

**A New Look at Unconscious Processes:  
Conceptual Analysis, Empirical Findings, and Clinical Formulations**

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*[This is a longer version of the paper, for pre-circulation only; a shorter version will be read at the meeting]*

I have been working on a book on the future of psychoanalysis in which I mainly address one large question: of the core concepts and formulations of psychoanalytic theory, which ones should be relinquished, which ones need to be modified and if so, in what ways, and which ones should be preserved, all in the light of conceptual analysis, theoretical developments, and empirical evidence, including both research and clinical evidence? In addition to my own selection, I asked a group of about 15 to 20 psychoanalysts to indicate what they believed to be core psychoanalytic concepts and formulations. There was a range of nominees, but, as you might expect, the most frequently proposed one was the central role of unconscious processes in mental life. You might be interested in some of the runner-ups, which were: the concept of defense, transference, and countertransference.

As a sign of how much times have changed, the Oedipus complex was not mentioned with great frequency – although I include a chapter on it because of its centrality in classical theory. The book devotes a chapter to most of the frequently cited choices, but also includes chapters on concepts and formulations that have played a special and central role in the development of psychoanalytic theory and that have generated research findings both within psychoanalysis and in other disciplines. Thus, despite the low frequency with which it was cited, I have a chapter on the Oedipus Complex. In addition to its central place in classical theory, there is a huge body of research on that topic (much of it from outside psychoanalysis), which allows one to make a useful, disciplined, and informed judgment regarding its merited fate. There is a vast anthropological, sociological, and animal research literature which raises serious questions regarding the viability of the concept which tends to be ignored in the psychoanalytic literature and has had little systematic impact on reformulating the concept. Instead, changes in the meaning of the concept occur mainly as a function of different ‘schools’ and theoretical perspectives.

As we will see, this is also true in the case of unconscious mental processes. Of all the chapters I have worked on, the chapter on unconscious mental processes has been by far the most difficult and demanding one. Not only is there an overwhelmingly large research literature on that topic, but the conceptual, philosophical, and theoretical problems and challenges inherent in the concept of unconscious mental processes are complex and demanding. One challenge for this paper is how to condense all this material into a 50-55 minute presentation. I have tried to deal with this challenge partly by posting a longer version of the paper. In any case, I present my paper today as a work in progress. A historical note: The *Rapaport-Klein Study Group* began as a forum for the informal discussion of unfinished works in progress among a relatively small group. Then we became successful and grew large and more polished and more completed papers rather than works in process became the rule. So in today’s presentation, I revert back to tradition – which also has the advantage that if you find a great deal wrong with this paper, I can always say: “What do you expect? It’s only a work in progress”.

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The paper comprises four sections and is organized as follows: Section 1 focuses on selective conceptual issues surrounding the concept of unconscious mental processes and states. Section 2 deals with how different psychoanalytic ‘schools’ conceptualize unconscious mental processes. Section 3 selectively covers empirical research studies on unconscious processes. And section 4 considers the implications of research findings on unconscious processes for psychoanalytic theory.

### **Some conceptual issues**

Although there is not sufficient time to discuss all of them, let me begin by identifying some conceptual issues inherent in the concept of unconscious *mental* processes, states, and contents:

Is the concept of unconscious mental processes a viable and coherent one? Although the idea of unconscious mental processes has long been accepted (See Whyte, 1960; Rand, 2004), since at least Descartes, the primary criterion for something being mental was conscious experience. On this view, to speak about unconscious mental processes is a oxymoron, a contradiction in terms. And indeed, that was not an uncommon philosophical reaction to Freud’s formulation of the concept of unconscious mental processes. Freud did not simply allow the possibility of unconscious mental processes. He went much further in arguing that the major part of mental life goes on outside conscious awareness and most radically, that “the unconscious is the true psychical reality” (Freud, 1900, p. 613).

Although he never mentions Freud, William James (1890) presents ten arguments against admitting the concept of unconscious mental processes into psychology. He expresses the fear that such an admission would open the floodgates to arbitrariness of explanation and attributions. He writes that the positing of unconscious mental states “is the sovereign means for believing what one likes in psychology, and of turning what might become a science into a tumbling-ground for whimsies” (p. 163). James’ alternatives to unconscious mental states are either momentary, fleeting, and forgotten conscious states or simply brain processes that should not be assigned the property mental.

The debate between the Freudian and the Jamesian unconscious needs to be understood in the context of the history of psychology. A dominant point of view around the time that James (1890) wrote his *Principles of Psychology* was that the subject matter of psychology is conscious experience and the main task of psychology is an analysis of the structure of conscious experience. Contrastingly, Freud’s vision of psychology was one in which conscious experience is radically de-emphasized. Indeed, he argued that only through such a radical de-emphasis of conscious experience could psychology become a scientific discipline. It was this de-emphasis as well as an emphasis on the role of biological drives that led to the seemingly odd bedfellowship of behaviorism and Freudian psychology in the 1940s and 1950s, one expression of which was the neo-Hullian translation of Freudian formulations into behaviorist terms and principles, which culminated in Dollard & Miller’s (1950) *Personality and Psychotherapy*.

In some form, the Freud-James dispute continues to the present day, both in terms of conceptual, theoretical, and clinical debates and, as we shall see, in terms of differing interpretations of the empirical research data. With regard to the former, the distinguished philosopher John Searle (1992) asks: “How could we subtract consciousness from a mental state and still have the mental state left over?” (p. 52). According to Searle (1992), there are only conscious mental states and neurophysiological brain states with a capacity to cause conscious mental states; there is no ontological realm between the two. It should be noted that Searle’s critique is also directed to the positing of unconscious mental processes in cognitive psychology. Surprisingly, in some important respects, Searle’s position is not especially different from Freud’s. As late as 1940, Freud writes: “it...seems natural to lay stress in psychology upon these somatic processes, to see in them the true essence of what is mental...” (p. 34).

It is Benjamin Rubinstein who develops this perspective, when he writes that “unconscious mental events are neurophysiological events that are classified as mental” (p. 52). In a sustained and brilliant exposition that is congruent with and further develops Rubinstein’s and Freud’s position, Wakefield (1992) essentially argues that implicit in Freud’s conception of unconscious mental processes are the arguments (1) that representationality and intentionality in the Brentano sense rather than consciousness are the essence of the mental; (2) that brain states possess the property of representationality; and (3) that therefore non-conscious brain states can be mental. By this account, “consciousness is a contingent and inessential property of the mental” (p. 51), a startling conclusion also arrived at by Freud. He writes that “the psychical is unconscious in itself” (Freud, 1940, p. 158).

However jarring this conclusion may be, ultimately, we will likely have little difficulty with the idea that at a particular level of organization, unconscious mental processes are essentially neurophysiological processes. As Chomsky (1965) writes in a different but relevant context, “the very concept of ‘physical explanation’ will no doubt be extended to incorporate whatever is discovered in this [mental] domain, exactly as it was extended to accommodate gravitational and electromagnetic force, massless particles and numerous other entities and processes that would have offended the common sense of earlier generations” (pp. 83-84).

Once one accepts the tenability of unconscious mental states, one of the epistemological questions that arises is how one determines the validity or accuracy of attributions of unconscious mental states. Freud’s (1917) response to this question was that such attributions must “tally with what is real in the patient,” which, of course, raises the question of how that is determined. Note that the question is conveniently bypassed when one sets as the primary, even exclusive, aims of one’s attributions that they are persuasive – Spence’s (1982) “narrative truth” –; internally coherent; or aesthetic. But, outside the therapeutic context – and even in that context – this direction is problematic. It does not serve psychoanalysis very well.

In the psychoanalytic context, the attribution of unconscious mental states usually takes the form of attributing unconscious motives. Indeed, the principle of psychic determinism is really a principle of motivational determinism (Eagle, 1980). This raises the question of the explanatory status of motivational accounts, whether one refers to as conscious or unconscious motives. Identifying the reasons and motives for an action suffices as an explanation in the context of ordinary social interaction. Although including unconscious motives makes an account more comprehensive, it remains in the ordinary explanatory mode of accounting for behavior in terms of the individual’s aims and motives. However, as the philosopher Max Black (1967) has observed, “As soon as reasons for action have been provided, an inquiring mind will want to press on to questions about the provenance and etiology of such reasons” (p. 656). Implicit in Black’s comment is the idea that although explanation in terms of reasons and motives may suffice for ordinary social purposes, and, I would add, for therapeutic purposes, it does not suffice for a more complete scientific account of human nature and human behavior.

Much skepticism has been expressed, including by Freud, of the sufficiency of motivational explanation of any kind. Some philosophers influenced by Wittgenstein have argued that the reasons given for action are largely justifications for the actions after it has taken place. This form of skepticism is also expressed by Nietzsche who writes: «Is the goal, the purpose not often enough a beautifying pretext, a self-deception of vanity after the event that does not want to acknowledge that the ship is following the current into which it has entered accidentally? That it “wills” to go that way because it must? That is, has a direction, to be sure, but – no helmsman at all?» (p. &&).

A similar sentiment is expressed by Freud (1923) in his horse and rider metaphor representing the relationship between id and the ego. “Often a rider, if he is not to be parted from his horse, is obliged to guide it where it wants to go; so in the same way the ego is in the habit of transforming the id’s will into action as if it were its own.” (p. 25).

On this metaphor, one is, in Groddeck's (1923) words, "lived by one's id." According to this perspective, which is implicit in Freud's metapsychology, underlying what we normally think of as our reasons and motives are essentially unconscious impersonal propelling forces pressing for discharge. Further, unlike the way we think of ordinary motives and wishes, we cannot have conscious access to these propelling forces. Pushed to its logical conclusion, this view implies that any account in terms of reasons and motives, conscious or unconscious, is at best, incomplete and at worst, illusory. As we will see, the emphasis on unconscious *internal* propelling forces of Freudian metapsychology is paralleled by an equal emphasis on the *external* influences emphasized by researchers on unconscious processes. In both cases, the image that emerges is of the individual buffeted about by influences of which he is unaware, inner forces in the psychoanalytic context and external stimuli in the context of research on unconscious processes.

According to the former perspective, what Ricoeur (1965) refers to as the dissimilating nature of consciousness, consists not only in our not knowing the motives and reasons for our behavior, but in the more radical idea that underlying what we think of as our reasons and motives are impersonal blind forces. Each theoretical perspective nominates its candidates for the nature of these impersonal forces. In Freudian metapsychology, it is instinctual energies pressing for discharge. In Marxist theory, it is economic forces. In evolutionary psychology, it is selected for adaptations. In contemporary neuroscience, it is brains rather than persons doing things. And, as we will see, in contemporary social psychology, it is external stimuli that influence our behavior in ways of which we are unaware. All these perspectives converge on the commonly shared idea that our belief that we act on the basis of reasons and motives, conscious or unconscious, is illusory.

### **Psychoanalytic conceptions of unconscious processes and states**

Freud's (1933) repressed unconscious as a "cauldron, full of seething excitations" (p. 73) has essentially disappeared from contemporary psychoanalytic theories. It has been replaced by either few references to any unconscious processes – for example, the few references one finds in the index of Kohut's (1984) book are comments on Freudian theory – or a very different conception of the unconscious consisting of cognitive-affective representations such as "relational configurations" (Mitchell, 1988), "interactional structures" (Beebe & Lachmann, 1994), "Representations of Interactions Generalized" or "RIG's" (Daniel N. Stern, 1985), "Internal Working Models" (Bowlby, 1973), "unconscious pathogenic beliefs" (Weiss & Sampson, 1986; Weiss, 1993), "implicit relational knowing" (Lyons-Ruth *et al.*, 1998; Lyons-Ruth, 1999), and "habitual relationship patterns" (Schachter, 2002). However much they may differ in other ways, these concepts have the following elements in common: (1) Representations of self, other, and prototypic interactions between self and other are assumed to have been acquired early in life in the course of repeated interactions with parental figures; (2) for the most part, their unconscious status is not due to repression, but to other factors, such as implicit and non-verbal learning; and (3) these early representations strongly influence one's later relationships with other significant figures, including, in the therapeutic context, one's transference patterns.

According to this perspective, psychopathology is rooted in representations that may have constituted an adaptive response to early circumstances, but have become maladaptive. In effect, this formulation attributes psychopathology to one form or another of environmental failure; for example, lack of maternal sensitivity, lack of empathic mirroring, trauma, and so on. Although, as noted, these representations are assumed to be unconscious – or perhaps more accurately, implicit – they are not repressed. In that regard, the link between psychopathology and repression – a central assumption of classical theory – is considerably attenuated. The main process task of treatment is no longer lifting repression of prohibited impulses and wishes, but the modification of early representational patterns. Furthermore, according to some contemporary views, such modification is as likely to come about

through implicit relational interactions leading to “implicit relational knowing” as through making the unconscious conscious or the achievement of insight and explicit understanding.

### **Finagarette & Sartre**

An interesting reconceptualization of unconscious mental contents as the unarticulated and not spelled out was presented many years ago by the philosopher Herbert Finagarette (1963, 1969) who builds on Sartre’s cogent critique of the Freudian unconscious. One of Sartre’s main criticisms of the Freudian unconscious is that it replaces a conception of an agent making choices and decisions with subpersonal “non-choicelike states of the unconscious” (Olafson, , p. 292), with the result that human actions of “bad faith” are transformed into subpersonal non-agentic mechanisms. By the way, a similar concern is a red thread that runs through Schafer’s (1976) *A new language for psychoanalysis*.

Let me provide a hypothetical example used by Sartre and cited by Finagarette to illustrate their thinking. A married woman allows her hand to remain in the hands of a man who is clearly bent on seduction. When his intention becomes more evident, the woman is shocked. According to Finagarette, the woman is complicit in an ongoing seduction, - without spelling out both the project in which she is engaged as well as her ‘policy’ to fail to spell it out. In more ordinary discourse, one can say that the woman does not spell out both the motives for her behavior, as well as her inclination – in Sartre’s language, her ‘choice’ and in Finagarette’s language, her ‘policy’ – to either not articulate her motives or to find motives which she finds comfortable and which allow her to continue in her behaviors, that is, to cooperate in the seduction.

The question that Finagarette and Sartre raise is whether this situation is best accounted for in terms of deeply repressed id impulses pressing for discharge and kept from consciousness by ego defenses or in terms of an agent doing things in a particular way. When Freud describes clinical cases, his description is not that different from Finagarette’s. Consider the following passage from Freud’s discussion of Lucy R., which is supposedly an early example of repression: After Freud tells her “I believe that really you are in love with your employer, the Director, though perhaps without being aware of it yourself...” Lucy R. responds, “Yes, I think that’s true.’ – ‘But if you knew you loved your employer why didn’t you tell me?”, Freud asks. Lucy R. responds: ‘I didn’t know – or rather I didn’t want to know. I wanted to drive it out of my head and not think of it again; and I believe latterly I have succeeded” (Breuer & Freud, 1893-95, pp. 117).

This is clearly not an instance of deeply buried mental contents inaccessible to conscious awareness, but rather of consciously experienced, even if fleetingly, thoughts and feelings that are then pushed out of awareness or in Finagarette’s words, not fully spelled out. Consider also the following exchange between Anna Freud and Joseph Sandler (1985) with regard to the nature of defense:

“Anna Freud: Heinz Hartmann would say that it can become automatic.

Joseph Sandler: ...I still think that there must be an awareness of the impulse to evoke a the response.

Anna Freud: Hartmann and I discussed it at the time, in 1936 and 1937. There must be a momentary awareness/

Joseph Sandler: An unconscious awareness?

Anna Freud: It could even be a conscious momentary awareness.” (Cited in Erdelyi, 1990, p. xx).

Apparently, James’ hypothesis of fleeting and momentary conscious awareness is alive and well. As we will see, it also reappears in the context of accounting for empirical research findings.

### **The unconscious as unformulated**

Before turning to empirical research, I want to briefly discuss two other conceptualizations of unconscious processes that bear a family resemblance to Finagarette’s formulation and what I refer

to as the interpersonalizing of the unconscious. One, proposed by Donnell B. Stern (1989, 1997), is that defended against unconscious mental contents remain unformulated and can be formulated in a variety of different ways as a function of social interactional context. It should be clear that Donnell Stern is not saying that unconscious (i.e., unformulated) mental states have a determinate content that may be difficult to identify – that would be an epistemological observation. Rather, he is saying that unconscious mental contents have no determinate meaning and are given determinate meaning via social interaction – that is an ontological proposition.

My colleagues and I have argued against Donnell Stern's position (Eagle, 2003; Eagle, Wolitzky, & Wakefield, 2001) and I do not want to repeat the full argument here. However, a central element in our argument is perhaps worth repeating. According to Donnell Stern (1997), "lack of formulation as defense means never allowing ourselves to interpret our experience in the first place. The refusal to formulate is quite simple; one just restricts one's freedom of thought and the "offending" experience is never created" (p. 63). The gist of our argument was that however vague and fleeting it may be, there must be some "offending" determinate content that triggers the defensive step of not formulating any further. However, it is conceptualized otherwise, if there is no determinate unconscious mental contents, why is defense against such contents even necessary? To do away with the idea of some determinate meaning for unconscious mental contents is to do away with the concept altogether. Indeed, it is difficult to understand what could possibly be meant by unconscious mental contents that have no determinate meaning. It seems to me an incoherent conceptualization.

Finally, some theorists, Lyons-Ruth (1999) most prominently, have essentially equated unconscious processes with "implicit procedural" knowledge that "does not require reflective thought or verbalization to be, in some sense, known" (p. 578). Although out of awareness, such knowledge is implicit rather than repressed. Lyons-Ruth employs the term "implicit procedural unconscious" (p. 586). It will be noted that the representations discussed earlier can be thought of as examples of the "implicit procedural unconscious." There is much to be said about all this, but not time to say it.

### **The interpersonalizing of the unconscious**

Both Freudian and post-Freudian theories share the assumption that what is rendered unconscious and what is permitted to reach consciousness is, to an important extent, a function of parental responses to the child's experiences and behavior. Because they are associated with dangers of loss of the object, loss of the object's love, and castration, certain mental contents are banished from consciousness. This formulation is entirely compatible with contemporary ones that emphasize the role of parental validation or invalidation, approval or disapproval, in determining what Stolorow et al. (2002) refer to as the individual's "horizons of awareness" or "regions of experience." As they put it, "regions of experience are sacrificed to safeguard the needed tie" (p. 47). However, beyond this point, their paths diverge in a number of ways. For one thing in contrast to Freudian theory, in post-Freudian formulations, it is not necessarily sexual and aggressive contents that are kept from consciousness, but any mental contents that evoke parental disapproval and therefore, thereafter vitally needed ties.

Another point of divergence between Freudian and post-Freudian formulations has to do with Freud's metapsychological conceptualization of the role of drive and the constancy principle in determining whether mental contents are repressed or given access to consciousness. In effect, Freud has two theories of why certain mental contents need to be barred from consciousness, a more experience near one having to do with parental prohibitions and the second a metapsychological one having to do with the inherent threat to the ego represented by id impulses, a threat that is relatively independent of parental response. According to this second view, because drive impulses represent the inherent danger of overwhelming the ego with excessive excitation, they need to be defended

against. This is the case *quite independently of parental approval or disapproval*. As Anna Freud (1936) puts it, there is a “primary antagonism” (p. 157) between the id and the ego.

The primacy of the metapsychological account is seen in Freud’s (1923) statements to the extent that the main reason that loss of the object, loss of the object’s love, and castration are so dangerous and devastating to the infant and child is that these events leave the infant at the mercy of excessive excitation. Further, that this metapsychological formulation was taken quite seriously by Freudian theorists in accounting for clinical phenomena is seen, for example, in Spitz’s (1960) explanation of infant marasmus as attributable to the fact that the infants has no object on which to discharge sexual and aggressive impulses.

Another divergence between Freudian and post-Freudian thinking lies in how each understands the role of the other in influencing what is permitted to reach consciousness. As we have seen, there is agreement, at least in regard to Freud’s non-metapsychological account, that parental responses play an important role in determining which mental contents will gain access to consciousness. However, according to Freud, parental prohibitions become *internalized* and structuralized early in life in the form of the superego, with the result that it is now one’s own reactions (e.g., of guilt) that instigate the barring of certain mental contents from consciousness. In short, in the course of development, defense becomes essentially an *intrapsychic* mechanism relatively independently of the other’s response. Little attention is given to the role of the contemporary other in determining the contents of consciousness. The danger is now from within in the form of self-punishment rather than, or at least in addition to, punishment from the other. This is clearly seen in the inclusion in the “danger situations” not only loss of the object, loss of the objects love, castration threats – all of which are *external* dangers – but also superego condemnation, which is an *internal* danger.<sup>1</sup> The point here is that in Freud’s understanding, despite its origin in early interpersonal interactions, once developed defense is essentially an intrapsychic mechanism concerned with inner conflict and not especially responsive to the behavior of contemporary others.<sup>2</sup>

In contrast to this view, in some contemporary psychoanalytic theories, what is permitted to reach consciousness and what is barred from consciousness is not simply a function of defense acquired early in life in the course of interactions with parental figures, but continues into adult functioning and is dynamically influenced by interactions with contemporary significant figures. Thus, according to the latter view, one’s “horizons of awareness” and “regions of experience” are shaped not only by early parental invalidation and validation, but also by current interactions of validation and invalidation. Thus, it is not only the child, but also the adult who sacrifices areas of conscious experience in order to safeguard vitally needed ties.

An implication here is that what is kept from consciousness is not simply a function of inner conflict (i.e., one’s self-condemnation of one’s mental contents), but also of one’s experiences and construals of cues emitted by the other. Nowhere is this more evident than in Weiss and Sampson’s proposal that is reflected in a number of Weiss & Sampson’s (1986) proposal – for which they present supportive evidence – that the patient’s judgment as to whether condition of safety obtain,

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<sup>1</sup> Freud is not being consistent here. Whereas loss of the object and loss of the object’s love are dangers that can be experienced at the earliest periods of the child’s development, this is not the case for castration threats, which is a danger presumably associated with the Oedipal stage, and certainly not the case for superego condemnation, which implies the existence of the internalized structure of the superego.

<sup>2</sup> Despite many other differences, this same perspective is seen in Fairbairn’s (1952) formulations. According to Fairbairn, although early parental deprivation and frustration is the basis for the infant’s internalization of the bad object, once internalization occurs and becomes a stable structure of the personality, its influence operates relatively independently of the external other’s actual responses. Indeed, particularly in psychopathology, the individual responds to the other mainly as a stand-in for an internalized object. In short, according to the logic of Fairbairn’s (1952) theory of personality structure, is the internalized rejecting object (and its associated ego structure, namely, the anti libidinal ego) that exert the main influence on the individual’s feelings and thoughts.

defined by the other's passing of tests, strongly influence whether or not warded-off contents will emerge into conscious awareness.

What is implied is that what is barred from consciousness and what is 'permitted' to reach consciousness is strongly influenced by one's judgments and expectations, both conscious and unconscious, regarding the other's likely response to one's expression and communication of certain mental contents. There are similar implications inherent in other psychoanalytic and non-psychoanalytic formulations, including Winnicott's (1960) distinction between "true self" and "false self" (i.e., a self of social compliance), Donnell Stern's (1997) suggestion that the relational field "structures the possibility of knowing – the potential for what we can say and think and what we cannot" (p. 31); and finally, Rogers' (1961) idea that "conditions of worth" will determine whether or not fleeting gut feelings will be attended to and brought to consciousness or permitted to fade away. Thus, from this perspective, defense operates not only in regard to what one will tell oneself, but also in regard to what one will tell others. It is in this important sense that one can say that in some contemporary formulations, the interrelated concepts of defense and unconscious have been increasingly understood, not simply as intrapsychic, but also interpersonal concepts.

This theoretical trend is apparent in a number of other ways. The reconceptualization of transference, from projections on to a blank screen to construals of and responses to cues emitted by the analyst (Gill, 1982) is one expression of this trend. A clear and specific expression of this trend is seen in Weiss & Sampson's (1986) earlier noted proposal that whether or not warded off (i.e. unconscious) contents emerge into conscious awareness is strongly influenced by the patient's judgment of how expression of these contents will be received by the analyst. They further propose – that patients present tests to their therapist to determine the degree to which *conditions of safety* obtain. They have presented impressive evidence that independent clinical judgments of the therapist's test-passing versus test failing is predictive of, among other things, the emergence of warded off material. Thus, and this is a critical point that emerges from their findings is that the what remains unconscious and what reaches consciousness are strongly influenced by the expected response of the other. This entails a striking extension of the concept of defense. That is, defenses operate not only to keep oneself unaware of certain mental contents, but also to keep others from becoming aware of them.

In accord with traditional theory, Weiss and Sampson assume that prior to test-passing and subsequent lifting of defense, warded off contents are repressed and unconscious, that is not available to conscious awareness. However, it is likely that at least some of the time, the issue is *reluctance to communicate* certain mental contents to the other, even if they are fleetingly available to oneself. I think this 'interpersonalizing' trend is also implicit in the "close process monitoring" approach of Gray (1994) and his followers (e.g., Busch, 2001). Their focus on material just below the surface and their description of how "close process monitoring" works suggest that the patient is at least fleetingly aware (and, at times, more fully aware) of certain conflictual mental contents, but in expectation of a negative reaction from the analyst, is reluctant to *communicate* them to the analyst. Neither Weiss and Sampson nor Gray distinguish between, on the one hand, keeping certain mental contents from one's own conscious awareness – an entirely intrapsychic phenomena, - and on the other hand, being aware, perhaps fleetingly, of certain mental contents, but being very reluctant to communicate them for fear of the other's response – an interpersonal phenomenon.

Before turning to empirical research, I simply want to note that there are a number of psychoanalytic formulations of unconscious processes that I have not covered. I want to at least mention Sandler and Sandler's (1984) distinction between the past and present unconscious and Stolorow, Atwood & Orange's (2002) three interrelated forms of unconsciousness: (1) the prereflective unconscious; (2) the dynamic unconscious; and (3) the unvalidated unconscious. I have also not discussed the important concept of dissociation, which I take up in my chapter.



## **Empirical research on unconscious processes**

Now, let me move on to a discussion of empirical research on unconscious processes. As we have seen and will see from this year's presentations, such research falls into a number of different categories:

- (1) Subliminal studies and, as a subcategory, neural correlates of subliminal stimuli. What is especially noteworthy about the subliminal studies is the finding indicating that subliminal stimuli can be encoded at the semantic level. This is quite a remarkable finding and, I must confess, always evokes my skepticism. However, there have been many replications of this finding over the years. And more recently, the evidence for semantic encoding has been buttressed by identification of neural correlates of subliminal stimuli. To take a simple example, compared to neutral or happy faces, fearful faces activate an amygdala response.
- (2) Studies demonstrating the effects of supraliminal stimuli on our behavior without our awareness of their influence. Here what is purportedly out of awareness is not the stimuli themselves, but their effects on our behavior. The work of Bargh and his colleagues is illustrative of this research.
- (3) Studies demonstrating learning without our awareness, including the unconscious acquisition of 'rules' and algorithms. The research of Lewicki and his colleagues is illustrative of this approach.
- (4) Studies on the effects of presumed unconscious thought on various behaviors, largely associated with the research of Dijksterhuis and his colleagues.
- (5) Studies on the relationship between stimulus organization and degree of awareness and attention.
- (6) Research on the Implicit Association Test (IAT), associated with Greenwald and his colleagues which purports to show discrepancies, for example, between verbal report of racial bias and so-called "implicit prejudice," as inferred from reaction times indicating associative strength between categories.
- (7) Studies in which the reasons given for one's behavior can be shown not to be the actual reasons. The seminal work of Nisbett and Wilson (1977) illustrates this work.
- (8) Studies focusing on the dissociation between verbal report of affect, particularly anxiety, and physiological responses. The research on "repressive style" as well as an interesting study on homophobia illustrate work in this area (see Eagle, 2000).

There is obviously not enough time to discuss the research in any of these categories in any detail. And the other presenters will indeed cover much of this research. So, let me limit my discussion to some general comments and to a few studies that I believe are especially relevant to psychoanalysis.

There have been a number of critiques of the studies in most of the above categories.

Again, limited time prevents a fuller account. But some examples: one critique of subliminal as well as of learning without awareness studies is that they have not ruled out the possibility of conscious, even if fleeting, cues. Once again, the ghost of William James is present. Another problem with both sets of studies is successful replication in some labs and the failure of replication in other labs. I am reminded of a version of the "allegiance effect" associated with psychotherapy outcome research. In a well-known and disturbing paper, Luborsky *et al.* (1999) demonstrated that the single best predictor of outcome studies is the theoretical allegiance of the researcher. So, if you are a CBT researcher and theorist, you are more likely to get and report findings favorable to CBT. On the other hand, if you are a psychodynamic research and theorist, you are more likely to get and report findings favorable to psychodynamic theory. I remember that this issue came up at the NYU Research Center. Labs in the mid-west, for example, did not replicate our findings, on subliminal effects. At one point, a colleague and I were going to write a paper to be entitled "subliminal effects and the Jewish question."

This failure to replicate has also afflicted studies on supraliminal influences without awareness. For example, in a well known study, Bargh and his colleagues found that subjects who were exposed to words linked to the elderly walked significantly more slowly to the elevator than a control group. However, the effect disappeared when the stop-watch timing of walking speed was replaced by the objective timing of an infrared beam.

Another example: Dijksterhuis and his colleagues reported that compared to immediate decisions and decisions after a period of conscious deliberation, subjects who were distracted for a period of time made superior decisions in a variety of areas, including selecting a car, choosing a roommate, and selecting an art poster. The effects are attributed to the inferred unconscious thought presumably going on during the distraction period. The problem is that there have been failures to replicate these results. Also, there is no evidence presented that unconscious thought occurred during the distraction period. Even if the results reported were reliable and replicable, they could be due to the detrimental effects of immediate and conscious deliberation decisions rather than to the facilitating effects of the distraction condition.

### **Implications of research for psychoanalytic theory**

Let me turn to the question of the implication of the studies on unconscious processes for psychoanalytic theory. To start, virtually all the studies carried out in this area deal with the processing and effects of *external* stimuli. The fact is, however, that psychoanalytic theory has relatively little to say about unconscious processes in relation to *external stimuli*. Freud (1900) assumed that insofar as perception of external stimuli served the main ego function of reality-testing in relation to the external world, the role of unconscious mental processes was minimal. In the language of ego psychology, perception is normally relatively autonomous, relatively uninfluenced by unconscious motives. The function of perception is to accurately represent external reality and it does so best when it operates relatively freely of unconscious motives. Somewhat paradoxically, perception serves drive gratification most effectively when it functions independently of unconscious drive influences.

As an ego function, the task of perception in reality-testing of the external world, which can only function properly when it is relatively impervious to unconscious factors. For example, the surprising finding that semantic coding, and the acquisition of subtle algorithms are possible without conscious awareness. Such findings support the psychoanalytic claim that unconscious mental processes are complex and ‘smart’ rather than simple and ‘dumb’ as has been argued by some cognitive psychologists and add some weight to the plausibility of Freud’s claim that the major part of psychological life goes on outside conscious awareness. These findings, one can say, provide evidence for the existence of a descriptive unconscious.

The distinctive psychoanalytic claim, however, is not the existence of a descriptive unconscious, but of the so-called “dynamic unconscious.” Although a descriptive unconscious is a necessary condition for the dynamic unconscious, it is not a sufficient one. Unlike the descriptive unconscious, the dynamic unconscious was viewed by Freud (1933) as a “cauldron, full of seething excitations” (p. 73) – reservoir of repressed wishes and impulses pressing for discharge, much like the witches’ brew of Shakespeare’s lady Macbeth: “fie, burn, and cauldron bubble” (Act IV, Scene I).

I know of no post-Freudian or post-ego psychology ‘schools’ of psychoanalysis that pay much attention to the role of unconscious processing of external stimuli that are out of awareness. In short, the priming effects of external stimuli per se may not have direct relevance for psychoanalytic theory. However, the findings of these studies may have *indirect relevance* of psychoanalytic theory insofar as they speak to the capacities of unconscious processes.

When the role of external stimuli and events is addressed in psychoanalytic theory, it is in the context of early interactions with parental figures. I refer here to the emphasis in contemporary psychoanalytic theory on the effects of repeated interactions and parental communications on the

development of representations of parental figures, of self, and of prototypic interactions with parental figures. It is probably more accurate to refer to these representations and the interactional communications on which they are based as implicit rather than unconscious in the dynamic sense. Also, the external stimuli responded to have little to do with the contrived circumstances of subliminal stimuli. Most important, we need to make a distinction between the unconscious processing of external stimuli that have been rendered unavailable to conscious experience through such external manipulations as brief exposure and masking and unconscious processing of internal mental contents that have been rendered unavailable to conscious experience through the operation of defensive motives and processes.

It is important to keep in mind that, unlike subliminal stimuli, unconscious desires and wishes are not inherently unavailable to conscious experience; they are *made* unavailable by motivated defense and would presumably be available to conscious experience were it not for the active defensive processes. It is these latter phenomena that are of central interest to psychoanalysis.

An assumption sometimes made by psychoanalytically oriented researchers on subliminal effects would make their work more relevant to psychoanalytic theory is that subliminal stimuli trigger and even gratify unconscious wishes and fantasies that the effects observed are mediated by the activation of unconscious fantasies and wishes. For example, recognizing that this assumption was necessary to make these studies relevant to psychoanalysis, Lloyd Silverman (e.g., Silverman, Lachmann & Milich, 1982; Silverman, 1983) argued that subliminal messages exerted their effects – for example, symptom reduction or enhanced performance on a particular task – through the intervening process of activating and gratifying unconscious wishes and fantasies. Indeed, without that assumption it is not clear what would make a study of that kind psychoanalytic, beyond the general fact that it has to do with unconscious processing. However, no independent evidence is presented that unconscious wishes and fantasies have been activated and gratified. Indeed, the reasoning is somewhat circular: how do you know unconscious wishes and fantasies have been activated and gratified? Because of symptom reduction or enhanced performance. We are left with data – interesting and important in themselves – suggesting that external stimuli that are exposed too quickly to be consciously perceived or reported can nevertheless be processed, it appears, at a semantic level.

I believe that there are a number of studies that have more direct relevance for psychoanalytic theory. One set of these studies fall into the category of the relationship between conscious versus unconscious processing and stimulus organization. Such studies are somewhat relevant to a psychoanalytic theory of thinking, in particular to the distinction between primary and secondary processes and to the general Rapaportian idea that degree of awareness and attention deployment influence stimulus organization. A number of studies on this issue were carried out at the NYU *Research Center for Mental Health* many years ago. For example, based on the Freudian hypothesis that “thinking below awareness tends to fan out over a large network of traces” (p. 164), Spence & Holland (1962) predicted and found that compared to a supraliminal condition, subjects who were subliminally primed with the word “cheese,” when presented a list of words that included cheese associates and control words, recalled significantly more cheese associates, especially distant associates. They concluded “that a supraliminal stimulus had a more restricting effect on recall than on a subliminal stimulus” (p. 170) and that “apparently the subliminal stimulus follows laws that are independent of those which determine conscious associations” (p. 169). Unfortunately, attempts to replicate Spence & Holland’s (1962) findings were largely unsuccessful.

However, Marcel (1980) reported results that tend to support Spence & Holland’s (1962) hypothesis. When the word PALM was presented subliminally, it facilitated the lexical classification of WRIST, whether preceded by HAND or TREE, whereas when it was presented supraliminally, it had an inhibitory effect on the classification of WRISY when preceded by TREE. More recently, Shevrin *et al.* (1992) have shown differences in the organization of stimuli as a function of whether

or not they are reportable in phenomenal awareness. They reported that subjects' Event-Related Potential (ERP) responses classified unconscious conflict words related to their phobia when presented subliminally, whereas supraliminal exposure led to classification of conscious symptom words. As another example of differences in subliminal and supraliminal encoding, Stenberg et al. (2000) reported that consciously reported stimuli were associated with neural activity in different brain areas than unreported (subliminal) stimuli, which suggests that explicit (i.e., reportable, in phenomenal awareness) and implicit perception (i.e., not reported) "are separable [neural] processes" (Hannula *et al.*, 2005, p. 252).

Williams *et al.* (2006) also reported that subliminal facial expression of fear elicited greater amygdala activity and also skin conductance responses, compared to neutral faces. There was a trend for greater right amygdala response for subliminal stimuli and greater left amygdala response for supraliminal stimuli. There were also differential cortical responses to the subliminal and supraliminal faces. Quite interesting, subcortical amygdala activity was relatively persistent in response to the subliminal faces, whereas the supraliminal faces were associated with more sustained cortical activity.

Studies on the relationship between degree of awareness and attention and stimulus organization escape preoccupation with the methodological issue of whether the purported subliminal stimuli are truly subliminal. Instead, they pose the question of whether the degree of awareness or of deployment of attention influences how stimuli are organized and the kinds of effects they have. This question, it will be noted, bears some relationship to the issue of primary versus secondary processes.

One such study was carried out by Fred Pine in 1960 in which he found that *incidental* – not subliminal stimuli of oral-passive versus phallic-aggressive content had differential effects on TAT-like imaginative stories. Compared to focal stimuli, the influence of incidental stimuli on subjects' imaginative stories reflected their symbolic meanings.

In another early study, in support of Jung's hypothesis that a low level of attention would be associated with a more 'primitive' kind of cognitive processing, Eagle & Ortof (1967) found that compared to a high level of attention, reduced attention to stimulus words resulted in greater organization based on sound rather than semantic meaning.

In a fascinating study on the relationship between awareness and stimulus organization, Turvey & Furtig (1970) found that one can get release from proactive interference of recall of words based on how they fall on positive versus negative poles of the *Osgood Semantic Differential* (&&), which includes the evaluative (good-bad), potency (strong-weak), and activity (active-passive). Normally, the greater the similarity of categories between lists of words the greater the degree of proactive interference; and when one shifts from one category to another, one gets release from proactive interference.

Let me describe a fascinating study on the relationship between awareness and stimulus organization to the implicit processing of external stimuli along dimensions that do not appear to be available to explicit knowledge even when one is fully attending to the stimuli. Turvey & Fertig (1970) presented the following lists of words to subjects:

**List one**

farm  
prevent  
uncle  
sea  
car  
play  
religious  
action  
develop

**List two**

wife  
burn  
silence  
debt  
sing  
young  
alone  
serious

In list 1, each set of 3 words are normatively rated high on one of the dimensions of the Osgood's *Semantic Differential* (Osgood, Tannenbaum & Suci, 1957), which include evaluative (good-bad), potency (strong-weak), and activity (active-passive), and neutral on the other two dimensions. In list 2, the words are drawn from the negative pole of the Semantic Differential. Before presenting the study and its results, let me briefly describe the phenomenon of proactive interference (PI). The interference of learning list A with the learning and recall of the subsequent list B is referred to as PI. In other words, list A proactively interfered with the recall of list B. There are many studies identifying the dimensions of list A and the relationship between lists A and B that influence PI. Further, and most important for this study, one can manipulated the factors that will produce *release* from PI. For example, one gets release from PI when there is a shift in the category of items from list A to list B.

Now to the results of the study. When there was a shift in polarity (from positive to negative or negative to positive), a release from PI occurred, that is, there was significant impairment in recall. This did not occur when there was a shift across dimensions within the same polarity. In other words, a distinction between negative and positive polarity was made tacitly. What is striking about the finding of the release from proactive interference based on semantic differential polarity is that even when informed about the properties of the two lists, the distinction cannot be made explicitly. As Turvey (1972) writes: «Imagine if the words in the two columns were simply mixed together and you were ignorant of the Semantic Differential (as were the subjects in the experiments). I doubt if you could even begin to sort them into the two categories I have described» (p. 121). And yet, this sorting is implicitly made. One should note that the release from PI does not work when there is a shift between nouns and verbs, a distinction that is readily available to explicit knowledge.

The results of the Turvey & Fertig (1970) study suggest that implicit organization of verbal material can be quite different from explicit and intentional organization and not easily accessible to conscious cognition. Their findings indicate that in addition to explicit denotative semantic encoding, we implicitly organize verbal material along connotative dimensions such as good-bad, active-passive, and strong-weak without being explicitly aware of doing so. One can speculate that in particular ecological contexts, such as drive and affective states, implicit organization would also include such dimensions as edible-non-edible, safe-dangerous, sexual-nonsexual, happy-angry, or even related to person X (e.g., one's romantic partner) – not related to person X.

These findings are relevant to the concept of “connotative hierarchy” tossed off by George S. Klein many years ago. He hypothesized that when presented with verbal stimuli, in addition to encoding denotative meaning, which is directly available to conscious awareness, we also implicitly encode a set of connotations, which are arranged hierarchically with regard to accessibility to conscious awareness. I recall doing a study in support of that hypothesis in which we found that recognition errors are not random, but are lawfully related to target words associatively, semantically, and even phonetically.

I would add the speculations: one, that the “connotative hierarchy” phenomenon is not limited to verbal stimuli, but extends to all stimuli we encounter; and two, that expression of primary process organization are more likely to be found in the dimensions and categories that characterize connotative meanings.

Although explicit versus implicit cognition bears some family resemblance to primary versus secondary processes, they are not identical. We do not know, for example, whether implicit cognition is more likely to be characterized by what Rapaport (1959) called drive organization. The only work I know of that is relevant to that question is Pine's earlier noted 1960 study on the effects of incidental stimuli on narrative construction. There is no time to discuss it, but the whole question of the relationship between drive organization and the formal features of primary processes – for

example, organization by graphic similarity rather than semantic meaning (as in, for example, clang associations) – is murky in psychoanalytic theory.

In addition to the research on the relationship between degree of awareness and stimulus organization, there are some studies that are relevant to psychoanalytic conceptions of unconscious processes, particularly the contemporary conceptions. I refer to five interrelated sets of studies: (1) studies on the tacit acquisition of “rules” and algorithms, as exemplified by the research of Lewicki and his colleagues; (2) studies demonstrating that the reasons we give for our behavior are not the operative reasons, as exemplified by the classic 1977 paper by Nisbett and Wilson; and (3) studies demonstrating what appears to be a defensive dissociation between explicit verbal report (e.g., of one’s attitudes or feeling states) and other implicit measures, such as physiological responses, studies on “repressive style” are examples; (4) as a sub-set of (3), studies demonstrating and elucidating the influence of defense on behavioral and cognitive processes; and finally, (5) studies demonstrating the effects of stimuli on affective responses as a function of awareness and verbal labeling.

Obviously, there is not time to discuss all five sets of studies. A feature that many of the studies have in common, however, is their demonstration not only of what Ricoeur (1965) referred to as the dissimulating nature of consciousness, - a statement that implicates motivation and the dynamic unconscious, - but also of the limitations of introspective verbal report as a measure of the extent of one’s psychological life, a generalization that speaks to the descriptive unconscious.

Let me spend some brief time on the links between some of these studies and specific psychoanalytic formulations. The studies on the tacit acquisition of ‘rules’ and algorithms are relevant to contemporary psychoanalytic conceptions of the unconscious, not as a “cauldron, full of seething excitations” (Freud, 1933, p. 73), but as a set of cognitive-affective representations and schemas – RIG’s or internal working models (Daniel N. Stern, 1985; Bowlby, 1973), for example – acquired early in life. As noted earlier, this is an unconscious of procedural or tacit knowledge rather than deeply buried repressed contents.

As for dissociation between verbal report and physiological responses, let me briefly describe a study that is, indeed, relevant to the dynamic unconscious. Adams et al. (1996) reported that in sample of explicitly heterosexual men, compared to non-homophobic men, homophobic men showed a significantly greater increase in penile erection in response to a male erotic homosexual video. Further, whereas reports of subjective arousal were consistent with penile responses for non-homophobic men, for homophobic men this was not the case with regard to the homosexual video. The discrepancy appeared to be due to underestimates of arousal by the homophobic men.

As Adams, Wright & Lohr (1996) note, these findings are consistent with an explanation implicating the homophobic men’s own repressed homosexual impulses. The authors also present the presumably alternative hypothesis that it is the homophobic men’s anxiety that accounts for their penile responses to the homosexual video. As they put it, “Because anxiety has been shown to enhance arousal and erection, this theory would predict increases in erection in homophobic men” (p. 444). And they go on to state, “Furthermore it would indicate that a response to homosexual stimuli is a function of the threat condition rather than sexual arousal per se” (p. 444). But this would leave unanswered the question of why homophobic men would feel greater anxiety and threat in response to a homosexual video than non-homophobic men.

The anxiety and threat and the repressed homosexual impulses accounts are not really two entirely separate and distinctive explanations. That is so because the repression account presupposes that presence of anxiety and threat as the primary factors that instigate repression. As noted above, a critical question is why some men – who turn out to be homophobic – feel greater anxiety and threat than other men – who turn out to be non-homophobic.

There is one other issue raised by the Adams, Wright & Lohr (1996) study that merits discussion. And that is the question of the status of the homophobic men’s presumed repressed homosexual thoughts and feelings. Referring to them as repressed implies that they are ‘deeply’ unconscious and

inaccessible to conscious awareness. However, it is entirely possible, even perhaps likely, that in viewing the homosexual video, the homophobic men more readily experienced anxiety-provoking homosexual thoughts and feelings that, like Lucy R., they pushed out of consciousness. Note that once again we confront the question of fleeting conscious awareness versus unconscious and inaccessible.

Finally, I want to reiterate the special relevance of studies of this kind to psychoanalytic theory and also to note its greater 'ecological validity' compared to subliminal studies. In the latter, the stimuli that are shown to have various effects are unconscious not by virtue of anxiety and defense, but as a product of external experimental contrivances (e.g., masking). Hence, the discrepancy between verbal report and other indirect responses to the subliminal stimulus (e.g., amygdala activation; faster reaction time in a lexical decision task; GSR response) cannot readily be attributed to the individual's defensive activity in keeping the stimulus out of awareness. At best, these studies show that we can process external stimuli without conscious awareness. Contrastingly, in the Adams et al. (1996) study, the discrepancy between verbal report (i.e., endorsement of heterosexuality; ratings of arousal) and other responses (i.e., penile erection) can be plausibly attributed to defensive activity in response to anxiety.

There is another set of empirical studies that, I believe, possess greater ecological validity and are far more relevant to psychoanalytic theory than most of the experimental studies on unconscious processing, including studies on the neural correlates of unconscious processing. I refer to two sets of studies: one set that, rather than attempting to demonstrate repression in the experimental laboratory, focuses on defense as a personality variable and investigates the correlates of individual differences in defensive style, including its costs and benefits; and another set that identifies the specific mechanisms and behaviors through which defenses are implemented.

At the risk of being guilty of criminally condensing the findings of the first set of studies, let me try to summarize the major findings. The early set of studies on "repressive style," defined as a pattern of self report of low anxiety combined with a high level of physiological arousal in response to mild stress, found that subjects high in "repressive style" reported less conscious experience of anxiety and depression, but greater susceptibility to certain somatic illnesses (e.g., hypertension). The latter has been attributed to the "physiological work" and "cumulative damage" due to chronic inhibition combined with "heightened excitation" (Esterling et al., 1990; Schore, 1994). These descriptions bear a strong family resemblance to Freud's (1915) hypothesis that repression entails a "constant expenditure of effort" (p. 151).

Luborsky's (1996) study on "momentary forgetting" can be understood in terms of the patient's conflict between consciously experiencing and expressing thoughts that are anxiety-provoking and pushing them out of awareness. As noted in a previous Chapter of this book (ch. 4), although momentary forgetting may, in certain respects, be similar to repression, it is a rather pale version of it as it is understood in Freudian theory. I also noted that one could attribute the momentary forgetting as due to the 'automatic' – that is, non-motivated disruptive effect of anxiety. Also, there is little compelling evidence that the momentarily forgotten thought is unconscious in the sense of repressed rather than fleetingly in and then out of conscious awareness. In short, while the momentary forgetting phenomenon is interesting and provocative, at best, it may illustrate 'something like' a dynamic process in which responsive-like defenses succeed in keeping unconscious mental contents from reaching conscious awareness, even if only momentarily.

There are a few other studies worth noting insofar as they not only demonstrate the influence of defense, but also shed some light on the underlying mechanisms through which that influence may operate. In one such study, shedding light on how avoidance is implemented, Luborsky, Blinder & Schinek (1965) reported that subjects classified as repressors, when shown a photograph that included a woman with her breasts exposed tended to avoid looking at the breasts. This was not true of those subjects classified as isolators. The repressors also shower poorer memory of the contents of

the photograph. In short, selective deployment of attention was the mechanism through which repressors implemented an avoidant strategy.

The role of attention deployment in implementing defensive avoidance is also seen in a study by Szalai and Eagle (1992). They found a robust relationship between the use of avoidant and repressive defenses and the number of errors made in acquiring an aggressive concept. This relationship was not found for the neutral concept. It was also found that the avoidant subjects' greater difficulty in acquiring an aggressive concept was due to less attention to the aggressive dimension of the stimuli.

And finally, let me describe a study that is especially relevant to psychoanalytic theorizing. In an fMRI study Lieberman *et al.* (2007) reported that labeling of affective responses diminished amygdala and other limbic activation to negative emotional images. Affect labeling also resulted in increased activity in the right ventrolateral prefrontal cortex (RVLPFC). "Finally, RVLPFC and amygdala activity during affective labeling were inversely correlated, a relationship that was mediated by activity in medial prefrontal cortex (MPFC)" (p. 421).

These findings suggest that labeling can reduce negative affect. Obviously, one cannot label one's affective responses unless one is consciously aware of them and likely unless one can consciously and meaningfully related these responses to the triggers that activate them (a study that should follow the affect labeling one). So, here we have neat experimental demonstration of a basic psychoanalytic assumption that conscious awareness and giving words feelings can modulate negative affect. This finding is especially important in a period in the history of psychoanalysis in which the therapeutic role of conscious awareness and self-understanding is severely minimized.

### **Implications for psychoanalytic theory and practice**

So, what does all this add up to? What can we say about the implications of conceptual analysis, of an examination of alternative theoretical formulations, and of empirical research findings for a psychoanalytic conceptualization of unconscious processes? First, some general observations. I think that there are two opposing tendencies in our discipline with regard to attitudes toward empirical research. One tendency, perhaps the more typical one, is wholesale rejection. The other, is to clutch to our breast any research that appears to validate psychoanalytic assumptions and formulations. This tendency is equally uncritical insofar as it does not sufficiently address either the adequacy or relevance (including ecological validity) of these studies. It is characterized by selectively including mainly studies and findings that appear to support psychoanalytic formulations and ignore non-supportive studies and findings. Thus, even some of those in the psychoanalytic community who are favorably disposed toward empirical research tend to look to it primarily to support or confirm psychoanalytic ideas and to reassure themselves that they were right all along rather than to challenge and modify these ideas. One example of this which I describe in the longer version of the paper is the tendency to cite findings on maladaptive consequences of a repressive style and ignore contrary findings on its adaptive consequences

For example - and I can include on of my own papers here, - the work on "repressive style," originally reported by Weinberger and his colleagues, is often cited as demonstrating the maladaptive and symptomatic consequences of repressive defenses. However, contrary findings, which are most often not cited, have also been reported (e.g. Bonanno). Also, as noted earlier, even those who have found maladaptive somatic consequences of a "repressive style," have also reported that such individuals not only consciously experience less anxiety and depression, but have a lower probability of receiving a psychiatric diagnosis. Ironically, the so to speak, more nuanced cost-benefit pattern of a repressive style is more compatible with an adequate understanding of the impact of defenses on psychological functioning than a more simple-minded: "Repressive defenses are bad for you. Freud was right."

One consequence of a biased selection of studies as well as a pre-set interpretation of their findings is that psychoanalytic theory is made immune to challenge by empirical findings and to the



resulting growth from such challenges. Theories grow through unexpected findings and interpretations, not through a stance of “see, we were right all along.” Psychoanalytic theorists have rightfully complained that empirical researchers frequently do not acknowledge the relevance of their work to psychoanalytic theory. However, on the other side, it seems to me that empirical researchers have a right to complain about the uncritical assimilation of their work in the service of supporting psychoanalytic ideas.

In some important ways, the findings on unconscious processes are not compatible with at least certain psychoanalytic perspectives. The image that emerges from psychoanalytic theory is that of the individual strongly influenced, at times buffeted about, by inner forces of which he or she is unaware. For Freudian theory, these inner forces are instinctually based motives, wishes, impulses, and fantasies. For contemporary psychoanalytic theories, they are representations and symbolic equivalences acquired early in life. However, Freudian and post-Freudian theories have an emphasis on the determining influences of inner forces and structures.

The contrasting image that emerges from much current research on unconscious processes is that of the individual strongly influenced by external stimuli of which he or she is either unaware or is aware of the stimuli, he or she is unaware of their influence. Thus, if primed with words redolent of the elderly, he or she walks slower. If exposed to hot objects, he or she is warmer and more generous and so on. Note that there is no concern in these studies with the question of *individual meanings and associations* given to elderly words or to contact with hot versus iced coffee. That is, there is no concern with individual psychic reality. From a psychoanalytic perspective, the assumption is made that inner processes, such as conflict, defenses, desires, fantasies, and one’s idiosyncratic history will influence the meanings of and associations to external stimuli. Thus, from this perspective, it is possible that for some individuals, iced coffee might elicit implicit associations of hot summer days rather than coldness or lack of generosity; and that hot coffee might be associated for some with indifferent and distant parents. These possibilities are not investigated in much of the research. Instead, the implicit assumption made is that the external stimulus has the same meaning for all subjects and will influence their behavior in the same way.

### **Summary and Conclusions**

Let me turn to some specific conclusions that emerge from research, conceptual critiques, and contemporary psychoanalytic theoretical formulations, the conception of unconscious processes that emerges seems to me to be characterized by the following features:

- (1) There is a radical de-emphasis of the “cornerstone” concept of repression and correspondingly, of deeply buried instinctually derived unconscious impulses, wishes, desires, and fantasies. To a certain extent, this is the product of a de-emphasis on Freud’s drive theory, but not entirely.
- (2) There has been an increased emphasis on unconscious representations that are unconscious, not by virtue of repression, but largely because they have been acquired early in life, often during pre-verbal stages. Indeed, it would be more accurate to refer to these representations as implicit and as a kind of learning without awareness – as in Lyons-Ruth’s (1999) “implicit relational knowing” – rather than unconscious as in repressed.
- (3) The emphasis on the implicit rather than the repressed unconscious is also reflected in accounts of the motivated failure to articulate one’s thoughts, feelings, and intentions and one’s motives for doing certain things. According to this account, one’s motives are not repressed, but rather not spelled out. One implication of this view is that one’s unarticulated motives and other mental contents are likely fleetingly experienced in consciousness rather than deeply repressed – much like Lucy R.’s description of her experience and much like the description of unconscious processes in the exchange between Anna Freud and Sandler noted

earlier. It turns out that William James' (1890) emphasis on fleeting and momentary consciousness is alive and well in contemporary developments.

- (4) A topic remarkably absent even in the literature on relational psychoanalysis is what I refer to as interpersonalizing of unconscious processes.
- (5) In an important sense, one contemporary development in psychoanalysis is an increasing emphasis on more surface phenomena. This is especially evident in the "close process monitoring" approach of Paul Gray (1994) and his followers (e.g., Busch, 2001). It is also implicit, I believe, in the contemporary emphasis on the transference-countertransference choreography between patient and analyst. Interpretations and attention are directed toward material just below the surface rather than to presumably deeply buried repressed contents. In this approach, much of the material addressed is very likely fleetingly experienced and pushed out of awareness or is, indeed, consciously available but not communicated.
- (6) There is an interesting disconnect between, on the one hand, descriptions of clinical work, which focus on relatively surface material that is at least fleetingly available to the patient and, on the other hand theoretical accounts which refer to deeply buried mental contents and processes. Two cases in point:
- (7) For a long time, psychoanalysis was referred to and referred to itself as a depth psychology. Paul Wachtel (2003) has written a fascinating paper on how we use the metaphors of surface and depth. In particular, we equate surface with superficial and depth with profound. During the heyday of psychoanalysis, analysts traded on these metaphors by presenting themselves as *mensch kernalers* who could read the depths of the individual's mind, regions where the individual himself or herself could not go. Hence, the idea that what was referred to as repressed may, in fact, be fleetingly available to consciousness – as, for example, in the case of Lucy R. – had to be a threat to the image of the analyst as someone with a special mind-reading capacity, as someone who does not deal with surface phenomena – read superficial – but with deep and dark phenomena.
- (8) It is interesting to observe that the analyst as mind reader who could tell you what is going on in your hidden mind and how you are influenced by inner unconscious forces of which you are unaware has now been replaced by the experimental psychologist and neuroscientist who can tell you how you, or more likely, your brain is influenced by external stimuli of which you are unaware (e.g., subliminal stimuli) or in ways of which you are unaware. As was the case with analysts, the possibility that some of the presumed unconscious influences are accompanied by fleeting awareness represent a deflation of dramatic claims.
- (9) One ironic conclusion that emerges from the empirical research is that subliminal effects studies, which most clearly demonstrate unconscious processing, are least relevant to psychoanalytic theory. Contrastingly, those studies that are concerned with implicit acquisition of 'rules' and algorithms, degree of awareness and stimulus organization, and dissociation between verbal report and other behavioral and physiological responses are most relevant to psychoanalytic theory.

In a variety of ways, just about all psychoanalytic theories have taken as virtually axiomatic the assumption that unconscious processes and mental contents and psychopathology are closely, even inherently linked, as a corollary assumption, that the transformation of unconscious processes and contents into conscious ones is therapeutic. However, there is remarkably little research that supports what has been since the birth of psychoanalysis. The axiomatic claim that unconscious processes play a causal role in psychopathology. The only studies referred to that are somewhat relevant to this claim are those that show that labeling as well as cortical processing can inhibit amygdala activation in response to negative stimuli, which suggests inhibition of negative affect, associated with amygdala activation.

However, as noted earlier, there are many studies that report that under certain circumstances and contexts, keeping mental contents out of awareness can be adaptive rather than pathogenic. I refer, for example, to the work of Taylor and her colleagues on the relationship between positive illusions and proneness to depression and the adaptive role of denial in serious illness; and to the research of Bonanno and his colleagues reporting adaptive consequences of the use of avoidant defenses in coping with loss and bereavement. Of course, what is kept out of awareness and the context in which it occurs is likely to play a critical role in its adaptive versus maladaptive consequences. As I have suggested elsewhere the positive link between unconscious processes and psychopathology and the corollary identification of making the unconscious conscious as an overriding therapeutic goal may be as much a reflection of the Enlightenment root of psychoanalysis as conclusions warranted by clinical research evidence.

### **Overall conclusions**

Although the pervasive role of unconscious process and contents in mental life is almost always seen as the hallmark of psychoanalytic theory, it turns out that most of the research on unconscious processes is not especially relevant to distinctive psychoanalytic claims such as those inherent in the concept of the dynamic unconscious, including the “cornerstone” concept of repression or in the inextricable link between unconscious processes and psychopathology.

Ironically, Freud’s formulations of the descriptive unconscious are far more relevant to contemporary cognitive theory and research. These formulations include the ubiquitousness of unconscious processes, the radical idea that the essence of mental life is somatic, and the corresponding implications that representationality and intentionality, not consciousness, are the essence of the mental and that brain states have representational capacities. Indeed, Wakefield (1992) has argued that in articulating these foundational ideas, Freud can rightfully be seen as the father of contemporary cognitive theory.

I want to end this paper by returning to what, for very good reasons, Freud (1914) referred to as the “cornerstone” (p. 16) concept of repression. As noted earlier, Freud’s introduction of the concept of repression in the context of positing “defense hysteria,” marks the birth of psychoanalysis. It is at the core of the formulation of the dynamic unconscious. And yet, there are a number of reasons to conclude that it is time to do away with the concept as it has been employed for a number of reasons. One, there is no good evidence, either experimental or clinical, for its existence as it has come to be understood in classical theory. With regard to the former, not one of the studies discussed requires the positing of repression or provides convincing evidence for its operation. As for the latter, as we have seen in the case of Lucy R., even Freud’s own description of the workings of repression does not fit the model of a fully unconscious mechanism.

Two, as we have seen, the concept of repression has, in effect, already been abandoned or at least much minimized (a) in formulations of representations that are unconscious not by virtue of repression, but as a function of implicit and early acquisition; (b) in the emphasis on just below the surface phenomena in the “close process monitoring” approach of Gray and his colleagues; and (c) in self psychology theory.

Three, when the term repression is used uncritically, it obscures as much as it explains. It is time to unpack the blanket term repression and try to identify the specific mechanisms, processes, strategies, etc. by which people are able to ward off conscious experience of unacceptable feelings, thoughts, desires, aims, and so on. As Singer & Sincoff (1990) note in their summary chapter in an edited book on *Repression and Dissociation*, there are various ways we can avoid conscious awareness of unacceptable thoughts and feelings, including “selective inattention, avoidance of labeling, avoidance of reminiscence, distraction through physical or social activity, and ruminative thoughts about trivialities...” (p. 494). One can add to Singer and Sincoff’s list the strategies and processes described in this chapter, including the motivated failure to understand the personal

meaning and import of certain experiences, the failure to articulate or spell out one's intentions, and the projects in which one is engaged, allowing vague and unformulated experiences to remain unformulated, pushing uncomfortable thoughts and feelings out of conscious awareness and so on. All these strategies involve cognitive and affective processes about which we know a great deal and that are susceptible to empirical research; a consideration that could perhaps serve to narrow the gap between meaningful empirical research and psychoanalytic theory and practice.

Not too long ago, I had a conversation – I cannot remember with whom – in which I was told that rumor held that a particular analyst no longer believes in the unconscious with the same shocked tone that, say, a faithful catholic would report that a particular priest no longer believes in God. I wonder if my paper today will elicit a similar reaction.

It is worth noting that in replacing make the unconscious conscious with where id was, there shall ego be as the overriding goal of psychoanalysis, Freud (1933) was essentially giving pride of place to integration rather than awareness as a psychoanalytic ideal. This becomes clear when based on the original German of *Das Es* and *Das Ich*, Freud's adage becomes where impersonal it was, there shall personal I be. From this perspective, the unconscious status of an aspect of oneself is only a means of rendering it as an impersonal it. However, a fully conscious mental content, an obsessive thought, for example, can be experienced as an ego-alien "it." In emphasizing integrating the unintegrated as a primary psychoanalytic goal, Freud returned to his early formulation in which, along with Charcot and Janet, he viewed the isolation of mental contents from the rest of the personality, that is, their unintegrated status, as a pathogen and in which the implicit primary criterion for mental health was successful integration of various components of the personality.

Although this perspective was initially developed, particularly by Charcot and Janet, in the context of linking isolated traumatic memories to psychopathology, it was adapted by Freud to accommodate the motivated isolation of mental contents due to inner conflict, to an "an incompatibility between the ego and an idea presented to it" (Breuer & Freud, 1893-85, p. 22). Freud added to the earlier formulation the ideas (1) that the isolation of mental contents came about through repression, which marked the birth of psychoanalysis; and (2) that repression resulted in hysterical symptoms through the intermediate step of conversion of "strangled affect" (Breuer & Freud, 1893-95). After the early emphasis on the "cornerstone" concept of repression in Freud's account of defense hysteria, repression came to be seen as the primary factor in neurosis and lifting repression and making the unconscious conscious came to be viewed as the primary process goal of psychoanalytic treatment. The pathogenic role of failure to integrate isolated mental contents and the therapeutic goal of integration of the unintegrated receded into the background.

When it became clear that making the unconscious conscious was most frequently not sufficient for therapeutic change, the concepts of emotional insight (versus intellectual insight) and *working through* were introduced, almost as an after thought. A careful consideration of these concepts, particularly that of working through makes it clear that they essentially refer to the process of integration, that is, making an insight or perspective or a way of viewing oneself an integral part of oneself. But given its importance, the goal of integration cannot rest on the thin needs of emotional insight an working through, concepts that are secondary, both in terms of theoretical and clinical primacy, to lifting repression and making the conscious unconscious. (For a philosophical discussion of the importance of integrating disowned aspects of oneself, see Moran's (2001) discussion of first-person versus third-person knowledge). For one thing, there are ways of facilitating integration other than through the lifting of repression and the expansion of conscious awareness. (See, for example, Kohut's, 1984, concept of "transmuting internalization" and Lyons-Ruth's, 1999, concept of "implicit relational knowing").

## The importance of integration

The role of failure of integration as a hallmark of psychopathology and the corresponding therapeutic importance of integration are apparent in a number of theoretical and clinical contexts. These include discussions of borderline personality disorder, lack of self-cohesiveness, dissociative disorders, the primacy of compromise formation, and the concept of synthesizing function of the ego. There is not sufficient time to discuss these matters. However, even a brief consideration of the concept of splitting in borderline personality disorder makes it clear that on that view, it is the failure of integration of ego states (what has been referred to as a vertical split) rather than the unconscious status of mental contents through repression (referred to as a horizontal split) is the primary pathological condition; and correspondingly, that the primary therapeutic aim is integration of unintegrated cognitive-affective ego states rather than lifting repression and thereby making repressed mental contents conscious. At this point, it would make sense to launch into a discussion of dissociation. But that is for another time.

**End Note:** In today's post-Brenner discourse, one can refer to the goal of strengthening the observing function of the ego as the achievement of an adaptive compromise). One sees in the posited necessity of gratification, sublimation, or repudiation of certain mental contents traces of the early idea that "strangled affect" must be dealt with in a way that permits adequate discharge if one is to avoid symptomatic compromise formation.

In contrast to the above aims of strengthening the observing function of the ego, the primary purpose of enhancing mentalization reflective capacity is not rendering unconscious wishes, desires, and impulses conscious, but rather strengthening one's capacity to *reflect* both on one's own and other's mental states. Both the observing function of the ego and reflective capacity entail expansion of consciousness, but in somewhat different ways. According to the traditional view, consciousness is expanded through increased conscious access to defended against mental contents. According to the current conception of reflective capacity, consciousness is expanded through one's increased capacity not only to reflect on one's own and other's mental states, but also through an increased capacity to reflect on one's rigid and unquestioned perspectives, construals, and expectations. Expansion of consciousness is characterized not by increased access to a greater number of hitherto unconscious specific mental contents (e.g., incestuous wishes), but by an increased capacity to take different perspectives and to understand how one's mind works (Sugarman, 2006).

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