

Symposium on Roberto Unger's *Politics*

**Psychiatry as Scientific Humanism:
A Program Inspired by Roberto Unger's *Passion***

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I. INTRODUCTION

A funny thing happened on the way to *Politics*: feeling the need for nothing less than a new theory of the human personality, Roberto Mangabeira Unger wrote a book called *Passion*. This glorious aside -- some 300 pages in length -- is full of the great essayist's wisdom and grace. I read it with a paradoxical combination of admiration and frustration.

The wide-ranging discourse of *Passion* culminates in a detailed and trenchant critique of contemporary psychiatry. *Passion's* concluding chapter, "A Program for Late Twentieth-Century Psychiatry," was presented as an invited address to the American Psychiatric Association in 1980 and published in the *American Journal of Psychiatry* in 1982. Unger's Program was brought to my attention in 1984 by my colleagues in the New Psychiatry Seminar, a quasirevolutionary group of Young Turks that was wrestling with the same issues Unger had so skillfully pinioned.

In his Program, Unger promised that his *Passion* would provide a sketch for a new individual psychology that might at

once replace the failing constructs of psychiatry (psychoanalysis) and serve as a building block for the social assumptions of *Politics*.

In this Essay, I hope to convey some of my own critical doubts about the validity and utility of this hybrid agenda and voice some fears that Unger's vision of reality and his rhetorical style aroused. I also offer here some ideas, which were inspired by my reading of *Passion*, for the remaking of psychiatry.

To sum up my position at the outset, I believe that Unger's overall analysis of the current problems of psychiatry is correct: Psychoanalysis *is* out of gas, and biological psychiatry *is not yet* up to speed. As a field in crisis, psychiatry is ripe for change. Into the breach walks Unger with his *Passion*. As a means of filling the gap between psychiatry's decadent psychology and its immature biology, I find Unger's theory of personality both irresistibly compelling and hopelessly inadequate. In praising Unger's direct and lucid style, his freedom from technical jargon, his skepticism about psychiatric pseudoscience, I support *Passion's* endorsement of a dynamic model of

human possibilities. By enumerating *Passion's* scientific inadequacies, I hope to fill a few of the gaps, or at least to outline, more specifically than Unger has done, a programmatic approach to filling them. Thus, I hope to remain both friend and ally to Unger in what I take to be a joint intellectual endeavor.

I begin in part II with a critical overview of the psychological theory in *Passion*. I show why I believe that Unger's theory, while substantially true and eloquently espoused, is not likely to be effective as a humanistic exhortation to professional psychologists, and why I believe it to be categorically inadequate as a scientific base for the study of behavior.

In part III, I present my own view of the intellectual agenda that confronts a New Psychiatry. I develop a much more positive and optimistic appraisal of the prospects of biology than Unger adopts. I also show that many of the psychological assumptions of *Passion* may be evaluated by comparison with already existing biological data. Some are flatly wrong; many others are questionable; and all are in need of quantitative measurement. Only in this way can Unger's psychology advance from a set of slogans to testable hypotheses.

Turning to the need for a new psychology, I articulate in part IV my own Credo for a scientific humanism that attempts to integrate the broadly humanistic spirit of Unger's approach with the operationalism of modern science. The goal of this part is to show that bold propositions such as Unger's need to be considered as hypotheses seeking verification rather than as a priori truths, the credibility of which

rests upon emotional appeal and vivid articulation.

Feeling as strongly as Unger does about the pressing need for reform, I conclude in part V with a Manifesto for a New Psychiatry, a call to arms should the proposed Agenda and Credo fail to be adopted. I confess that two scenarios are more likely than the one I propose. One is a conservative retrenchment of both psychoanalysis and biological psychiatry resulting in a continuing cold war; the other is a gradual drift toward utilitarianism forced by economic stagnation, and a resulting vitiation of both scientific and humanistic programs.

II. A CRITIQUE OF UNGER'S *PASSION*

In his "Essay on Personality," Roberto Unger develops a view of man based upon the presumed universality of "our desire to be accepted by one another and to become, through this acceptance, freer to reinvent ourselves." n2 A key assumption is that each individual's identity is continuously changed by interaction with others. This tenet runs strongly counter to the deterministic views of Freud and implicitly denies the priority of either heredity or early experience, with their attendant historical fatalism.

Flying in the face of strong clinical and experimental evidence, this denial will immediately dismay many reasonable practitioners and scientists. In this respect, Unger is typical of liberal architects of social change in denying the power of strong biological forces: the genes that color our skin for life; the hormones that change our brain-minds from month to month; and the powerful

early experiences that shape those highly conservative interpersonal bonds that mark our social interactions forever.

In advancing a utopian or revolutionary social program, it is not necessary for the humanist to deny the data of Gregor Mendel, John Bowlby, n3 and E. O. Wilson. n4 There is plenty of room for a dynamic environmentalism within the biological tradition that Unger discounts or ignores. In thus castigating Unger for his highhandedness with regard to some of my own intellectual heroes, I join forces with scholarly critics who wish that *Passion* had been better documented and that it had specified and discussed its inspirational sources. n5

As a natural scientist, I also wish that *Passion* had presented and discussed *evidence*, rather than relying exclusively upon rhetorical argument. I quickly become both weary and wary of rhetoric: weary because its generalizations create a thirst for concrete examples; wary because its uncritical urgency creates a sense of dictatorial oppression.

Unger's *substantive* aim, to "restat[e] . . . the Christian-romantic image of man," n6 is both appealing -- because I *am* a Christian-romantic -- and appalling -- because I am *also* a Jew, an atheist, a skeptic, and a hard-headed scientist. Surely Unger does not want to exclude these pluralistic parts of modern man from his neo-Christian sect.

I welcome Unger's *methodological* aim - - to reconceive the attribution of normative force to conceptions of personality and society. But this task is quite inconceivable without quantification. Not only are his intellectual progenitors unnamed, there

are also no numbers to substantiate his pronouncements! Surely Unger does not wish to exclude statisticians from his modernist workshop.

In sum, Unger's scholasticism invokes specters of medieval rationalism that allow too easy a dismissal of his most salient messages. For example, Unger asserts that "there might be nothing to which the idea of a fundamental human identity could refer," n7 and adds that "a common identity . . . could not be reduced to strong but indeterminate biological constraints, nor to precise but trivial cultural traits." n8 Might our common identity not be our brain-mind? With its capabilities of reflection, feeling, and invention, the brain-mind strongly determines our states, the traits of which include the very openness that Unger extols. Our openness is itself determined: we are determined to be free. Unger thus can look to modern neurobiology and to cognitive science for key building blocks of his theory.

As to "precise but trivial cultural traits," n9 are we, as a set of brain-minds, also not subject to determinate constraints on our collective state of mind? Thus, while it may be true that "all contexts can be broken," n10 the state-space of all possible social contexts itself may be bounded by the limits of our brain-minds. And those context shifts that do occur also may be subject to strongly probabilistic sequences.

Sociobiology, that *bete noir* of so many liberal intellectuals, must be as useful to an assessment of the degree to which sociocultural forces are derivative of (and reducible to) biology as it is to an estimation of the limits of any utopian state-space. There must be an analogy --

in the realm of dialectic -- to the laws of competition and survival in field biology. Is it Marxism? No, Unger rejects that dogma as emphatically as he does Freudian determinism. I agree with both these indictments. The New Psychiatry, like the New Politics, must move beyond these limits.

If not Freud, if not Marx, then who is our theoretical guru? Why *not* E. O. Wilson? Do we envisage a kind of Social Darwinism that sees the brain-mind as the analog of the mutant gene? If so, it might be tempting to assume that all we need do is foster mutation -- that is, change our minds. But of course most genetic mutations are nonadaptive. Indeed, most mutations probably are useless if they are only harmless oddities. But some mutations lead to disease and some are even lethal. The limits are set by the fit between the organism's new biochemical capability and its environmental realities.

Unger's analysis of the problems of contextuality is offered in place of an answer to these mechanistic questions. He states that the unlimited quality of mutual dependence and jeopardy leads to the "problem of solidarity."¹¹ According to Unger, an unlimited need (dependency?) and an unlimited danger (vulnerability?) make accommodation to community so difficult.

Why declare that our need is "unlimited"? This hyperbolic adjective implies infinity, and so echoes Freud's concept of "boundless" narcissism. How do we know that this need is not narrowly and specifically bounded? For the utopian social theorist -- who is going to make practical decisions regarding such social entities as day care

centers -- it would seem essential to assume that human needs can be specified, measured, and met. By assuming unlimited need, Unger excuses in advance the failure of such practical schemes.

And why should vulnerability likewise be dubbed "unlimited"? Surely there are conditions that reduce, eliminate, or even invert vulnerability. A behaviorist might say that acts which generate positive feedback will reduce anxiety and discomfort. Unger claims that in the interpersonal domain such acts are due to the generosity that naturally springs from empowerment. This paradigm is reducible to a positive reinforcement learning model. So is Unger a Skinnerian? Yes and no. He shares Skinner's naive utopianism, but he does not acknowledge the existence and power of those punitive structures that seem quickly to emerge when visionary schemes like Unger's become real politics. It is not unusual under such circumstances for the newly empowered to eradicate the intelligensia! Like Skinner, Unger is an extreme environmentalist for whom the human head is but a black box to be programmed at will by the benevolent social engineer.

On further contemplating Unger's vulnerability tenet, a modern psychologist might think of the Freudian concept of defense and its revision by neo-Freudians like Elvin Semrad and George Vaillant. As antidotes to vulnerability there are healthy defenses like sublimation and humor, neurotic defenses like hypochondriasis and conversion, and psychotic defenses like denial and projection. According to this scheme, Unger's vision thus would seem

to range all the way from the healthy (sublimation) to the unhealthy (denial).

Unger's reading of the modernist account of reality thus strikes me as overly relativistic. Is there really no unconditional context? Are there no absolute physical limits on an organism's real and potential adaptive capability? Or is Unger's social gene *infinitely* creative? If Unger's hyperbole is rhetorical -- that is, he doesn't *really* mean *infinitely* -- then how do we know where Ungerian rhetoric leaves off and Ungerian naturalism begins? Scientific naturalism, which I espouse, recognizes interactionism, as Unger would like, but attempts to measure its terms (the interactants) and to model its modes (the interactions). This classical approach, which Unger decries as absolutist, leads ultimately to mathematical models and to the recognition of "higher order principles and rules," which Unger's extreme contextualism denies. But as I will point out in my own agenda for a New Psychiatry, n12 it is precisely a principled approach which is most likely to advance the biological program of psychiatry in parallel with advances in its psychology.

The world that Unger promotes does not appear either to acknowledge or to respect the absolute limits imposed upon the organism by physical reality. It thus ignores the power of scientific analysis that is such an important part of any accurate representation of the "modernist view of man." Unger is, sad to say, a scientific ostrich.

Consider *Passion's* conception of our place in nature and examine the syllogism that links its three types of order: constraint, coordination, and

emancipation. A problem arises in Unger's choice of the term "emancipation," n13 with its implied capacity "to *override* the influence of the constraints." n14 At the physical level of the analogy, emancipation is not the right word because the organism is absolutely constrained by both the limits of its genome and the limits of its physical environment. Recognizing these limits still allows for virtually infinite freedom (via recombination), but it does not allow for *transcendence*. I would substitute a more moderate word for emancipation, such as "creativity," "invention," or "experimentation." These processes do not override (transcend) physical reality; they lead to understanding, to control, and even to imitative replication of its creative processes.

In a naturalistic world view, the psychological and social levels of the analogy will be bound by the same constraints. Unger recognizes that these domains -- in their complexity -- will be less amenable than even biology to reductionist analysis. The failure of the reductionist strategy poses an ever-present danger: the mystical celebration of complexity that is, I fear, religion. Insofar as Unger's neo-Christian-romantic vision endorses mysticism, I reject it.

In the religious world view the mind is not constrained by the body. Although this view cannot be disproved, most modern scientists consider it untenable. No evidence supports it. The social equivalent of this view is a world of human beings living in the bliss of perfectly harmonious love. This view cannot be disproved either, and, because it is in some ways desirable, I am less

sure that it is wrong. But I am skeptical of this view because, as Unger points out, material scarcity does exist, and it is likely to increase. This will increase competition for food supplies and -- short of the universal adoption of Gandhi-like abstinence -- will lead to conflict, of which there is, anyway, no sign of abatement in the world.

I do not say that war is inevitable. Nor do I deny that mental life and social life have *virtually* infinite degrees of innovative freedom. But I am convinced that a natural context for life and for human discourse does exist. In fact, I believe that such a natural context for life is increasingly evident and well known. For me, biology already provides the theoretical and empirical basis of a naturalistic world view that recognizes interactionism and the dynamic interplay of freedom and restraint. Life processes are thus *both* boundless (via recombination of materials) and absolutely limited (via material laws). So too are mental and social processes. To foster creativity and growth we do not need to open the door either to spiritualism or to psychosis. While such mental experiments are naturally determined, in the long run they are likely to be lethal cognitive mutants.

III. AN AGENDA FOR A NEW PSYCHIATRY n15

Unger and I most strongly agree on the priority that psychology should receive in any revisionist agenda for psychiatry. And we further agree that psychology should be reformulated in humanistic terms that recognize both needs and vulnerabilities. But, while I would build such a psychology *up* from my lowly

base in biological science, Unger would build it *down* from his lofty perch in sociopolitical theory.

A. *Why a New Psychiatry?*

The bankruptcy of the old psychology is increasingly evident. Psychoanalysis simply has been unable to maintain credibility as a central, unifying theory for psychiatry. The institutional isolation, the protectionist orientation toward texts, procedures, and rules, and the drift away from biology and toward hermeneutics all contribute to its impending failure. n16

If it is to succeed, the New Psychiatry must either reconcile psychoanalysis with modern science or create a new general theory to replace psychoanalysis. If this is impossible, we must recognize clearly our inability to do either while defining profitable areas of inquiry that are potentially integral to an emerging synthesis.

At a more practical level, the institutional function of psychoanalysis also must be replaced so that the psychological progress of the New Psychiatry has a university-based forum for its theoreticians and practitioners. n17

The current instability presents the opportunity for sweeping revision of psychoanalytic theory. This revision will require institutional recognition of flux and support for those who seek alternative ideas and approaches. I believe that the university, which originally excluded Freud and psychoanalysis (and later was excluded by him and his institutionalized followers), should play a more open,

aggressive, and affirmative leadership role at the post-graduate level, as well as in appropriately revised medical student and resident psychiatry education programs.

The elements of a change toward a New Psychiatry already are visible. Specific critiques recently have emerged that constitute frontal assaults on psychoanalysis. The response to these challenges has been weak and ineffectual.

In the area of historical study we have seen the appearance of Jeffrey Masson's book, *The Assault on Truth: Freud's Suppression of the Seduction Theory*, n18 with its flood of revelations regarding the behavior of past and present psychoanalysts. n19 No amount of *ad hominem* argument can vitiate the impact of Masson's historical thesis; it joins an impressive array of modern empirical studies indicating that what really happened to people in childhood really matters to their psychology and behavior as adults. Modern evidence regarding the traumas of incest and abuse support Masson's claim that Freud's abandonment of the seduction theory was not only politically slick, but scientifically unjustified. This conclusion resonates with the New Psychiatry's emphasis upon ethology, learning theory, and naturalistic studies of behavior. And it argues -- from an environmentalist perspective -- against Unger's idea that we are absolutely free to reinvent ourselves.

I await with interest the publication of Peter Swale's book on what really happened to Freud's patients after treatment, anticipating -- from the preliminary evidence -- at least as much

distortion in describing outcomes as Freud applied to the elaboration of their premorbid histories. Such distortion is foreshadowed by Paul Roazen in his book, *Brother Animal: The Story of Freud and Tausk*, n20 detailing Freud's treatment of his colleague Victor Tausk.

Frederick Crews indicates that we soon can expect more in the tradition of historical demythification initiated by Frank Sulloway. According to Crews' new thesis, Sulloway stopped far short of the conclusions justified by his data. n21 Sulloway's superb *Freud, Biologist of the Mind* n22 is a major watershed in Freud scholarship. As the first study by a professional historian, and the first by a non-Freudian, it provides startling data about Freud's intellectual development and his strategic style.

In the area of philosophy of science, the publication of *The Foundations of Psychoanalysis: A Philosophical Critique* n23 by the professional philosopher of science, Adolf Grunbaum, is another landmark work.

While there have been many previous potshots at the logic and use of evidence in Freud's theorizing, Grunbaum's book constitutes a sustained and thoroughgoing attack on the details of Freud's arguments. It is in the spirit of Michael Sherwood's equally devastating (but largely overlooked) philosophical critique of the influential neo-Freudian Wilfred Bion. n24 But Grunbaum critiques Freud himself, and no fundamental aspect of psychoanalytic theory goes unchallenged.

Grunbaum ridicules the hermeneutic conception in today's psychoanalytic vanguard as muddled, scientifically

untutored, and decadent. He prefers the real Freud. Grunbaum rejects Karl Popper as superficially schooled; Grunbaum further skewers Jurgen Habermas, Paul Ricoeur, and George Klein; he then attacks the psychoanalytic clinical method of investigation as, for the most part, hopelessly unscientific. Grunbaum also shows the theory of repression to be epistemically anemic in its formulation of the psychogenesis of neuroses, slips, and dreams. All three phenomena either are not adequately explained by psychoanalytic theory or have more plausible and verifiable alternative explanations, or both. As a *coup de grace*, Grunbaum's logical razor slashes the central method of free association as incapable of establishing causal connections or yielding probative evidence for the theory's cardinal hypotheses.

A third element of the movement toward a New Psychiatry is the growth of neurobiology and ethology. n25 The fundamental knowledge base relating to the nervous system -- which Freud repeatedly recognized as the ultimate and most highly privileged level of causal explanation -- is increasing exponentially. n26

Since it is generally recognized (even by the devout apostles Ernst Kris and James Strachey) that psychoanalysis derives from neurobiological concepts, we need to update almost every one of Freud's basic assumptions about the brain. n27

A more focused, alternative approach is to derive a dream theory from what we now know of the neurophysiology of sleep. The resulting "Activation Synthesis" hypothesis explains distinctive dream phenomenology

without resort to wish fulfillment, censorship, disguise, protection of sleep, or repression. n28 Since Grunbaum has shown that the psychoanalytic dream theory also is not supported by Freud's own data, one can conservatively claim that a new theory is at least worthy of serious consideration, and that its development (from nonpsychoanalytic data) may constitute a more general model of the way that revision and the construction of any new psychological theory may proceed. This no doubt will be contested by those psychoanalysts who believe that the only valid data is that which they collect in the analytic setting.

The growth of ethology also is especially interesting since it deals with the interaction of instinctual drives (fixed action patterns that are based upon innate releasing mechanisms) and their interaction with environmental factors (the ethologists' "releasing stimuli"). Ethology thus follows the fundamental paradigm of dynamic psychology. John Bowlby's attempt to integrate ethological concepts with those of psychoanalysis are good examples of the sort of moderate progressive thinking that generally has been ignored by psychiatrists. n29 But the psychoanalysts don't like Bowlby's scientism. And the scientists don't like his Freudianism! Perhaps a more polemical and direct approach is required to attract attention to this important area. It is remarkable, for example, how little has come of attempts to develop animal models of depression, especially since the implication of such work is that it is the separation per se, and not ambivalence about the introjected object, that is pathogenic.

Another unexplored ethological lead is Niko Tinbergen's analysis of childhood autism, replete with its suggestions for an experimental treatment program. n30 To date, no young psychiatrist has grasped the opportunity to create a new area of inquiry by opening up the psychiatry/ethology interface. On the other hand, learning theory has been applied successfully to the treatment of autism by Ivor Lovaas. n31

Another interesting area is the growth of information theory, linguistics theory, and systems theory. By information theory, I mean the constellation of disciplines that utilize computer technology to simulate the brain-mind. Artificial intelligence and cognitive psychology intersect at a current hot spot of scientific investigation. Douglas Hofstadter's *Godel, Escher, Bach* n32 is loaded with stimulating and often humorous speculation rooted in sound logic and realistic methodology. Some work has been done in the development of computer models of psychopathology and in computer simulation of psychotherapy. If the major mechanism in therapy is the analysis of transference, it should be possible to simulate it perfectly. If, instead, the process is one of identification with, and modeling of, a real person, then simulation will not work.

The ACT-star model of the mind described by John Anderson in *The Architecture of Cognition* n33 provides a program simulating human thought that clinical and basic scientists can manipulate according to their interests. For example, the model should behave differently when it is less "data driven" (as in dreaming) than when it is input responsive (as in waking). Does it? Can

dreaming be simulated given a suitable database? New models of cognition also predict and explain most slips as simple systems errors, which some have called "cognitive demons." n34 The appealing parsimony of this alternative explanation -- coupled with Grunbaum's critique of the repression hypothesis of slips -- provides another example of how emerging, independent, scientific approaches converge.

Another field that beckons to the young investigator is linguistics, which has been bastardized by Jacques Lacan n35 but eloquently developed and explained by Noam Chomsky. n36 Since words are one of the vehicles of thought and communication, it is surprising that no decent psychiatrist has done scientific work at this important interface.

Politics is a final element leading to the change to a New Psychiatry. Third-party payers increasingly insist on evidence of efficacy and efficiency in psychiatric treatment. They include governmental agencies, which must establish priorities for their limited resources. Even that segment of the public that still can pay its own costs is increasingly well-informed and skeptical regarding psychoanalysis and its offshoot schools of psychotherapy.

B. What Will Be the Character of the New Psychiatry?

As its field boundaries have blurred in the attempt to be all things to all people, psychiatry has become, at worst, a confusion and, at best, a bland smorgasbord of topics. Beyond today's moderate but pallid eclecticism I visualize a more radical and robust integration.

To realize the many tasks of its integrative agenda, the New Psychiatry needs to abandon its quest for magical leadership. John Ratey predicts that nothing less than the "Cannonization of William James" is necessary for the creation of a new synthesis. n37 But we search the horizon in vain for the synthetic intelligence of either a William James or a Walter Cannon, taking only faint comfort in the fact that, since our era provided the intellectual climate that nourished both, it may be capable of fostering the growth of their successors. And since it took James fourteen years to write *The Principles of Psychology* n38 -- which tied together all that was known in 1890 -- it would be wise to begin writing today with the fateful publication date of the year 2000 in mind! Unger's work has the scope and style that are needed; but James' empiricism and Cannon's experimentalism are not evident in *Passion*. We need those scientific qualities as well as Unger's optimism and enthusiasm.

The New Psychiatry also will be characterized by a reunion with biology that is based upon compatibility. The reunion I envision is a back-to-basics stripping down of psychiatric psychology that should go hand-in-hand with renovation of its dynamics. In this respect, I would go much further than Unger, even if I never could hope to be as eloquent as he. In Unger's view, the New Psychiatry's biological program is too weak to fill the void caused by the impending collapse of psychoanalysis. I agree. But I do not agree that Unger's naturalistic psychology is an adequate replacement of psychoanalysis. His view of psychology is as scientifically limited

as his view of biology. As evidence, I note that Unger overlooks cognitive psychology and artificial intelligence as well as ethology. These are the fields upon which psychiatry should rebuild.

The New Psychiatry also will involve the retention and renovation of psychodynamic theory (a new psychoanalysis). What is most exemplary and useful in Unger's psychological approach is its refusal to reduce the human passions (especially love) to the baser derivative elements that may energize, enhance, or be deflected by them (sex, mastery, etc.). Unger's holism is not mere Christian cultism and could inspire the sort of organic and open view of intrapersonal and interpersonal processes that is needed to allow the natural history tradition of biology to speak in the same voice as the analytic tradition in psychology. Were Unger's appealing and rich literary musings on the life of feeling fleshed out with specific examples, the biological ground out of which they arise might even be more clear.

I think, for example, of the relief I experienced when I read Irving Yalom's *Group Psychotherapy*, n39 which seemed both natural and open, compared with the tension inspired by Wilfred Bion's *Experiences in Groups*, n40 which seemed feigned and categorical. The bridge here could come from further study and emulation of Charles Darwin, who, like Herbert Spencer and William James, was both holist and an analytically acute psychologist. n41 If thinkers like George Vaillant could supplement psychoanalytic jargon with constructs more capable of observational verification, n42 our field could become

more than neo-Freudian. Vaillant's natural history approach n43 is a methodological step in the right direction. Prospective, predictive studies using the life-history format are also needed.

The New Psychiatry also will involve the incorporation of learning theory. Learning theory could be integrated more gracefully into our thought if it were seen as less limited than it first appeared on emergence from the pigeon-pecking, black-box paradigm of B. F. Skinner, and less stereotyped than the dog-drooling imagery of its neo-Pavlovian practitioners. The organism is designed to learn, and learn it will. The patient will learn from the therapist at every moment of their interaction; this process includes transference, but it will prove to be but a small part of therapeutic learning. How else could one possibly explain that therapists, not therapies, help patients? In fact, when the therapist variable is removed, the only technique that seems to have any specific utility is behavior therapy -- that is, the learning theory aspect. It is thus the method of choice in the treatment of the phobias, where it is clearly superior to insight-oriented approaches. Even in the difficult area of childhood autism, a simple reinforcement paradigm can be used to teach the mute patient to speak; with speech, comes relationship, and with relationship, comes emotion. Autism thus is dissolved. n44

John Ratey's definition of therapy, the empathic mirroring of states, n45 is teaching by doing in the here and now as much as it is teaching by principled reflection upon the past. Each of us says to the other: "Show me how to be. Show me how to become productive,

successful, and happy." In this sense, Unger is correct to be charismatic. For some, at least, he will be an effective role model. But it is the worst error of demagogues to believe that exhortation alone is enough. We also need diligent and devoted caretakers. *They* are unlikely to be charismatic.

It is both a relief and a profound disappointment to realize that imitative modeling is what personal growth is really all about. It is a relief because the concept is so simple; we need to concern ourselves more with the promotion, by example, of healthy behavior. It is a disappointment because we are not the technically sophisticated psychic engineers we have taken ourselves to be. Here I agree with Unger's maxim: Mutual acceptance makes us freer to reinvent ourselves. But only within certain limits!

For those therapists who must have technical complexity to maintain self-respect, there is the study of the nervous system (behavioral neurobiology), the development of realistic mechanical models of the mind (artificial intelligence), and the design of a new dynamics of identification consonant with simple learning principles (interactive plasticity).

The New Psychiatry also will be characterized by the incorporation of ethology. An area of particular promise, linking interactive plasticity to ethology, is an ethologically oriented developmental psychology. As T. B. Brazelton has shown, n46 clinically relevant integrations abound as Bowlby's attachment concept is examined in field studies. This work continues the work begun by Dorothy Burlingham and Anna

Freud, and continued at Yale University as the Psychoanalytic Study of the Child, but it sheds the bias of that faulty theoretical framework.

The New Psychiatry also will break with narrow determinism of classical psychoanalytic thought by recognizing and working to enhance creativity. As derivatives of the limited, late nineteenth-century picture of the nervous system as reflexive, which has been carried forward in Freud's metapsychology, the mental models we use are overly committed to a closed-loop paradigm, of which the repetition compulsion is the epitome. Here I strongly agree with Unger's emphasis upon openness and our freedom to reinvent ourselves. We now know that the brain-mind is not adequately described as a reflexive system. Rather, it is an open-loop system capable of producing its own energy and its own information. This recognition demands that we address our innate creative capability more positively. Change can occur by adding new repertoires and does not necessarily or primarily involve the eradication of old ones.

It is at least ennobling so to change our view from the psychopathologically oriented position, derived from psychoanalysis, that constituted the early twentieth century "modernist" vision of man. Ironically, the now intellectually conservative psychoanalysis prides itself on a clinical and moral liberalism that its own precepts do not support. Symmetrically, and equally illogically, it fears that the new biology will return psychology to reductionist mechanical models. But the new biology -- with its emphasis on plasticity and creativity -- is a solid scientific base upon which liberal

humanism solidly can stand.

I use the term "naturalistic" to define, centrally, the character of the New Psychiatry in its approach to descriptions of individual and interactive behavior. Certainly there are echoes of naive romantic traditions in this term: the voices of Rousseau, Voltaire, Blake, Wordsworth, Coleridge, and the rest, who basked in the ruddy, mystical afterglow of the political revolution, still can be heard. But it is not only a simple return to pastoral and spiritual innocence that is in the air. It is, rather, a tough-minded, if tenderhearted, advance to a new state of observational resonance with personal reality that late twentieth century psychiatry can make by redeveloping its naturalistic character.

New descriptions and new classifications now can lead to radically new models of the human brain-mind. The renaissance at hand could compare favorably with that which occurred between the fourteenth and seventeenth centuries and produced the polyglot, multidisciplined genius of Shakespeare, Galileo, Michaelangelo, and da Vinci. All were naturalists who used both science and art to create a graceful and timelessly accurate picture of man. Now, for the first time in human history, we can take a naturalistic look at the organ of creativity itself, the human brain-mind.
n47

C. How Can Scholarly Work Create a New Psychiatry?

In this section, I summarize points already made in earlier sections and develop a few themes in detail to show promising directions to specific items in the revisionist agenda.

A first priority must be historical and critical revision of psychoanalytic theory. The revision and critique of Freud's *Project* n48 should be extended. The revision will include scrapping the metapsychology (already conceded by all but the diehards) and will proceed to the topographic and dynamic aspects of theory. For example, the March 1985 Gifford Conference in St. Andrews, Scotland, was a concatenation of historical, neurobiological, and philosophical criticism. n49 Hopefully, those that are still within the citadel will hear the clamor outside and decide against merely letting them (us) eat cake.

Scholarly work also must strive toward further demythification. Like the cult of personality, the self-styling of genius is hazardous. Those who live by polemics often die by polemics. I hope this will not be Unger's fate; his rationalistic approach makes me fear for him. When public relations go sour, credibility fades fast. The images of Freud-as-scientist, Freud-as-therapist, and even Freud-as-person all are tarnished by recent revelations. To flourish, a scientific field needs strong, simple methods, verifiable data, and strongly predictive models. As psychologists, we psychiatrists still do not have one. We have borrowed heavily from basic science, but, as Unger points out, we have yet to forge a general psychology that will both appeal (as psychoanalysis has done) and endure (as it has not).

Scholarly work must be characterized by a radical stripping down to basics. "Unlearning" goes along with demythification. We must cast off -- and even root out -- those received ideas that hinder progress. All behavior can be

ascribed too easily to post hoc motives. For example, my own criticism of the field can be understood by resort to a post hoc, *ad hominem* analysis of my personal history. But this says nothing about the truth of the arguments I advance. It only establishes an interesting, but ultimately irrelevant, aspect of its context. Here, I accept the scientific assumptions of physical truth describable by mathematical means, which Unger's relativism denies.

In interviewing patients, writing up cases, and formulating theories, we must cultivate that sense of wonder that Lewis Thomas calls "bewilderment." n50 The psychoanalytic "retrospectoscope" works so well as to be suspect. Using it, one may find what one is looking for via suggestion: that on-line data fabrication is a serious problem is suggested by the scientific evidence regarding the natural history of human memory, on the one hand, and the scientific evidence for distortion in hypnotic amnesia, on the other. Let us abandon as hopeless the ideal of "free" association while retaining its level of focus: on feelings, associative thought processes, and adaptation.

The new psychodynamics will center on a radically modern view of the so-called unconscious mind. To begin anew it would be better to call it the non-conscious mind. Psychobiology can now use neurobiology as it develops its psychodynamics. The interface between cognitive psychology (*a la* Anderson), artificial intelligence (*a la* Hofstadter), and state neurophysiology (as modern sleep scientists practice it) is a node at which an integration synthesis might profitably be crystallized.

In the area of basic research, the barriers between ethology, neurobiology, and learning theory have been collapsing for some time. Their coalescence soon will constitute a major new discipline, behavioral biology, which could provide a substantial, scientific base for the New Psychiatry. Desperately needed to round out this picture is a truly naturalistic psychology. In this respect Unger's *Passion* is a step in the right direction, but it needs translation from the rhetorical to the operational level.

In the area of clinical research, scholarly work must proceed toward further development of the state concept, both to account for the unity of the brain-mind and to support a psychophysiological concept of madness. If there is but one mind, complex but unified, and if that one mind normally undergoes a dynamic succession of changes in state, then it seems possible Unger is correct when he asserts there is but one genus of mental illness, if that genus is viewed as a set of potentially infinite alterations in brain-mind state.

This radical thesis -- composed of the new state psychophysiology and the new cognitive psychology -- makes a mockery of both faculty psychology's endless subdivision of the normal mind and the new descriptive psychiatry's increasingly complex classification schemes. What a relief: one mind, one mental illness. Slightly changing one of many operating properties of the brain-mind can move the system to a new point in the state-space.

Each diagnosis thus might become a set of quantitative coordinates in a state-space. The question is not, "Is this person a schizophrenic?"; we already

know enough to modify that sort of reification. We could change the question to, "Does this person have schizophrenia?"; but even that expression is too limiting. The question really is, "How schizophrenic is this, or any other, person, including you and me?" In other words, a vectorial dimension in the state-space is one's degree of relatedness versus separateness from others. Another dimension, in the perceptual domain, is the degree of hallucinoid (internally generated information) versus data-driven (externally generated) information. Still another is mood: "How good does the person feel?"; or, "How energetic/lethargic is the person?"

Such an approach would reconcile the antidiagnostic resistance of those clinicians who already recognize the multidimensionality of brain-mind states (and who tend to be antiscientific-psychoanalytic) with the progressively quantitative impulses of the proto-scientific contingent (who tend to be monistic reductionists). At the same time, it would both rid the field of its constant embarrassment regarding the unreliability of its diagnostic efforts and allow psychiatry to take a stronger position with respect to the richness of its subject. The human personality is not a monotonic function, like blood pressure. In other words, psychiatry could properly and precisely define its scientific "specialness" without the antiscientific special pleading that is so common in modern psychoanalytic circles.

A corollary of this naturalistic approach to diagnosis is to regard psychosis itself as a systems error, understandable in terms of the normal functioning of its

autocreative, disoriented "mad" mode so clearly seen in our nocturnal dreaming. n51 We are thus never far from madness, and our proximity is both physiologic and pharmacologic. This concept explains the so-called functional psychosis without recourse to the dubious concept of "defense." But because the state approach is more general, it has no difficulty accommodating the notion of defense in its psychology.

An attractive feature of the state model just sketched is its application to current concepts in psychopharmacology, where it also can relieve the conceptual strain of the multiple category approach to diagnosis. Because one's mental health and disease are but a cluster of factors in a state-space, and because that state-space has specific reference to a complex but unified brain-mind, the introduction of single, significant molecules (affecting neurohormones or neurotransmitters) will affect the state of the whole system.

Instead of speaking of antipsychotic, antidepressive, or anxiolytic agents (and recognizing that psychosis, depression, and anxiety are inseparable -- though distinct -- dimensions of a single system), one would measure a drug's action in terms of its capacity to change the multidimensional state-space of the brain-mind. Since drugs act peripherally as well as centrally, we must acknowledge the integral nature of the whole body and its signals in our ultimate conception of the state-space.

Agreeing with Unger's indictment of psychiatry's disease model approach to diagnosis and treatment, I note the strong evidence that whether a patient is

called schizophrenic or manic-depressive depends upon the availability of treatments supposed to be specific for one condition or the other. Thus the introduction of the phenothiazine drugs in the 1950s was followed by a fourfold increase in schizophrenia diagnoses. Correspondingly fewer patients were diagnosed manic-depressive. Wanting to be helpful, psychiatrists simply were moving patients from one diagnostic category to another. When lithium later was introduced for the treatment of mania, the well-meaning doctors moved patients back out of the schizophrenia category. This shows the robust effects of context upon medical decisionmaking.

Just as the schizophrenic/manic-depressive distinction could be seen as a false diagnostic dilemma, the phenothiazine/lithium treatment conflict also would vanish if we were to adopt Unger's unitary approach to diagnosis and treatment. To oversimplify for heuristic impact, any psychotropic drug might work by simply stabilizing oscillations within the state-space. Or, still more paradoxically, one could understand how we control hallucinating perceptual systems by clamping the motor pattern generators (with phenothiazines).

Since the emerging picture of the brain-mind is open-loop and plastic, learning is a given. The investigation of the cellular basis of classical learning paradigms, in the work of E. Kandel, B. Libet, R. Thompson, and others, already has dissolved one artificial barrier between "psychology" and neurobiology. We can expect the same process to occur at more complex levels. n52

There is no conceptual difference between the models of psychosis and neurosis to which the new state concept gives rise. The distinction is simple: it is the part of the state-space that is affected. And even this may be more a matter of degree than of kind. For example, when does a fantasy become a delusion? When one believes it? When one says one believes it? When someone else does not believe it? Or when we ourselves do not disbelieve it? Minor perturbations of the system (neuroses) may be more context-sensitive than major ones (psychoses). Thus, programming errors (as contrasted with system design errors) may underlie these coarse clinical distinctions. Reprogramming (psychotherapy) can help in either case, but will be more effective in neurosis because of differences in both severity and mode of mediation.

The relearning model is also a simple one: (1) create an atmosphere such that modeling of the healthy aspects of the therapist's behavior can occur; (2) recognize the ideal of therapeutic neutrality to be illusory, but avoid exploitation or manipulation of patients; and (3) give up the alienating power of aloofness in the interest of empowerment of the other person. (This sounds like Unger, doesn't it?)

In summary, Unger is correct in his assessment of the profound problems of psychiatry and in calling for radical revisions of theory and practice. But to make his critique practical and his prescriptions useful, more specific attention must be paid to scientific realities in the rapidly evolving fields of neurobiology and psychology. Between

Unger's lofty position as social critic of psychiatry and the empirical details of day-to-day psychiatric science is a large and fertile field for theory development.

IV. CREDO FOR A NEW PSYCHIATRY: SCIENTIFIC HUMANISM

Having made suggestions regarding the New Psychiatry's intellectual Agenda, I now turn to the most appropriate conceptual and effective attitudes for the architects of change. This part outlines psychiatry's most elementary assumptions and attitudes, and presents them in a most concise and epigrammatic language in the hope of creating an intellectual and attitudinal basis for consensus.

While many of the particular points made in the Agenda are controversial, debatable, and even polemical, I try here to step back to an article-of-faith level, to create a kind of Credo. This is followed in part V by an equally preliminary guide to action, the Manifesto.

A. The Basic Principles of Scientific Humanism

- The human species is the highest known life form.
- The most distinctive and qualitatively unique aspects of human life are functions of the brain.
- The human brain is the highest known organ form.
- The human mind is the highest known functional state of matter.

- Among the distinctive attributes of the brain-mind, three are particularly remarkable:

Thought: analytic and creative

Feeling: emotional and emphatic

Communication: gestural and linguistic

(There is good evidence that the first property of each of the three pairs is shared by other animals, while the second appears to be more uniquely human.)

- Knowledge regarding these matters is still primitive despite roughly 2500 years of systematic inquiry.

B. The Relationship of Psychiatry to Scientific Humanism

- All human activities take place within a context of feeling.

- No human knowledge is transcendent of meaning and value, both of which are related to the context of feeling.

- Human individuals and human societies function well if and only if a balance between thinking, feeling, and communicating is maintained.

- Psychiatry is that branch of natural science and philosophy that concerns itself most directly with human thinking, feeling, and communicating -- and with the balance between them.

- Psychiatry can rightly aspire to a high place among the natural sciences.

- Since the expectations of its clients and the claims of its practitioners are vastly

disproportionate to psychiatry's competence, the field should both be more modest and reorient the direction and priorities of its ambition.

C. The Challenge to Psychiatry of Scientific Humanism

- Psychiatry is correct to insist upon the whole person as the most meaningful frame of reference for the results of its own investigations. Psychiatry thus must be at once humanistic and scientific.

- Psychiatry should adopt more generally humanistic principles as operating hypotheses. Because of its humanistic impulses and obligations, and because of its scientific orientation, psychiatry at the same time should use more critical modes of thought in evaluating the theoretical adequacy of its hypotheses and should develop more scientific methods of testing their empirical validity.

- The scientific revolutions in neurobiology, computer science, and molecular biology present opportunities for psychiatry that are unparalleled in the past 2500 years of human inquiry. The door is open to both revolution and renaissance. It is both the promise and the threat of these powerful techniques that prompt philosophical reflection.

- Reflection suggests that a secure, useful, and acceptable framework for this endeavor is scientific humanism.

D. The Relationship of Scientific Humanism to Other Philosophies

- Scientific humanism regards man as the product of evolution but takes no position regarding either cosmological

first causes or ultimate purposes.

- Because it is open at both ends, scientific humanism can stand alone, or it can be inserted within any world view that accepts its internal premises and principles.
- By defining mental health in functional terms, scientific humanism opens the door to a variety of "treatment" interventions. If they can be empirically demonstrated to promote healthy functioning, such interventions may include those that can be neither scientifically explained nor theoretically justified.

V. A MANIFESTO FOR A NEW PSYCHIATRY AND A PLAN OF ACTION

This preliminary set of conclusions and its related "plan of action," like the Agenda and the Credo, are an early state of thinking about the social, and especially the educational, setting of psychiatry. They are intended to serve only as seeds for new concepts of institutional reform. In this sense, my essay ends on a note as vague and promissory as the Unger program I have criticized. My only defense is the outstanding success of scientific reductionism in solving other, no less human, problems.

A. Assumptions and Goals of the Manifesto

- Psychiatry remains the most human of the medical specialties, since it deals primarily with human behavior, human thought, and human feeling.
- The theoretical and practical efforts of

psychiatry must stay focused at the level of the whole person.

- To progress as a medical science, psychiatry simultaneously must develop at several levels and integrate across those levels.
- Three levels of discourse require development and integration: the biological, the psychological, and the social.
- The strongest level, in a scientific sense, is the biological. Biology thus is properly regarded as a basic science where psychiatry is concerned. But biology can only inform the other levels, not replace them. Biology alone is not enough. Unger correctly assesses the current inadequacy of biology but underestimates its place and its promise in a New Psychiatry.
- Psychology is the second most important science for psychiatry as a medical specialty. But because of its currently disproportional weaknesses, the highest priority must be given to its development. Unger's bold theory of personality -- with all of its inadequacies -- should be welcomed as a goad to psychiatric theoreticians.
- Of the integrative tasks, that between the biological and the psychological is the most fundamental and the most difficult. At this interface lies the mind-body problem. Unger completely ignores this central issue. A more determined, affirmative, and concerted attack on the mind-body problem should constitute the central intellectual focus of a New Psychiatry. To mount such an attack, difficult choices must be made and deliberate priorities must be established.

It is one purpose of the Manifesto to define these choices and priorities.

- The definition of choices and priorities should constitute strong challenges to existing administrative, intellectual, and clinical assumptions. A second goal of the Manifesto is to identify the means of strengthening the challenges within the existing system.

- A final goal of the Manifesto will be to consider more radical means of changing the system should moderate measures fail. The problems of the field have reached the point where revolutionary innovations must be contemplated.

B. Obstacles to Progress -- Intellectual

- The mind-body problem remains unsolved. Most people laugh when it is mentioned, considering it to be either a false problem or insoluble. It is neither. It is real, and it is soluble. It should be recognized as the central intellectual issue of psychiatry.

- Biology is a field that is in productive ferment. Molecular biology and neurobiology are among its most active frontiers. These fields have taken little notice of psychiatry (as we have defined it), and psychiatry (as it exists) has taken little notice of them. Both sides, especially psychiatry, need to take responsibility for this mutual neglect. Psychiatry has more to gain from doing so, and psychiatry has more to lose from not doing so.

- Psychology is weakened by its intrinsic methodological handicaps and by the splintering that serves to protect its many special interest subgroups against attack, dissolution, and takeover. Unfortunately,

this is particularly true of psychoanalysis, psychiatry's own favorite psychology. The problem of psychoanalysis is so severe and so special that it must be treated separately.
n53

- The few areas of strength in modern psychology are still remote from psychiatric attention.

- *Cognitive psychology* remains the province of university-based academic psychologists who carry on the "mental faculty" approach of the nineteenth century. Cognitive psychology is unattractive to psychiatrists because it tends to deny or to ignore feelings.

- *Behavioral psychology* (including ethology, learning theory, and communications, and even the rigorous side of linguistics) has had limited impact because it denies and ignores mental life.

- *Developmental psychology* contains cognitive and behavioral aspects, but it adds the dimension of longitudinal study to each. The concept of "critical period" needs to be incorporated into the "life stage approach" that is now quite popular in psychiatry.

- Psychiatry fools itself when it considers such fields as psychopharmacology and related neuropsychiatric endeavors to be either biological or truly basic. These fields are rarely biological in any fundamental sense. Rather, they apply superficial, medical-model paradigms to psychiatry in a feeble effort to retain dignity in the face of the shoddy psychological thinking and sentimentalism that prevails in other quarters of the field.

- The weakening of tough-mindedness by tenderheartedness complements the still unresolved mind-body problem. The goodness of intent that brings many physicians to psychiatry, combined with the futility of even their most sustained efforts to cure serious mental illness, fosters abstract, logically loose, and literary thinking. Psychiatry thus fools itself again when it considers its psychological theories to be so deep, so advanced, and so complex as to defy scientific test. Unger is as mistaken as other utopian visionaries in failing to state his hypotheses in terms that are compatible with the paradigms of natural science. While rhetoric usually only begets more rhetoric, experimentation can test and thereby alter theory.

C. Obstacles to Progress -- Educational

- The popular mind is now thoroughly accustomed to the shoddy thinking of psychiatry. In a permissive society, post hoc reasoning is the order of the day. Since we all are raised in this casual ambiance we find it doubly difficult to escape it. And those who try will find their views unpopular. In a democracy where anything goes, the loosest ideas are the most serviceable, supple, and sought after.

- Secondary and collegiate education hardly touch upon the issues at hand. With the decline of classical education, logic and philosophy are antique. Some students become science whiz kids and pursue physics, chemistry, or perhaps biology. But most are steeped in the rhetoric of "appreciation" -- "compare and contrast." Humanities blue books are filled with analogical reasoning. Analytic inquiry takes a back seat.

Unger is a classic example of this trend.

- Premedical students take science courses to get into medical school. Scientists teaching in liberal arts schools resent this perfunctory participation and make the obstacle course more difficult and unpleasant. The fun of science -- its humanistic aspect, and its importance to human concerns -- is hard to discern. Most colleges conform to C.P. snow's "Two Culture" caricature: Either-Or. n54

- Medical school is split into abstract basic science -- a continuation of the obstacle course approach -- and technologically oriented medicine. Neither appeals to the would-be psychiatrist, who is often a fugitive from both science and technology, and who elects psychiatry as a way back to the holistic, soft, poetic atmosphere of liberal studies. Those who can, do science; those who can't go into psychiatry.

- Psychiatric training deepens the split between basic science and technology. The tough-minded are horrified by the laxness of psychological thinking and retreat to the library or laboratory. The tenderhearted see this strategic withdrawal as a lack of capacity to feel. Thus begins the *ad hominem* division of the field. Rare is the tough-minded, tenderhearted mediator that the field needs most. And when he comes forth, he risks dismemberment for his efforts.

- Academic reward for science goes to the superficially biological. When recognition is won for psychological work it rarely is deserved in any real scientific sense. Psychiatric leaders are almost never great scientists and rarely even great clinicians; and, to the extent

that they were ever either, they usually cease being so after assuming leadership. There is so much to administer, especially when the line between psychiatry-as-scientific medicine and psychiatry-as-politics becomes blurred. By raising expectations further, Unger's work will not help to sharpen this distinction.

- Post-graduate education in psychiatry offers two paths: the biological and the psychoanalytic. Rarely, if ever, are the two effectively combined. The academic psychiatrist says good-bye to psychology, and the psychoanalyst says goodbye to science.

D. The Plan.

Implementation of the Agenda and adoption of the Credo will be enhanced by and centered in new university-based programs.

1. *Revised Medical Curricula.* -- Subject matter will be structured from the bottom up, from behavioral to clinical science. This will require strong commitments of time, especially in the first year of medical school.

It also will require new alignments, new programs, and a reorganization of faculty to bring the existing pieces of psychiatry's scientific base together. For scientific humanism to become a two-way street -- rather than two one-way streets -- there must be more effective interpenetration of the ideas in the Agenda and Credo.

In addition to traditional teaching models, the creation of longitudinal seminar structures is essential. These settings will provide intense, prolonged,

and repetitive exposure to problems, methods, and role models. n55

2. *Revised Residency Programs.* -- Academic training centers must struggle to protect the psychiatric resident from the intellectual diffusion, physical fatigue, and moral disenchantment that are the fallout of excessive social demands upon a socially overcommitted psychiatry.

This retrenchment must be distinguished from withdrawal from the unequivocally legitimate demands of the public for the humane and devoted care of the severely ill patient. Unger's social concerns are consonant with this obligation.

The maintenance of humane treatment requires the institution of more realistic custodial arrangements. Thus, leaders of academic training centers must be as aggressive in promoting novel modes of care as they are defensive of their fledglings, who must not be viewed only as caretakers. While caretaking is rightly of the highest social priority, it is often an impediment to analytic problem solving in psychiatry.

In their didactic programs, residents should be exposed early to the same set of principles that inform revised medical student curricula. We should inform them clearly and repeatedly that there is no escape from the central tension of the mind-body dilemma and that even the most elegant neurological or psychoanalytical analysis alone is as inadequate as caretaking in solving the central problem of psychiatry.

As in medical school, longitudinal multidisciplinary seminars are the only possible antidote to specialist

fragmentations that circumvent the central issues. As yet, we have not experimented with this mode in teaching our residents.

3. *Revised Postgraduate Education.* -- University centers must develop alternatives to the current career split between private sector psychotherapy (via the psychoanalytic institutes) and biologically oriented research (via National Institute of Health fellowships).

Such programs should combine attention to primary clinical material (cases) and to treatment processes (psychotherapy and/or psychopharmacology) with fundamental scientific work (theoretical or empirical).

Junior faculty, like residents, must have their time protected for thought, for writing, and for discussion. Structures to support these activities also must be created. Here, as in undergraduate education, tutorial relationships with mentors and longitudinal seminars with peers must be fostered by encouragement and reward of senior faculty who engage in this important work.

VI. CONCLUSION

Unger's critique of psychiatry is inspiring but inadequate. While I agree with Unger's rejection of psychoanalysis and welcome his alternative emphasis upon passion as the felt tension between our longing for one another and our vulnerability to rejection, I propose that Unger's view of man, and of psychiatry, is biologically uninformed. Unger ignores scientific evidence that ultimately both supports and challenges the fundamental tenets of his social

theory.

I have attempted to redress this imbalance by proposing that the reconstruction of psychiatry proceed as scientific humanism. I call my alternative view of man "scientific humanism" to emphasize what I take to be robust biological evidence for both the evolutionary capability of the human brain-mind -- which Unger recognizes -- and for the physical basis and constraints on that system -- which Unger ignores. The Agenda for the New Psychiatry that I have outlined calls for exploration of both the capabilities and limitations of the brain-mind using many of the modern scientific methods that Unger eschews. Because a New Psychiatry ultimately will flourish or not according to new psychiatrists, the implementation of a program of scientific humanism requires fundamental changes in both medical and psychiatric education.

FOOTNOTES:

n1 *See Late Twentieth-Century Psychiatry.*

n2 PASSION at vii.

n3 *See generally J. BOWLBY, ATTACHMENT AND LOSS (1979).*

n4 *See generally E. O. WILSON, ON HUMAN NATURE (1982); E. O. WILSON, SOCIOBIOLOGY: THE NEW SYNTHESIS (1975).*

n5 *See, e.g., Neu, Looking All Around for Our Real Selves (Book Review), N.Y. Times, July 8, 1984, at 24.*

n6 PASSION at vii.

n7 *Id.* at 3.

n8 *Id.*

n9 *Id.*

n10 *Id.* at 9.

n11 *Id.* at 20.

n12 *See infra* part III.

n13 PASSION at 17.

n14 *Id.* at 19 (emphasis added).

n15 This section is a collection of ideas on a wide variety of topics that emerged in discussion with my colleagues in the New Psychiatry Seminar. Participants included Alan Green, Ned Hallowell, Steve Hoffman, Ben Lopez, David Mann, Ed Mikkelsen, John Ratey, Victoria Russell, Jennifer Stevens, and Margaret Warner.

Many of the themes were further developed in dialogue with visiting scholars in the Academic Conference Series that was organized by the seminar. Participants included John Bowlby, Patricia Churchland, Frederick Crews, Adolf Grunbaum, Julian Jaynes, Jerome Kagan, Ivar Lovaas, Morton Reiser, Paul Roazen, and Frank Sulloway.

The motive for this Agenda -- and construction of its essential framework and contents -- preceded my awareness of Unger's closely related essay, *An Agenda for Late Twentieth-Century Psychiatry*, and the last chapter of *Passion*. I recognize both the similarity and simultaneity of our respective visions as well as the important differences in orientation that distinguish

our views.

n16 *See* Hobson, *Psychoanalysis on the Couch*, 1986 ENCYCLOPEDIA BRITANNICA MED. & HEALTH ANN. 74-91.

n17 *See infra* part V.

n18 J. MASSON, THE ASSAULT ON TRUTH: FREUD'S SUPPRESSION OF THE SEDUCTION THEORY (1984).

n19 This story had already been broadcast by Janet Malcolm in her articles, *Annals of Scholarship: Trouble in the Archives* (pts. 1 & 2), NEW YORKER, Dec. 5, 1983, at 59; Dec. 12, 1983, at 60.

n20 P. ROAZEN, BROTHER ANIMAL: THE STORY OF FREUD AND TAUSK (1969).

n21 *See* F. CREWS, *Beyond Sulloway's Freud: Psychoanalysis Minus the Myth of the Hero*, in SKEPTICAL ENGAGEMENTS 88-111 (1986).

n22 F. SULLOWAY, FREUD, BIOLOGIST OF THE MIND: BEYOND THE PSYCHOANALYTIC LEGEND (1979).

n23 A. GRUNBAUM, THE FOUNDATIONS OF PSYCHOANALYSIS: A PHILOSOPHICAL CRITIQUE (1984).

n24 *See* M. SHERWOOD, THE LOGIC OF EXPLANATION IN PSYCHOANALYSIS (1969).

n25 Ethology is the naturalistic study of behavior with the goal of determining its biological purposes. *See infra* notes 29-

30 for references to ethological writings.

n26 The overall relevance of the growth of neurobiology for a comprehensive psychiatric theory is to be found in S. FREUD, *Project for a Scientific Psychology*, in 1 THE STANDARD EDITION OF THE COMPLETE PSYCHOLOGICAL WORKS OF SIGMUND FREUD 294-397 (J. Strachey trans. 1966).

n27 See McCarley & Hobson, *The Neurobiological Origins of Psychoanalytic Dream Theory*, 134 AM. J. PSYCHIATRY 1211-21 (1977); see also F. SULLOWAY, *supra* note 22.

n28 See Hobson & McCarley, *The Brain as a Dream State Generator: An Activation-Synthesis Hypothesis of the Dream Process*, 134 AM. J. PSYCHIATRY 1335-48 (1977).

n29 See J. BOWLBY, *supra* note 3; see also J. BOWLBY, LOSS: SADNESS AND DEPRESSION (1980); J. BOWLBY, SEPARATION: ANXIETY AND ANGER (1973).

n30 2 N. TINBERGEN, THE ANIMAL IN ITS WORLD 175-199 (1972).

n31 See Lovaas, *Behavioral Treatment and Normal Educational and Intellectual Functioning in Young Autistic Children*, 55 J. CONSULTING & CLINICAL PSYCHOLOGY 3 (1986).

n32 D. HOFSTADTER, GODEL, ESCHER, BACH: AN ETERNAL GOLDEN BRAID (1979).

n33 J. ANDERSON, THE ARCHITECTURE OF COGNITION (1983).

n34 J. REASON & K. MYCIELSKA, ABSENT MINDED? THE PSYCHOLOGY OF MENTAL LAPSES AND EVERYDAY ERRORS 38-61 (1982).

n35 E.g. J. LACAN, THE FOUR FUNDAMENTAL CONCEPTS OF PSYCHOANALYSIS (1978).

n36 See N. CHOMSKY, REFLECTIONS ON LANGUAGE (1975).

n37 Conversation with John Ratey.

n38 W. JAMES, THE PRINCIPLES OF PSYCHOLOGY (1893).

n39 I. YALOM, THE THEORY AND PRACTICE OF GROUP PSYCHOTHERAPY (1970).

n40 W. BION, EXPERIENCES IN GROUPS (1961).

n41 See, e.g., C. DARWIN, THE EXPRESSION OF THE EMOTIONS IN MAN AND ANIMALS (1979) (1st ed. 1872).

n42 See, e.g., G. VAILLANT, ADAPTION TO LIFE (1977).

n43 See G. VAILLANT, THE NATURAL HISTORY OF ALCOHOLISM (1983).

n44 See *supra* note 31 and accompanying text.

n45 Conversation with John Ratey.

n46 See, e.g., T. B. BRAZELTON, INFANTS AND MOTHERS (rev. ed.

1983).

n47 Patricia Churchland is one of a new breed of materialist philosophers who articulate a unified science of brain and mind. Noting the parallel growth of cognitive and neural science, she envisages a convergence of these disciplines that has momentous import for psychiatry. P. CHURCHLAND, NEUROPHILOSOPHY: TOWARD A UNIFIED SCIENCE OF THE MIND-BRAIN (1986).

n48 See S. FREUD, *supra* note 26.

n49 See F. CREWS, SKEPTICAL ENGAGEMENTS (1986).

n50 L. THOMAS, THE LIVES OF A CELL: NOTES OF A BIOLOGY WATCHER (1975).

n51 See J.A. Hobson, The Marriage of Mind and Brain (1984 Semrad Lecture) (unpublished manuscript available from the author on request).

n52 Flicker, McCarley & Hobson, *Aminergic Neurons: State Control and Plasticity in Three Model Systems*, 1 CELLULAR & MOLECULAR NEUROBIOLOGY 123-66 (1981).

n53 See Hobson, *supra* note 16.

n54 C. SNOW, THE TWO CULTURES AND THE SCIENTIFIC REVOLUTION (1959).

n55 The William James Seminar Program at the Harvard Medical School attempts to play this role. 1 S. DENLINGER & A. HOBSON, ANNALS OF THE WILLIAM JAMES SEMINAR, 1981-1982 (1982); 2 S.

DELINGER & A. HOBSON, ANNALS OF THE WILLIAM JAMES SEMINAR, 1982-1986 (1986); Saver & Denlinger, *Which Doctor Is Not a Witch Doctor?*, 2 ADVANCES 20 (1985).