (p. 806).

M. Baranger (2012) notes that there are many theorists whose approach is consistent with the notion of field theory. These include Jorge Canestri, Thomas Ogden, César and Sara Botella, Christopher Bollas, Michel de M'Uzan, and Bion, who describes the analytic cou-

ple as a small group that functions with mechanisms similar to those of larger groups (p. 133).

Bromberg (2008) and D. B. Stern (1994), two of the most central contemporary relational theorists believe that the classical idea of unconscious mentation is a static concept rather than one that is influenced by environmental events. They believe that a formulation of unconscious fantasy in an individual is an impediment to successful analytic or therapeutic work. They maintain that both therapist and patient have within their minds, unformulated/unmentalized experiences which are symbolized in a collaborative way (co-constructed) during the therapeutic process. As Bromberg maintains, a genuine analytic experience is co-created through the real, not "implied," interaction between the participants (In: Richards, 1997, page 1247). The analyst's ability to observe their contribution to enactments between patient and analyst is a critical element in enabling patients to see themselves through the analyst's eyes and make use of the therapist's interpretations. Stern (2024) maintains that his theory of "unformulated experience" derives from the actual clinical interaction, without taking the development of the human mind into consideration. He states, "this is a theory rooted in the clinical process, not in psychological development" (p. 64).

Self-psychology stresses that the environment (and not inner drives) shape unconscious fantasies. These fantasies are specific to the individual, based on their childhood experiences. If the environment is good enough, unconscious fantasies become the source of many of our passions and ambitions. If caretakers are unavailable, or humiliate and treat the child sadistically, unconscious fantasies may become foundations for symptomatic behavior and retaliative fantasies.

Within the contemporary Freudian perspective, represented by Sandler and Sandler (1994), there is a past unconscious which represents the first four or five years of life. These fantasies are only accessible by reconstructions based on the patient's material and the therapist's interpretations. In contrast, fantasies "in the present unconscious exist in the 'here-and-now', are accessible to analytic work, are more closely linked with representation of present-day persons, and are subject to a higher level of unconscious secondary-process functioning. Thus, unconscious transference phantasies exist in the present unconscious, not in the past unconscious (Boehleber, et a.l, 2015, p. 717).

From the perspective of modern American Ego Psychology, particularly Jacob Arlow and Sander Abend, unconscious fantasies are verbally conceptualized with an inner consistency and are highly organized. The unconscious fantasies are grouped around basic childhood wishes and there is an interaction between fantasy thinking and perceptions of reality. In contrast, the various interactional field theorists believe that "what is assumed as evidence of a buried unconscious is an illusion created by the interpersonal/relational nature of the analytic process during the ongoing symbolization of unprocessed affect" (Boehleber, et al., 2015, p. 716).

Jacob Arlow and Sander Abend

Arlow, 1969a, b; and Abend, (2006), 2008) have been most explicit in their discussion of unconscious fantasy from the perspective of Modern American ego psychology (or modern conflict theory). Early sensory-motor experiences are laid down as memory images. These images "coalesce" so that the child develops mental representations of the people in their life. These representations are an admixture of realistic features of the person, as

well as attributes added to the mental image of the person by the subject. These images are imbued with pleasurable and unpleasurable feelings. With development, including language development, a child has more interactions and, thus, mental representations of a variety of people. These images become organized as persistent unconscious fantasies. The importance of the role of feelings in the ongoing development and evolution of unconscious fantasies goes against the conviction of many, like Mitchell (1998), who maintained that, "traditional classical interpretations were regarded purely in semiotic terms, as a decoding, a translation of the manifest meanings of the patient's associations into latent unconscious meanings" (p. 839).

Litowitz (2007) notes that unconscious fantasies are a class of mental representations which are based on children's experiences with: significant persons in their lives, routine and critical events, or activities. The fantasies are based on their own feelings, desires, perceptions, and actions which may be based on actual or distorted perceptions. Language and cultural practices of the family influence the nature of the fantasies. What cannot be interconnected and given meaning may feel alien, potentially overwhelming and frightening. Various defenses are utilized to try to master negative emotions and with development and broader experience, there are ongoing revisions to the fantasies.

These unconscious fantasies affect the choice of relationships and patterns of loving (Andersen & Baum, 1994; Andersen & Przybylinski, 2012). Throughout life there is an ongoing interaction between sensory perceptions from the outside world stimuli (the real person) and the interpretations given by an individual based on their unconscious fantasies. When external percepts are ambiguous, the individual's experience will be dominated by their unconscious fantasies. In therapeutic situations when the life and character of the therapist or analyst is relatively opaque, and thus the equivalent of a relatively ambiguous stimulus, the patient's perception of the therapist will be dominated by the patient's unconscious fantasy. In such a situation, an exploration of the patient's transference reactions can help patient and analyst explore the patient's unconscious determinants to their present-day experiences with people in their lives, and understand how the past influences decisions in the present.

Emotion Schemas and Unconscious Fantasies

As noted above, Freud hypothesized how memories are revised with experience; Lane (2018) notes that from the perspective of neuroscience, in a therapeutic situation, there is a reactivation of old memories and their, usually painful, associated affect. New emotional experiences occur during treatment, which are incorporated into the reactivated memories. As explained above, Bucci et al. (2015) note that emotion schemas are organized from the affective core, are primarily relational, and that, "episodes with similar affective core components, activated in various contexts and with various people, will cluster to form an emotion schema." Arlow and Abend note that early sensory motor experiences are laid down as memory images. These images "coalesce" so that the child develops mental representations of the people in their life. These representations are an admixture of realistic features of the person, as well as attributes added to the mental image of the person by the subject. These images are imbued with pleasurable and unpleasurable feelings. With development, including language development, a child has more interactions and, thus, mental representations

of a variety of people. These images become organized as persistent unconscious fantasies. Furthermore, Litowitz (2007) notes that unconscious fantasies are a class of mental representations which are based on children's experiences with significant persons in their lives, as well as routine and critical events or activities.

From these notes, one can conclude that the constructs of emotion schema and unconscious fantasy are very analogous constructs, even though they have been developed within different basic principles. Both constructs describe clusters of representations of events in the brain/mind, which include bodily, sensory, and motoric processes, and are activated in relation to different people in different contexts. The components include neural processes, internal and external expressions, a feeling state, and cognition.

Priming

Erreich (2003, 2007, 2015, 2017, 2018) argues that one can consider unconscious fantasy to be a class of mental representations that develops from the earliest months of life (2015). These mental representations include an amalgamation of the infant's wishes, perception of reality, and naive conceptions of causality. These mental representations may be encoded as narrative memories (implicit or explicit, unconscious or conscious) or as procedural memories (implicit). Most notably, Erreich (2017) proposes that such unconscious fantasies, which develop starting early in life, can be sources of unconscious or nonconscious priming phenomena. In experiments demonstrating the process of priming, subjects are exposed to various subliminal stimuli. Exposure to one stimulus influences how one responds to subsequent related ones. For example, if one is subliminally exposed to a picture of a dog, there is a faster response if the next stimulus is a cat, and not a chair. Encoding of priming mechanisms occurs in declarative and procedural memory systems.

Erreich (2017), quite convincingly, shows that, "we are 'primed' to respond to some situations in predetermined ways; past experiences which have been mentally represented in or out of awareness prime us to respond to the present in often unique and personal ways" (p. 195).

Transference Phenomena as One Example of the Role of the Priming Influence of Unconscious Fantasy (Emotion Schema, Mental Representation)

Why do patients repeat behavioral interpersonal patterns with their therapists or analysts? How does this happen? This occurs because of the presence of "transference." In brief, transference is a universal psychological phenomenon in which a person's relation to another person has elements which are similar to and/or are based on his or her earlier attachments, especially to parents, siblings, and significant others. In other words, a patient's relationship to lovers and friends, as well as any other relationships, including analyst, includes elements from their earliest relationships. The ubiquity of transference has been demonstrated experimentally (Andersen & Chen, 2002).

As in any other relationship, the patient sees the analyst not only objectively, but also imputes qualities to the analyst which are based on qualities of other important figures in his or her earlier life. In addition, the patient may focus on attributes of the analyst or therapist which resemble attributes of important figures in the patient's life. Understanding the nature

of the patient's transferential meaning of the therapist can be an important tool utilized in the treatment of children, adolescents, and adults.

Susan Andersen's work from the perspective of social cognition (Andersen & Przybylinski, 2012) has developed a paradigm that is consistent with the clinical concept of transference (Gerber & Peterson, 2006). This work reveals that one's choice of a suitable partner in real life is unconsciously based on attributes similar to the attributes of one's early relationships. In short, unconscious memories or fantasies serve as primes for the selection of and focus on choices out of the myriads of stimuli in the external world.

Andersen and Przybylinski (2012) have demonstrated that transference occurs in everyday life, as well as in the therapeutic setting. For example, features of a new person may happen to resemble a significant person in one's past, even if minimally. The features of the new person may activate the mental representation of the important person from one's past, as well as the representation of oneself in relation to that important person. All of this stored knowledge is evoked and repeated in relatively predictable ways with the new person.

> "[In the therapeutic situation] transference is triggered—by cues in a new person that are similar to the significant other—suggests the importance of both context and cues (e.g., cues from a therapist) in evoking transference. Knowing what is cueing a problematic interpersonal pattern can be helpful both for clients and therapists (i.e., based on minimal resemblance or similarity to the significant other" (p. 378).

This idea is similar to Charles Brenner's (1992) exposition that transference is ubiquitous. In ordinary interactions, one person acts and the other reacts. In psychoanalysis, rather than automatically reacting, one tries to to understand the connection between transference ideas and feelings and their origin in the patient's life.

Erreich's (2017) stress on the importance of primes adds to the significance of Andersen's work and its applicability to the transference countertransference situation in psychotherapeutic sessions. When a therapist's verbal or non-verbal communication is related to a patient's "associated network" (interconnected with a memory of an early event, be it traumatic or otherwise), the early memory or unconscious/pre-conscious fantasy serves as a prime for the patient to respond in a particular manner to the analyst's intervention (p. 1082). This can lead to further elaboration, including greater conscious recollection of the early memory and eventual modification of the relationship between the early memory and current reality.

All psychodynamic treatments are two-person treatments where the two parties influence one another subsymbolically, or unconsciously, or implicitly. In moments where the interaction between the analyst and the patient is heightened (similar to a relational/interpersonal, or, metaphorically, two-person moments), the analyst may focus on the impact that both patient and analyst have on one another. In other words, each member of the therapeutic dyad serves as a prime for the other. For example, if one person's (e.g., the patient's) verbal and non-verbal communication touches on the associated network connected to the unconscious fantasy of the other (e.g., therapist's), a response may be triggered. The therapist's response may in turn trigger the patient's associated network related to their unconscious fantasy.

From this perspective, there may be alternating sequences between therapist and patient (each touching on a prime in the other). A gradual evolution occurs in the patient (and thera-

pist) during the treatment. In other words, an analyst's intervention (words or actions) can serve as an external stimulus leading to the recollection of memories that, until that moment, have been "unformulated" (un-verbalized, remaining unconscious or pre-conscious) in the patient. This can lead to a more integrated sense of self in the patient because the previously barely-recognized memories from the past are more fully appreciated.

In moments where the analyst steps back (takes a more classical, or, metaphorically speaking, a one-person treatment-moment), the alternating sequences between analyst and patient also occur. However, the analyst does not focus so much on the mutual influences on both members of the dyad. Instead, the analyst focuses mainly on the vicissitudes of the patient's responses to the external stimuli (the analyst's interventions), and not so much on the analyst's primes which are touched by the patient's communications.

Conclusion

Wilma Bucci and colleagues are correct in their notion that emotion schemas consististing of subsymbolic elements influence the development of symbolic thought. In other words, affective, visceral, and motoric bodily experiences are central to thinking. I provide evidence to illustrate the similarity between the construct of emotion schema with that of unconscious fantasy.

In the therapeutic dyad, emotion schema or unconscious fantasies based on their emotionally laden past experiences are operative in each member of the dyad. I conjecture that there are both "two-person" and "one-person" states in every treatment. When the patient's communication touches on the therapist's unconscious fantasy or emotion schema and its associated networks, the therapist may respond in a more-or-less "automatic" manner promoting a "real" interaction with the patient. The therapist's automatic response to the stimulation of their unconscious prime may be the source of mutual enactments.[1] On the other hand, the therapist may reflect on the significance of their potential response before responding (reflecting on the degree to which the patient consciously or unconsciously discovered a trigger point for the therapist). Or, the therapist may put to the side their own response and simply focus on the patient's responses. It is inconceivable that these variations in approaches do not happen in every treatment. One always learns about a patient when one listens to one's emotional responses to the patient (when one's unconscious fantasy was triggered). The clinical challenge occurs when one has to quickly decide how to respond: (1) automatically, (2) after reflection, or (3) not at all. And how do we understand how the patient responds to our response or non-response?

The construct of the Referential Process (RP) emerged out of the theoretical perspective of Multiple Code Theory. In a prior discussion (2019), I discussed the potentiality of utilizing the power of the RP to understand the analytic process in both relational and conflict theory. The RP allows for an empirical way to study the ongoing balance between the expression of emotionally rich narratives and the reflection on these narratives. The challenge for our field concerns the difficulty to empirically evaluate the non-verbal or subsymbolic interactions between patient and analyst.

[1] "Enactment is an intrapsychic phenomenon that is played out interpersonally" (Bromberg, 2008, p. 137).

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Data Availability Due to the sensitive nature of the data, full details are available from the corresponding author, Leon Hoffman, upon reasonable request.

Declarations

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References

Abend, S. M. (2006). Arlow on unconscious fantasy. *Psychoanalytic Quarterly*, *75*, 374–379.
Abend, S. M. (2008). Unconscious fantasy and modern conflict theory. *Psychoanalytic Inquiry*, *28*, 117–130.
Andersen, S. M., & Baum, A. (1994). Transference in interpersonal relations: Inferences and affect based on significant-other representations. *Journal of Personality*, *62*(4), 459–497.
Andersen, S. M., & Chen, S. (2002). The relational self: An interpersonal Social-Cognitive theory. *Psychological Review*, *109*(4), 619–645.
Andersen, S. M., & Przybylinski, E. (2012). Experiments on transference in interpersonal relations: Implications for treatment. *Psychotherapy*, *49*(3), 370–383.
Arlow, J. A. (1969a). Unconscious fantasy and disturbances of conscious experience. *Psychoanal Qn*, *38*, 1–27.
Arlow, J. A. (1969b). Fantasy, memory, and reality testing. *The Psychoanalytic Quarterly*, *38*, 28–51.
Békés, V., & Hoffman, L. (2020). The something more than working alliance: Authentic relational moments. *Journal of the American Psychoanalytic Association*, *68*(6), 1051–1064.
Bion, W. R. (2013). The psycho-analytic study of thinking. *The Psychoanalytic Quarterly*, *82*(2), 301–310, 1962.
Blatt, S. J., Auerbach, J. S., & Levy, K. N. (1997). Mental representations in personality development, psychopathology, and the therapeutic process. *Review of General Psychology*, *1*(4), 351–374.
Bohleber, W., Jiménez, J. P., Scarfone, D., Varvin, S., & Zysman, S. (2015). Unconscious phantasy and its conceptualizations: An attempt at conceptual integration. *The International Journal of Psychoanalysis*, *96*(3), 705–730.
Boston Change Process Study Group. (2005). The something more than interpretation revisited: Sloppiness and co-creativity in the psychoanalytic encounter. *Journal of the American Psychoanalytic Association*, *53*(3), 693–729.
Brenner, C. (1992). The structural theory and clinical practice. *Journal of Clinical Psychoanalysis*, *1*, 369–380.
Bromberg, P. M. (2008). Grown-up' words: An interpersonal/relational perspective on unconscious fantasy. *Psychoanal Inq*, *28*, 131–150.
Bucci, W. (1997). Patterns of discourse in good and troubled hours: A multiple code interpretation. *Journal of the American Psychoanalytic Association*, *45*(1), 155–187.
Bucci, W. (2021). Overview of the referential process: The operation of Language within and between people. *Journal of Psycholinguistic Research*, *50*(1), 3–15.
Bucci, W., & Maskit, B. (2006). A weighted dictionary for referential activity. In J. G. Shanahan, Y. Qu, & J. Wiebe (Eds.), *Computing attitude and affect in text* (pp. 49–60). Springer.
Bucci, W., & Maskit, B. (2007). Beneath the surface of the therapeutic interaction: The psychoanalytic method in modern dress. *Journal of the American Psychoanalytic Association*, *55*(4), 1355–1397. https://doi.org/10.1177/0003065107055004 12
Bucci, W., Maskit, B., & Murphy, S. (2015). Connecting emotions and words: The referential process. *Phenomenology and the Cognitive Sciences*, *15*, 359–383.
Civitarese, G., & Ferro, A. (2013). The meaning and use of metaphor in analytic field theory. *Psychoanalytic Inquiry*, *33*(3), 190–209.
Erreich, A. (2003). A modest proposal: (Re)defining unconscious fantasy. *Psychoanalytic Quarterly*, *72*(3), 541–574.
Erreich, A. (2007). The anatomy of a symptom: Concept development ansymptom formation in a four-year-old Boy. *Journal of the American Psychoanalytic Association*, *55*(3), 899–922. https://doi.org/10.1177/00030651070550030601

Erreich, A. (2015). Unconscious fantasy as a special class of mental representation: A contribution to a model of Mind. *Journal of the American Psychoanalytic Association*, *63*(2), 247–270. https://doi.org/10.1177/0003065115576999

Erreich, A. (2017). Unconscious fantasy and the priming phenomenon. *Journal of the American Psychoanalytic Association*, *65*(2), 195–219. https://doi.org/10.1177/0003065117702105

Erreich, A. (2018). Psychoanalysis and the academy: Working across boundaries with linguistics, cognitive/developmental psychology, and philosophy of Mind. *Journal of the American Psychoanalytic Association*, *66*(6), 1065–1088. https://doi.org/10.1177/0003065118819849

Erreich, A. (2024). The innate capacity for representing subjective experience: The infant's Mind is neither primitive nor prerepresentational. *Journal of the American Psychoanalytic Association*, *72*(1), 9–4900030651231223961.

Freud, S. (1896). Aetiology of hysteria. *SE*, *3*, 188–221.

Freud, S. (1908). Hysterical phantasies and their relationship to bisexuality. *SE*, *9*, 155–166.

Freud, S. (1985). Letter from Freud to Fliess, December 6, 1896. *The complete letters of Sigmund Freud to Wilhelm Fliess, 1887–1904* (pp. 207–214). Belknap Press of Harvard University.

Gerber, A. J., & Peterson, B. S. (2006). Measuring transference phenomena with fMRI. *Journal of the American Psychoanalytic Association*, *54*(4), 1319–1325. https://doi.org/10.1177/00030651060540040105

Gilboa, A., & Marlatte, H. (2017). Neurobiology of schemas and schema-mediated memory. *Trends in Cognitive Sciences*, *21*(8), 618–631.

Hoffman, L. (2010). One hundred years after Sigmund Freud's lectures in America: Towards an integration of psychoanalytic theories and techniques within psychiatry. *History of Psychiatry*, *21*(4), 455–470.

Hoffman (2019). Analytic process from the perspective of conflict and interpersonal/relational theory: A potential linguistic Indicator. *Contemporary Psychoanalysis*, *55*(4), 349–372. https://doi.org/10.1080/00107530.2019.1669407

Hoffman, L. (2024). What to say, when to say it, how to say it: Helping patients deal with painful emotions. *Clinical Psychology: Science and Practice*, *31*(1), 14–16. https://doi.org/10.1037/cps0000183

Isaacs, S. (1948). The nature and function of phantasy. *International Journal of Psychoanalysis*, *29*, 73–97.

Izard, C. E. (2007). Basic emotions, natural kinds, emotion schemas, and a new paradigm. *Perspectives on Psychological Science*, *2*(3), 260–280.

Kris, E. (1956). On some vicissitudes of insight in psycho-analysis. *The International Journal of psychoanalysis*, *37*, 445–456.

Lane, R. D. (2018). From reconstruction to construction: The power of corrective emotional experiences in memory reconsolidation and enduring change. *Journal of the American Psychoanalytic Association*, *66*(3), 507–516.

LeDoux, J. (2016). *Anxious: Using the brain to understand and treat fear and anxiety*. Penguin.

Litowitz, B. E. (2007). Unconscious fantasy: A once and future concept. *Journal of the American Psychoanalytic Association*, *55*(1), 199–228.

Mitchell, S. A. (1998). From ghosts to ancestors: The psychoanalytic vision of Hans Loewald. *Psychoanalytic Dialogues*, *8*, 825–855.

Process of Change Study Group, Stern, D., Nahum, L. S. J., & Harrison, A., Karlen Lyons-Ruth, Alec Morgan, Nadia Bruschweiler-Stern and Edward Tronick (1998). Non-Interpretive mechanisms in psychoanalytic therapy: The 'something more' than interpretation. *International Journal of Psycho-Analysis*, (79), 903–921.

Richards, A. K. (1997). The relevance of frequency of sessions to the creation of an analytic experience. *Journal of the American Psychoanalytic Association*, *45*, 1241–1251.

Sandler, J., & Sandler, A-M. (1994). Phantasy and its transfomations. *International Journal of Psychoanalysis*, *75*, 387–394.

Stern, D. N. (1985). *The interpersonal world of the infant*. Basic Books, Inc.

Stern, D. B. (2008). One never knows, do one? Commentary on paper by the Boston change process study group. *Psychoanalytic Dialogues*, *18*(2), 168–196.

Stern, D. B. (2018). How does history become accessible? Reconstruction as an emergent product of the interpersonal field. *Journal of the American Psychoanalytic Association*, *66*(3), 493–506.

Stern, D. B. (2024). Commentary: the role of the theory of unformulated experience in Anne Erreich's the innate capacity for the representation of subjective experience: the infant's Mind is neither primitive nor prerepresentational. *Journal of the American Psychoanalytic Association*, *72*(1), 61–70. 00030651241231222.

Tocatly, K. (2023). Interventions that move: Characterizing the language of therapist responses to high patient arousal [Doctoral dissertation, The City College of New York].

Tse, D., Langston, R. F., Kakeyama, M., Bethus, I., Spooner, P. A., Wood, E. R., & Morris, R. G. (2007). Schemas and memory consolidation. *Science*, *316*(5821), 76–82.

Winnicott, D. W. (1963). The development of the capacity for concern. In *The Maturational Processes and the Facilitating Environment: Studies in the Theory of Emotional Development*. London: Hogarth Press, 1965, pp. *73–82*.

Zilcha-Mano, S. (2024, February 15). How Getting in Sync Is Curative: Insights Gained From Research in Psychotherapy. *Psychological Review*. Advance online publication. https://doi.org/10.1037/rev0000471

Zilcha-Mano, S., Keefe, J. R., Fisher, H., Dolev-Amit, T., Veler-Poleg, N., & Barber, J. P. (2024). Is the use of interpretations associated with treatment outcome? A systematic review and meta-analytic answer. *Clinical Psychology: Science and Practice*, *31*(1), 1–13. https://doi.org/10.1037/cps0000158

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