RECONNECTING PSYCHOANALYSIS TO MAINSTREAM PSYCHOLOGY

Challenges and Opportunities

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Although psychoanalysis was once central to mainstream psychology, in recent years psychodynamic models of personality and psychopathology have become increasingly marginalized. The factors that combined to "disconnect" psychoanalysis from contemporary psychological science and clinical practice are examined, and strategies that can help reconnect psychoanalysis to mainstream psychology are described. These are (a) the use of nomothetic research methods to test and refine psychoanalytic concepts and (b) the communication of psychoanalytic principles and findings to colleagues, students, and members of the public. Opportunities and challenges that arise during this reconnection process are discussed, and prospects for the rebirth of a truly heuristic, integrative psychoanalysis are considered.

> There is literally nothing to be said, scientifically or therapeutically, to the advantage of the entire Freudian system or any of its component dogmas. (Crews, 1996, p. 63)

> From a scientific point of view, classical Freudian psychoanalysis is dead both as a theory of the mind and a mode of therapy. . . . No empirical evidence supports any specific proposition of psychoanalytic theory. (Kihlstrom, 1999, p. 376)

Not too long ago, psychoanalysis dominated American and European psychology. As the preceding quotations illustrate, however, the status of psychoanalysis within the intellectual community has diminished substantially in recent years. Given recent trends in academic and clinical research (Robins, Gosling, & Craik, 1999) and the impact of managed care on insight-oriented treatment (Sperling, Sack, & Field, 2000), it is difficult to envision psychoanalytic theory regaining its former status any time soon. It is a worrisome situation for any practitioner or researcher interested in the long-term health of psychoanalysis.

The diminished influence of psychoanalytic theory would be understandable if treatment outcome studies had shown psychodynamic psychotherapy to be ineffective or

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research findings had demonstrated that the key tenets of psychoanalytic theory had little empirical support, but neither of these things has occurred. The efficacy of insight-oriented treatment is well established (Blatt & Ford, 1994; Crits-Christoph & Connolly, 1998), and the heuristic value of psychoanalytic theory is robust (Bornstein & Masling, 2002; Fisher & Greenberg, 1996).

What accounts for the marginalized state of contemporary psychoanalysis in the academic and clinical communities? It is in part a consequence of psychoanalysts' willingness to stand by silently as their ideas are co-opted by theoreticians and researchers in other areas of psychology. The end result of this discipline-wide passivity is that whereas psychoanalytic *concepts* remain strong, psychoanalysis as a *discipline* has become "disconnected" from contemporary scientific and clinical psychology.

This article provides a framework for reconnecting psychoanalysis to mainstream psychology and reclaiming psychoanalytic ideas that have been co-opted by others. I begin by exploring the process by which psychoanalysis became disconnected from psychology during the latter half of the 20th century. I then demonstrate that despite this disconnection, psychoanalytic concepts have been surprisingly heuristic, though the origins of these ideas are often misattributed by clinicians, theoreticians, and researchers. Finally, I offer suggestions for reconnecting psychoanalysis to mainstream psychology so the first decades of the 21st century can be as exciting as those of the early 20th century—the time when Freud's revolutionary ideas were altering forever clinical practice, psychological science, and popular culture.

The Evolution of Psychoanalysis: From Mainstream to Periphery

Broadly speaking, the evolution of psychoanalysis during the 20th century can be divided into two phases: (a) the construction and refinement of psychoanalytic theory through the mid-1950s and (b) the evolution of the theory during the latter half of the century. In terms of clinical and research influence, Phase 1 was a time of growth, whereas Phase 2 was a time of decline.

The Two Disciplines of 19th-Century Psychology

Twenty years ago Erdelyi (1985) remarked that

> contrary to textbook tradition, the nineteenth century gave birth not to one but to two psychologies, one at Leipzig, the other at Vienna. For a hundred years each struggled to develop into a viable science of mind but each, perversely complementing the other, remained incomplete. (p. xii)

Erdelyi was referring, of course, to Wundt's empiricism and Freud's psychoanalysis.

Freud and Wundt grappled with a number of common problems (e.g., the nature of consciousness, the dynamics of memory), but they approached these problems from very different perspectives. Wundt's empirical method—derived from 19th-century positivism and modeled after the natural sciences—adhered to a nomothetic tradition that emphasized controlled experimentation to delineate general laws of human psychological functioning (Bornstein, 1999a; Hilgard, 1987). Freud's psychoanalytic method—derived from medicine and invoking a more idiographic approach—emphasized the intensive study of individuals within the context of their past and present relationships (Galatzer-Levy & Cohler, 1993; Greenberg & Mitchell, 1983). Early in the history of the psychoanalytic movement, general laws of human behavior were secondary to the deepest possible understanding of the person being studied. As psychoanalysis matured, this emphasis

reversed: Toward the end of his career, Freud shifted much of his effort to setting forth general principles of human mental life that would dictate the direction of psychoanalysis after his death (see Gay, 1988).

The Marginalization of Psychoanalysis

During the first decades of the 20th century, Freud's psychoanalysis was more influential than Wundt's empiricism, due in no small part to Freud's persuasiveness as a writer and speaker. Following Freud's Clark University lectures in 1909, psychoanalysis became immensely influential within and outside academia, shaping not only psychology and the other mental health professions but also art, literature, law, politics, education, anthropology, and myriad other fields (Holland, 1984; Torrey, 1992). By the early 1960s, the landscape had changed. Psychoanalysis was becoming increasingly marginalized within the clinical and academic communities, to the point that a slightly tempered version of 19th-century positivism more or less completely replaced the Freudian approach as a unifying psychological framework and worldview (Bornstein, 1999a).

It is ironic that psychoanalysis reached its peak of influence during a period when in-depth analysis of individuals was the centerpiece of Freud's work. Today, the theory's idiographic roots have become its greatest burden within the larger intellectual community. The idiographic underpinnings of psychoanalysis were not the sole reason that the theory became marginalized, however. As I have argued elsewhere (Bornstein, 2001), the diminished influence of contemporary psychoanalysis is largely a product of theory mismanagement: Rather than looking forward (to the evolving demands of science and practice) and outward (to ideas and findings in other areas of psychology and medicine), many psychoanalysts have chosen to look backward (at the seminal but dated contributions of early psychoanalytic practitioners) and inward (at their like-minded colleagues' own analytic writings). As a result, psychoanalysts committed seven "deadly sins" that exacerbated the theory's decline: insularity, inaccuracy, indifference, irrelevance, inefficiency, indeterminacy, and insolence (see Bornstein, 2001, for a detailed discussion of these psychoanalytic "sins").[1]

The Postmodern Reinvention and Co-Opting of Psychoanalysis

A key tenet of postmodernism is that both internal and external reality are social constructions, reflecting (among other things) an individual's cultural background, expressive language, and past and present experience (Gergen, 1997; Vollmer, 2000). In the empirical setting, postmodernism has led to a resurgence of constructivist research (Kvale, 1992) and an emphasis on cultural relativism in intellectual discourse (Hermans, Kempen, & van Loon, 1992). In the clinical setting, postmodernism has led to greater focus on "narrative truth" (Spence, 1994) and skepticism regarding the relevance of objective research methods to thorny psychological issues (Nichols, 1993; Wertz, 1994).[2]

A key corollary of postmodern thought is the notion that scientific truth—like individual experience—is actively constructed by individuals (Couvalis, 1997; Kirshner,

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[1]The perceived sexism of Freud's ideas also played a role in the marginalization of psychoanalysis, though in a number of instances psychoanalysis has been unfairly criticized in this regard (see Bornstein & Masling, 2002).

[2]As Reisner (1999) noted, psychoanalysis has always reflected postmodernism's emphasis on subjective truth, reconstruction, and private, personal meaning. In fact, several theoreticians have pointed out that in certain respects, psychoanalytic theory was postmodern before postmodernism had a name (see Arons, 1999; Kirshner, 1999).

1999). Theoretical propositions and research results are generated and interpreted within the context of a scientist's personal and professional milieu, and they may be revised and reinterpreted—many times, if need be—as this milieu changes. In the end, zeitgeist shapes the generation and interpretation of scientific findings as much as (if not more than) scientific findings influence the prevailing zeitgeist (a process described by Kuhn, 1962, 1977, in terms of "paradigm shifts"—wholesale zeitgeist changes that impel a radical reinterpretation of past methods and findings).

The postmodern view of science created new interpretive challenges for a broad array of disciplines (Kruglanski, 2001; Kvale, 1992; Vollmer, 2000), but it has posed a particular problem for psychoanalysis. When coupled with the theory mismanagement difficulties described earlier, postmodernism set the stage for a wholesale co-opting of psychoanalytic ideas by researchers in other areas of psychology. To the extent that scientific and historical "truth" is seen as something constructed rather than observed, researchers in different areas have at hand a ready rationale for rediscovering old concepts within their particular theoretical perspective. And just as an individual's personal history is rewritten and revised to accommodate present-day psychological needs, scientific history is rewritten and revised to accommodate present-day disciplinary needs. Studies show that once personal narratives are rewritten, it can be difficult (sometimes impossible) to change them back to their original form (Greenwald, 1980, 1992). So it is with scientific narratives: Once a revised account has taken hold, it can be extremely difficult (sometimes impossible) to change it back.

Across different domains of psychology, the process by which psychoanalytic ideas have been co-opted by researchers in other areas is characterized by a common dynamic. By deconstructing this dynamic we can better understand one of the most vexing paradoxes of contemporary psychoanalysis: how the theory itself became marginalized at the same time as its central concepts flourished in other domains.

The dynamic, in its most basic form, involves three steps.

Step 1: Revision and Reinvention

The co-opting process begins when a psychoanalytic concept is revised and reinvented: A researcher reframes some Freudian construct in the language of another discipline, emphasizing differences between the newly described concept and the one from which it was derived. At times this may involve conscious suppression of common elements on the part of the co-opting researcher, but in many cases the psychoanalytic roots of the construct in question are unknown (at least consciously) to the person who co-opts it. As Bornstein (1996) noted, many

> researchers in other areas of psychology were exposed to psychoanalytic concepts during their undergraduate and graduate training, but they no longer remember having been exposed to these concepts. Consequently, they may unintentionally "reinvent" the same concepts several—or even many—years later. (p. 2)

Jacoby and his colleagues refer to this process as "unconscious plagiarism" rooted in the individual's "source amnesia" regarding the original concept (Jacoby & Kelley, 1987; Jacoby, Toth, Lindsay, & Debner, 1992).[3]

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[3]Unconscious plagiarism is not merely an academic concept. In a widely publicized civil trial three decades ago, ex-Beatle George Harrison was convicted of plagiarizing the Chiffons' "He's So Fine" when he composed his hit tune "My Sweet Lord." However, the financial penalty was reduced significantly when Harrison was judged to have plagiarized the melody unconsciously, not deliberately.

Table 1 lists some key psychoanalytic constructs that have been revised and reinvented in other areas of psychology. In some cases the researchers who reframed the construct acknowledged its psychoanalytic roots; in other cases they did not. Certain constructs originated more or less exclusively in some variant of psychodynamic theory (e.g., parapraxis); certain constructs had roots in other domains as well (e.g., object representation).

As Table 1 shows, these co-opted constructs represent a broad range of psychological domains, from memory and motivation to personality and psychopathology. They come from every one of psychology's major subfields: clinical, social, developmental, cognitive, and physiological. Though not every reinvented construct is operationally defined in precisely the same way as the initial Freudian construct it reflects, perusal of the initial and later sources confirms considerable conceptual overlap for each of these constructs.

Step 2: Constructing an Empirical Base

The second step in the co-opting process involves studying the rediscovered concept empirically, using the measures and methods of the discipline that co-opted it. Over time, this research typically yields valuable new information regarding the concept in question—information that might not have been obtained had the concept remained solely within the psychoanalytic canon. Thus, it is not surprising that in mainstream psychology, the articles in the right column of Table 1 tend to be more widely known (and more frequently cited) than the original Freudian sources.

The evolution of "implicit memory" illustrates this aspect of the co-opting process. Although unconscious (or repressed) memories were central in much of Freud's work, the psychoanalytic concept of unconscious memory was only loosely defined, and much of the early research testing the psychoanalytic model of unconscious memory was methodologically flawed (Erdelyi, 1985; Holmes, 1990). Since the publication of Schacter's seminal (1987) article, however, hundreds of studies and conceptual critiques have been published on this topic. The broad empirical base created by these analyses has increased substantially our understanding of unconscious/implicit memory. Certain psychoanalytic hypotheses have proven to be incorrect (Bornstein, 1993; Brenneis, 2000); others are reasonably well supported (Bowers & Farvolden, 1996; Williams, 1995).

Table 1

Revisions and Reinventions of Psychoanalytic Concepts

Psychoanalytic concept[a]	Revision or reinvention
Unconscious memory (1900/1953a)	Implicit memory (Schacter, 1987)
Primary process thought (1900/1953a)	Spreading activation (Collins & Loftus, 1975)
Object representation (1905/1953b)	Person schema (Neisser, 1976)
Repression (1910/1957a)	Cognitive avoidance (Beck, 1976)
Preconscious processing (1915/1957b)	Preattentive processing (Treisman, 1969)
Parapraxis (1916/1963)	Retrieval error (Tulving, 1983)
Abreaction (1916/1963)	Redintegration (Bower & Glass, 1976)
Repetition compulsion (1920/1955)	Nuclear script (Tomkins, 1979)
Ego (1923/1961)	Central executive (Baddeley, 1992)
Ego defense (1926/1959)	Defensive attribution (Lerner & Miller, 1978)

[a]Original Freudian sources are identified by year of original publication and then date of corresponding Hogarth Press *Standard Edition* volume.

Step 3: Acknowledgment of Parallels/Reintegration

The third step in the co-opting process occurs when enough new information has accumulated that the co-opting discipline assumes full ownership of the construct in question, which is now more or less completely divorced from its psychoanalytic roots. At this point, one or more researchers may identify important parallels between the newfound concept and the earlier psychoanalytic construct from which it was derived, noting (with some amusement) that Freud speculated about this issue way back when—and some of his hypotheses actually have been supported by recent empirical studies!

Once these parallels have been identified, the stage is set for the concept to be reintegrated with psychoanalytic theory—fleshed out, refined, and reframed to fit with prevailing psychoanalytic language. The concept remains a part of the discipline that co-opted it, but a new connection is forged between that discipline and psychoanalysis (see, e.g., Weinberger, Siegel, & Decamello, 2000). Reintegration is often a long time coming (and for some co-opted constructs it may never happen at all). Note, however, that in the context of postmodern constructivist science, the narrative has effectively been rewritten, and in most cases there is no going back: Whatever historical roots this idea might have had, it is now the intellectual property of the discipline that co-opted it.

Again, recent work on implicit memory is illustrative. Initial studies in this area emphasized difficulties with the psychoanalytic model (e.g., tautological features of the traditional Freudian conceptualization of repressed memory; see Holmes, 1990; Kihlstrom, 1987; Roediger, 1990). As research continued, parallels between the psychodynamic and information-processing models of memory became increasingly clear, ultimately leading to some tentative efforts at reintegration (Bornstein, 1999b; Bucci, 1997; Epstein, 1994; Weinberger, 2000). However far this reintegration process proceeds, it seems likely that the concept of implicit memory will remain a part of cognitive psychology, with psychoanalytic work on unconscious memory relegated to historical footnote status in the minds of most researchers.

Reconnecting Psychoanalysis: From Periphery to Mainstream

Psychoanalysis is rich with ideas, but its empirical methods are limited in scope and rigor (Bornstein & Masling, 2002; Fisher & Greenberg, 1996). Mainstream academic psychology emphasizes rigorous empirical testing and verification, but oftentimes this rigor has a stultifying effect on the generation and acceptance of novel concepts (Bornstein, 1999a; Wertz, 1995). Academic psychology has enriched itself by co-opting psychoanalytic constructs and testing them rigorously. The time has come for psychoanalysis to enrich itself by adapting cutting-edge empirical methods from other areas of psychology and using these methods to validate and refine psychodynamic ideas.

Using nomothetic procedures to test psychoanalytic concepts is easier said than done. Just as resistance to psychoanalytic theory pervades the larger scientific community (Westen, 1998), resistance to nonpsychoanalytic research techniques is widespread among psychoanalysts (Bornstein, 2001). It is ironic (to say the least) that these contrasting forms of resistance have led psychologists in both camps to the same erroneous conclusion: The belief that psychoanalytic concepts cannot be studied empirically using traditional research methods.

Consider a recent passage from a leading undergraduate textbook in abnormal psychology:

> A major criticism of psychoanalysis is that it is basically unscientific. . . . There has been no careful measurement of any of these psychological phenomena, and no obvious way to prove or disprove the basic hypotheses of psychoanalysis. (Barlow & Durand, 2005, p. 21)

Contrast this with an assertion by a leading psychoanalytic theorist:

> Handing over ultimate authority on psychoanalytic ideas to empirical verification . . . is a mistake. It gives too much away. We have a perfect right to claim validity (the nonstatistical sort) for our ideas because they are grounded in rigorous thinking and continually cross-checked with clinical experience. (Mitchell, 2000, pp. 158–159)

The first quotation is demonstrably incorrect: Contrary to the assertions of Barlow and Durand (2005), it is possible to define operationally and study empirically virtually any psychoanalytic construct, regardless of whether that construct originated in drive theory, ego psychology, object relations theory, or self psychology. Operationalizing and testing psychodynamic concepts is challenging, but it has been accomplished successfully thousands of times (see Barron, Eagle, & Wolitzky, 1992; Fisher & Greenberg, 1996; Masling & Schwartz, 1979; and Westen, 1998, for reviews).

The second quotation is incorrect as well (see Masling, 2003, for a contrasting position). Contrary to the assertions of Mitchell (2000), rigorous thinking and clinical experience can never compensate for the absence of scientific data (the statistical sort). The unavoidable perceptual and information-processing biases of observers (including clinicians) have been amply documented (Bowers & Meichenbaum, 1984; Gilovich, 1991; Nisbett & Wilson, 1977; Uleman & Bargh, 1989). Studies confirm that even when people are made aware of these biases, they continue to occur (Greenwald & Banaji, 1995; Jacoby et al., 1992; Ross & Sicoly, 1979).[4]

In the following sections two broad strategies that can help reconnect psychoanalysis to mainstream psychology are described. The first involves the use of nomothetic research methods to test and refine psychoanalytic concepts; the second emphasizes increased communication of psychoanalytic principles and findings to colleagues, students, and members of the public.

Reconnection Through Research: Epidemiology, Meta-Analysis, and Neuroimaging

Over the years, certain mainstream research methods (e.g., content analysis of audio- and videotaped psychotherapy sessions, observational studies of infant–caregiver interactions, tachistoscopic presentation of subliminal stimuli) have been used to evaluate the validity of psychoanalytic ideas and the efficacy of psychodynamic treatment techniques (see Bornstein & Masling, 1998; Masling & Bornstein, 1996). Continued use of these empirical methods is critical to the long-term growth and well-being of psychoanalysis. In addition, we must utilize more frequently some alternative empirical methods that have rarely been applied to the psychoanalytic context, because these methods hold particular promise in testing and refining the key tenets of psychoanalytic theory.[5]

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[4]An important ethical issue emerges here as well: As long as psychoanalysis is used to treat mental disorders, a paucity of nomothetic research evidence violates the American Psychological Association's (2002) *Ethical Principles*. Principle 2.04 (Bases for Scientific and Professional Judgments) is particularly germane to this issue.

[5]These are not the only underutilized research methods that hold promise for psychoanalysis. Other potentially useful methods include neural and artificial intelligence simulations, mathematical modeling techniques, and regression analyses (statistical, not psychosexual).

Epidemiological Studies

Originally developed to identify population-wide risk factors for illness and disease, in recent years epidemiological techniques have been used with increasing frequency in health psychology and psychopathology (e.g., Kessler, McGonagle, Zhao, & Nelson, 1994). Though correlational, epidemiological data are amenable to statistical procedures (e.g., path analysis) that allow strong conclusions to be drawn regarding biological, behavioral, and environmental influences on physical and psychological pathology (Kendler, MacLean, & Neale, 1991). By identifying those variables that—alone or in combination—predict illness risk, epidemiological techniques allow for rigorous evaluation of diathesis–stress models of psychopathology.

Although most epidemiological studies of psychopathology risk have focused on categories from the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 1994), these techniques can easily be applied to forms of pathology unique to psychoanalytic theory (e.g., introjective depression). They can be used to assess (a) prevalence rates of risk factors presumed to produce these disorders in various segments of the population (e.g., overemphasis on individual achievement at the expense of social connectedness) and (b) comorbid traits and experiences (e.g., perfectionism, stressful life events) that are presumed to exacerbate these underlying risk factors (see Zuroff, Mongrain, & Santor, 2004).

Just as epidemiological methods can be used to predict the development of specific forms of pathology, they can (with some modification) be used to predict the developmental trajectory of personality traits, or trait clusters (Rost & Langeheine, 1997). Such investigations use different outcome measures (e.g., questionnaire or projective test responses in lieu of diagnoses), but the overall procedure is quite similar: Potential personality precursors are identified, mediating and moderating variables are measured, and theoretically related personality indices are subsequently (perhaps repeatedly) assessed.

Using this framework, epidemiological methods hold great promise in testing and refining psychoanalytic models of personality and exploring the relationship between family configuration/dynamics and subsequent personality development. Longitudinal follow-up assessments of participants in these studies can help clarify the inter- and intrapersonal precursors and consequences of different personality styles (see Franz, McClelland, & Weinberger, 1991).

Meta-Analytic Investigations

Meta-analytic techniques have a long history in psychology (Rosenthal, 1984), and they have been used in hundreds—perhaps thousands—of investigations to summarize complex sets of research findings and uncover hidden patterns in the literature (Meyer et al., 2001). Meta-analyses have at least two advantages over traditional narrative literature reviews. First, they allow researchers to quantify the magnitude of an experimental effect rather than simply tallying the proportion of studies that yielded statistically significant results. Second, meta-analytic techniques allow researchers to assess the impact of moderating variables on the phenomenon under investigation, even if certain of these variables differed across (rather than within) studies.

Smith and Glass's classic (1977) meta-analysis of psychotherapy effects remains a model for researchers who seek to quantify and contrast the impact of different psychological treatment techniques, and the applicability of meta-analytic methods to the psychoanalytic treatment literature is obvious. Meta-analysis can be used to test theoretical propositions as well. For example, meta-analyses of research using Silverman's

subliminal psychodynamic activation paradigm demonstrated that (a) subliminal message exposures produce significantly stronger effects on behavior than do supraliminal exposures of identical messages (Bornstein, 1990) and that (b) only those subliminal psychodynamic activation messages with drive-related content produce reliable behavior change (Hardaway, 1990). In an entirely different context, meta-analysis of the literature on interpersonal dependency revealed that—contrary to clinical lore—men actually have significantly higher dependency levels than women do, but only when dependency is assessed via projective measures with low face validity (Bornstein, 1995).

At another level, meta-analytic techniques can be used to assess the state of the discipline. Thus, a recent analysis of published psychoanalytic research showed that when investigators examine women and men within the same study, significantly stronger experimental results are obtained for men than women. When the behavior of men and women is compared across (rather than within) studies, comparable results are produced by women and men (Masling, Bornstein, Fishman, & Davila, 2002). Apparently, the degree to which psychoanalytic theory can predict the behavior of women and men is in part a function of the way studies are designed and gender differences assessed.

Neuroimaging Techniques

Although they use a wide range of procedures for constructing brain images, neuroimaging techniques share the common goal of linking neural activity to psychological activity (e.g., emotion, thought, motivation; see Becker & Mueller, 1998; Buchel & Friston, 2000). Among the most promising neuroimaging techniques for psychoanalytic research are (a) the positron emission tomography (PET) scan (which measures brain activity by tracking differential uptake of a radioactively tagged substance in various brain regions) and (b) the functional magnetic resonance imaging (functional MRI) technique (which uses low-frequency energy to alter neural activity at the molecular level and produce mathematically reconstructed real-time "snapshots" of brain tissue). Both techniques are most useful in linking functional brain changes to ongoing psychological processes (e.g., memory retrieval, verbalization of affect-laden material).

Neuroimaging techniques are already being used to contrast the patterns of cortical activity associated with conscious versus unconscious perception, memory, thought, and motivation (e.g., Rausch et al., 1996; Whalen et al., 1998). Only some of these studies are designed specifically to test psychodynamic models of the unconscious, but all have important implications for psychoanalysis (see LeDoux, 1996; Slipp, 2000; Zabarenko, 2004). Other neuroimaging investigations have demonstrated that different cortical activation patterns are associated with genuine and confabulated memories (Schacter & Curran, 1995). Aside from the potential applications of these results in forensic settings, such findings may eventually enable psychoanalysts to distinguish genuine memories from false (or "screen") memories within the analytic setting.

Such in vivo applications of PET and fMRI technology are not yet feasible, but there is every reason to expect that they will be in the future. When these assessment methods become less intrusive (and less expensive), they will have profound empirical and clinical implications. Perhaps neuroimaging technology will enable psychoanalytic researchers to contrast the patterns of cortical activation associated with realistic versus fantasy-based perceptions of the therapist, providing a real-time neural index of transference. Perhaps researchers will link unique patterns of cortical excitation with specific defense clusters, enabling analysts to validate their inference that a patient was using a particular defensive strategy within the analytic session.

Reconnection Through Advocacy: Colleagues, Students, and Members of the Public

By themselves, rigorous nomothetic research studies are not enough: Such studies are *necessary* to build a firm empirical foundation for 21st-century psychoanalysis, but they are not *sufficient* to prevent the continued co-opting of psychoanalytic ideas. To inhibit (and perhaps even reverse) the co-opting process, research must be coupled with advocacy—communication of psychoanalytic concepts and findings to colleagues, students, and members of the public. In the following sections I outline strategies in each of these areas.

Colleagues

As Malcolm (1980) noted more than two decades ago, psychoanalysts interact primarily with each other. The situation has not changed appreciably in recent years, and as a result our most interesting ideas and findings often go unnoticed by those outside the psychoanalytic community (Bornstein, 2001). Educating our professional colleagues regarding the contributions of psychoanalysis to psychological science and clinical practice requires that we overcome our long-standing practice of presenting psychoanalytic research primarily at psychoanalytic meetings and publishing this research almost exclusively in psychoanalytic journals. To maintain our rich psychoanalytic heritage we should continue to do both of these things, but it is also important that we look outward, translating our ideas and findings into the language of mainstream psychology. Only when psychoanalytic psychologists present their best empirical work at nonanalytic conferences and publish more of this work in journals with sizable nonpsychodynamic readerships will colleagues outside psychoanalysis be exposed to these data.

Peer review is another venue through which we may inform and influence our colleagues. When assessing manuscripts submitted to nonanalytic journals, it is important to point out those instances where an idea or finding originated in psychoanalysis but this attribution is not acknowledged. The same is true when evaluating institutional, foundational, and federal grant proposals, and when reviewing textbook chapters and book proposals. The antipsychoanalytic bias that pervades many undergraduate and graduate texts has been well documented (see Bornstein, 1988; Hogan, 1994), and it is almost certain to continue unless psychoanalytic psychologists become more involved in this aspect of the review process.[6]

Educating colleagues need not take place only in formal contexts but can occur in informal settings as well. Mentoring is key: Unless they hear otherwise, many younger psychologists—especially those who have been trained during the current cognitive era—begin their careers convinced that psychoanalytic concepts have been relegated to the ash heap of psychological history. Providing feedback to nonanalytic colleagues regarding drafts of manuscripts represents yet another informal venue through which we can point out the psychodynamic roots of modern psychological concepts, correct unsubstantiated assertions, and help create a more accurate historical record of psychoanalytic theory's influence.

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[6]Becoming a reviewer of textbook chapters and book proposals is not as difficult as one might imagine. Because honoraria for reviewing chapters and book proposals are meager (usually between $100 and $200 for the better part of a day's work), publishers are always interested in adding new reviewers to their lists. It is a pro bono endeavor, to be sure, but one that can potentially have far-reaching effects.

Students

The classroom offers one of the best opportunities for reclaiming psychoanalytic ideas that have been co-opted by others, and the earlier we begin, the more effective we will be. Reclaiming psychology's psychoanalytic center starts in undergraduate introductory psychology courses, where psychoanalytic principles can be used as an overarching framework to link ostensibly unrelated concepts and ideas. I have used this strategy for nearly 20 years, and it is straightforward: I present a small number of key psychoanalytic principles early in the course, usually at the first class meeting; these principles are then revisited periodically throughout the semester, in the context of different issues. Two principles work especially well because they are inherently intriguing to students:

Principle 1: All psychological processes are active processes.

Principle 2: The vast majority of mental activity occurs outside awareness.

Note that Principle 1 is essentially a variant of *psychic causality;* Principle 2 is a more general statement of *primacy of the unconscious*. I deliberately introduce these ideas without labeling them as psychoanalytic, and as we make our way through physiological psychology, sensation and perception, learning and memory, and other basic topics, I point out how these principles hold true with respect to a broad array of psychological theories and findings. By the time we reach the section on personality, during the last third of the course, students are amused (and at least a few are impressed) to discover that the principles we used to understand neurobiology, perception, learning, and other "hard" areas are in fact fundamental Freudian ideas. Not only have the students come to appreciate the value of psychoanalytic thinking, but the stage is set for us to explore the various ways these principles (and others) have been co-opted by researchers in different areas of psychology (see Anderegg, 2004, for a contrasting perspective on use of Freudian ideas in the classroom).

Upper-level undergraduate courses offer a different sort of opportunity to correct students' misconceptions regarding psychoanalysis. The relevance of psychoanalytic theory for personality and abnormal psychology is obvious, but myriad research programs in cognitive, developmental, and social psychology also utilize psychodynamic principles (though not all acknowledge these principles' psychoanalytic underpinnings). Table 2 lists 30 concepts from cognitive, developmental, and social psychology that overlap substantially with one or more psychoanalytic constructs. Unlike the concepts in Table 1, these are not ideas that have been co-opted by researchers outside of psychoanalysis but instead represent points of connection that allow for an in-depth consideration of psychoanalytic influences on neighboring psychological subfields.

Graduate courses offer a third venue through which psychodynamics can be made relevant in the classroom. In addition to the connections that can be made in graduate developmental, social, and cognitive classes (see Table 2), there are numerous opportunities to develop these connections when teaching courses on assessment (especially projective testing; see Lerner, 1990), diagnosis (Shedler & Westen, 2004), psychotherapy (Luborsky & Crits-Christoph, 1990), and even community-based interventions (Pyszczynski, Solomon, & Greenberg, 2003).

Members of the Public

Although many mental health professionals feel awkward interacting with the media, this is a critical avenue for reconnecting psychoanalysis with mainstream psychology. Members of the public (including health care consumers as well as high school and college

Table 2

Psychoanalytic Touchpoints in Cognitive, Developmental, and Social Psychology

Topic area	Psychodynamically relevant concepts
Cognitive	Automaticity
	False memory syndrome
	Hindsight bias
	Illusions of memory
	Implicit learning
	Intrusion errors
	Selective attention
	Schemas
	Source amnesia
	Tip-of-the-tongue phenomenon
Developmental	Adolescent egocentrism
	Attachment theory
	Emotional regulation
	Family structure
	Generativity
	Identification
	Intimacy
	Play
	Separation anxiety
	Sibling relationships
Social	Aggression
	Attributional bias
	Deindividuation
	False consensus effect
	Illusion of control
	Implicit attitudes
	Implicit motivation
	Self-discrepancies
	Self-esteem
	Social projection

Note. Useful information on these topics may be found in Aronson (1999), Bornstein and Masling (1998), Bucci (1997), Epstein (1994), Fazio and Olson (2003), Greenwald and Banaji (1995), Martin and Rumelhart (1999), Parke (2004), Steinberg (2001), and Westen (1998).

students making important career decisions) get much of their information regarding psychological science and mental health practice from print, radio, and TV media. Though advocacy of psychoanalytic ideas through mainstream media outlets may seem inconsistent with our history and professional identity, make no mistake: If we do not make ourselves available to speak with reporters and science writers, our behavioral, cognitive, and biologically oriented colleagues will be happy to speak in our stead.

Providing useful information to the media requires a different approach than we typically use when interacting with colleagues and students (see Wade, 1992). Most reporters do not deal well with nuance and ambiguity; brief, straightforward synopses of scientific findings and treatment advances are required. Unlike most of our professional activities, media responses must usually be immediate; there is no time to ponder or research an issue. Even a delay of a few hours—sometimes less—can render an opinion obsolete. Fortunately, a number of helpful guides are available for psychologists who want

to interact with members of the media (e.g., Merlis, 2003), and these resources provide detailed advice regarding effective strategies (and pitfalls to avoid).

Beyond learning to speak in sound bites, there is a more personal, emotional challenge in working with the media: It often brings forth a variant of the *imposter phenomenon*—the disquieting feeling common among professionals that despite external evidence of success, they are less competent, confident, and skilled than their colleagues (Leary, Patton, Orlando, & Funk, 2000). Media inquiries sometimes elicit a reflexive internal response characteristic of the imposter phenomenon: Who am I (we ask ourselves) to present myself as an expert?

This reaction is expectable, and some studies suggest it is actually a sign of healthy self-scrutiny and self-awareness (Henning, Ey, & Shaw, 1998). But given the paucity of depth and detail in most mass media mental health pieces, the modest amount of material likely to be quoted from one person (two or three sentences at most), and the questionable credentials of many who currently present themselves as figures of authority in the mental health arena, it is surprising how much expertise one really has. Psychoanalytic psychologists with media experience should not only make themselves available when opportunities emerge but also consider presenting media workshops at psychoanalytic conferences so the pool of media-savvy psychodynamic psychologists will increase.[7]

Conclusion

When neuropsychological assessment techniques become central to the testing and verification of psychoanalytic ideas, we will have come full circle. Freud's first outlines of psychoanalysis were derived from biological principles as well as psychological ones (e.g., Freud, 1895/1966), and much of his early drive model was framed in the language of 19th-century physiology (Gay, 1988; Greenberg & Mitchell, 1983). The post-Freudian evolution of psychoanalysis has been characterized by an increasing emphasis on psychological processes, with decreasing attention to biology (cf. Panksepp, 2000; Slavin & Kriegman, 1992; Winson, 1985). As neuroimaging and other physiological measurement strategies move from research laboratory to consulting room, the stage will be set for a renewal of Freud's dream: the creation of a psychoanalysis that integrates biological and psychological principles into a unified theory of human mental life.

It is ironic (to say the least) that a key tenet of psychoanalysis—the primacy of subjective narrative truth—has been used by other researchers to co-opt psychoanalytic ideas at the same time as they criticize them. Postmodern science offers numerous opportunities for reconnecting psychoanalysis with mainstream psychology, and writing a more accurate psychoanalytic narrative during the coming years. To do this effectively, we must reclaim those ideas that have been co-opted by other disciplines at the same time that we reach out to these very same disciplines for empirical inspiration. We must communicate our most interesting concepts and findings to various constituencies outside the psychoanalytic community so that the psychodynamic underpinnings of scientific and clinical psychology become widely known. Unless we do both of these things, we may

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[7]Those of us in academia can gain access to media through public relations and communications offices; most institutions maintain a list of faculty members and their areas of expertise. Many professional societies (e.g., the American Psychological Association, American Psychiatric Association, American Psychoanalytic Association) have media offices as well, staffed by people who have established relationships with members of the media; Division 39 has a Public Information Committee whose members can facilitate this type of outreach.

find that—unlike the journals and textbooks of the latter half of the 20th century—the journals and textbooks of the late 21st century no longer criticize psychoanalysis. Instead they might not mention it at all.

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