WHATEVER HAPPENED TO THE PSYCHE?:
A SOCIOLOGICAL EXAMINATION OF SCIENCE, RELIGION AND SPIRITUALITY IN PSYCHOLOGY AND PSYCHIATRY

By

RONALD J. NERIO

A dissertation submitted to the Graduate Faculty in Sociology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

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Abstract

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Ronald J. Nerio

Adviser: Professor Barbara Katz Rothman

Emile Durkheim (1913/1995) observed that the notion of the soul seems to exist wherever human culture exists. The western disciplines of psychology and psychiatry adopted a version of this notion by taking the "psyche"—variously translated as soul or mind—as their root word. However, as these fields shifted in response to changing ideas about what it means to be scientific, the notion of the psyche fell into disfavor. Psychology turned largely to the study of human behavior and psychiatry increasingly focused on the brain and other somatic causes of human mental states.

This study examines the ways in which the relationship between science and secularity has shaped western psychology and psychiatry. To do so, it focuses on transpersonal psychology, a small movement within those fields, as a case study to understand the ways in which ideas about science, religion, spirituality, and the human self changed over the course of the twentieth century. Transpersonal psychology has placed spirituality at the center of study, and has organized around a critique of the psychological and psychiatric mainstreams for their alleged materialist bias. This study begins by examining the historical context in which both the mainstream and the transpersonal sub-fields developed and changed. Then it compares the literature of the

transpersonal movement with the mainstream, as well as the communicative exchange that takes place between marginal group and the mainstream. This comparison is complemented by interviews with nineteenth of the most prolific contributors to the transpersonal literature. It shows the circumstances under which spiritual and religious ideas reemerged in certain areas of psychology and psychiatry, as well as the changing nature of the mainstream responses to such ideas. This project contributes to the sociology of knowledge, science and religion by tracing ideas regarding the notions of the soul, spirit and consciousness that are currently at the margins of the human sciences. As the relationship between science and secularity continues to shift, it is possible—even likely—that such ideas may gain greater currency within the mainstream.

In Memory of Robert Alford

And

To David Arthur-Simons

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CHAPTER ONE:
WHATEVER HAPPENED TO THE PSYCHE?

In 1967, the year that the Summer of Love followed the Human Be-in in quick succession, Abraham Maslow heralded the arrival of a "philosophical revolution" that he thought would affect every field of science. "A comprehensive system," he pronounced with great confidence during a lecture at the First Unitarian Church in San Francisco on September 14, "is swiftly developing like a fruit tree beginning to bear fruit on every branch at the same time" (Maslow, 1969a: 1). Perhaps reflecting the spirit of the time and the place, he forecast that this "revolution" would involve a re-centering of science and epistemology on human experience and human needs. Theretofore, he claimed, science had treated human beings as objects, exhibiting a "mechanomorphic," "technologizing," and "value-rejecting" approach to men and women and the world in which they lived. One vehicle for this expected reshaping of scientific worldviews would be transpersonal psychology, the formation of which his talk announced on that day.

Maslow and his colleagues expected that transpersonal psychology would constitute a "fourth force" in psychology, complementing and pulling the field beyond behaviorism, psychoanalysis, and humanistic psychology—the first three major psychological systems of the twentieth century. It would focus on the "farther reaches of human nature" and on "transcendent values." Four decades later, it is debatable whether—and when—the "revolution" that Maslow thought he saw in full bloom died on the vine along with the American counterculture. Maslow himself, who became the president of the American Psychological Association in 1968, did leave a durable imprint through his oft-discussed conceptions of a "hierarchy of human needs," "peak

experiences," and "self-actualized persons." But transpersonal psychology remains a small if prolific sub-field, all but ignored by the disciplinary mainstream.

Like humanistic psychology, it began as a "small protest group," in the words of Anthony Sutich, the founding editor of *The Journal of Transpersonal Psychology* (JTP) (1969: 15). Humanistic psychology had coalesced in 1959, a decade earlier than transpersonal psychology, objecting to what its partisans viewed as the exclusion of "human qualities...such as creativity, love, self, growth...and self-actualization" (13) from more established scientific psychology. Through the writing of participants such as Erich Fromm, Rollo May, Carl Rogers, Gordon Allport, and Maslow himself, it would find a mass audience within and beyond the academy. But as the 1960s drew to a close, a new committee within the humanistic group met to pursue subjects even further afield of mainstream psychology, including questions of "transcendence" and "ultimate meaning." Such questions would come to include many concepts drawn from religious and mystical traditions, and the JTP avowed that it would take an empirical and scientific approach to them. Part social movement, part academic pursuit, transpersonal psychology intersected with developments in the broader culture at the time including the increasing exposure to Buddhism, Hinduism, Taoism and Sufism as well the mounting critiques directed at the authority of science throughout much of the academy.

The development of transpersonal psychology offers a window—a case study—into the complex relationship between science and secularity and how that relationship changes over time. Nikolas Rose, perhaps the most well-known sociologist of psychology and psychiatry, advises that sociologists should be interested in the "emergence of practices, locales, and enunciative regimes that empower certain

authorities to speak of our truth in the language of the psyche" (1999: 178). Rose is right to focus on the power that lies behind authoritative statements about human reality, but he fails to note that the term "psyche" has fallen into progressive disuse among most members of these disciplines for a number of revealing reasons. Psyche translates as soul, or as mind, both of which have been widely regarded as harkening back to psychology's prescientific era. Amadeo Giorgio (1992) explains that perhaps most psychologists and psychiatrists abandoned the psyche as an object of study because they could derive no satisfactory understanding of how to perceive of it as an entity or reach agreement about how to conceive of its boundaries. Transpersonal psychology and psychiatry attempted to restore the soul—or spirituality more generally—to the center of scientific study.

When a science studies aspects of the human being, the entry point shapes what they see and how they see it. As they make decisions about what to observe, scientists are making and reflecting social choices. One option for the study of the human being which gained currency in the twentieth century was to focus on measurable behavior, including responses to stimuli. The behaving self consists of nerves, muscles, reflexes, and impulses. Language, consciousness and emotion became extraneous. Alternatively, many scientists have begun with the proposition of the psychodynamic self which is born with instincts and desires and is forced to reconcile them with the external social world. As the understanding of neurotransmission grew, scientists were able to make inferences about the centrality of the brain in determining states and experiences of the self and when and how to medicate the unhealthy self. Genes offer another entry point, wherein the most important features of the self result from particular combinations of base pairs.

Survival machine, carrier of DNA, battleground between conscious and unconscious mind, cognizing brain, and adaptive organism are some of the prominent metaphors of the human being current in the scientific and popular literature. Psychiatry and psychology as knowledge systems have claimed jurisdiction over ideas about the self and how it works. The challenge for the sociologist is to understand how these fields exercise their authority, how they decide what constitutes the self, and how that knowledge is transmitted to—and from—the broader culture. Transpersonal psychology offers a useful lens because of its marginal status, and because it raises questions that had fallen out of disfavor with mainstreams of psychology and psychiatry—questions about transcendence, spirituality and religion.

Before psychology and psychiatry—the "psy" disciplines in Nikolas's Rose's (1997) lexicon—assumed their roles as interpreters of the self in western societies, religious institutions and their affiliated clergy largely exercised the power to explain the self and its purpose. Andrew Abbott (1988) illustrates how, in the case of psychiatry, the field was able to claim much of this interpretive authority by the end of the nineteenth century. Industrialization and urbanization gave rise to "personal problems" for which the clergy's explanations were increasingly unsatisfactory. Psychiatrists proposed numerous categories of "nervous disorders," along with a sweeping range of treatments, which captured the public imagination and a degree of academic credibility. Concurrently, the development of Wilhelm Wundt's laboratory in 1891 enabled psychology to begin to consider the self as an object amenable to exact measurement and mathematical calculation. Such models were particularly attractive to the American cultural imagination in the twentieth century, as it experienced the explosive

transformations wrought by mass production, technological progress, and the rise of consumer society. Though older notions of the "soul" would persist in American culture at large, they lost currency in the universities. The latter institutions demanded precision and notions of scientific progress befitting the transformation of the political economy (Marsden, 1994).

My primary interest here is in the role that particular views of secularization played and continue to play in the construction of models of the self in the human sciences. The relationship between science and secularization has been a dynamic one, and as that relationship changes it provides new lenses for viewing the self and it re-carves the existing ones. While it is common to view science and religion as opposites to each other—at least since the dawning of modernity—such a view partly misses the point. Scientific and religious ideas have indeed long been in opposition, but the greater battles to define and delimit the self are occurring within each of these spheres. John Ziman, a noted philosopher of science, concludes his exposition: "The relatively recent notion that 'science' and 'religion' are so different as to be incompatible plays down the diversity and discord on each side of the divide" (2000: 310).

I propose that meanings attached to secularization evolved over the course of the twentieth century, and that these meanings carry implications for the ways in which the human sciences observe the self. During the twentieth century, many scholarly observers held that secularization was a one-way, inexorable, and progressive process. In 1918, amidst the ruin of World War I, Max Weber delivered his first observations about the disenchantment of the modern world. He characterized science as a "specifically irreligious power" that had contributed mightily to the rationalization of the world

(1946b: 142). In the decades following World War II, C. Wright Mills would write of science and religion as if the separation were nearly total. Critiques of the rhetorical styles and dubious technology associated with science were beginning to mount in various quarters, he stated, but "our scientific grandfathers and fathers beat down . . . religious doubts. The current doubts are secular, humanistic" (1959/2000: 15). A decade later, the sociologist of knowledge Peter Berger (1968) developed an influential theory of religion and modernity which forecast the gradual and likely permanent retreat of religion from public life in the wake of secularization and scholarly pluralism.

But as the twentieth century neared its end, many sociological observers and philosophers of science began to revisit the relationship between secularization, modernity, and rationality. Peter Berger famously reversed his "secularization hypothesis" as early as 1997, and proposed that contrary to earlier expectations the world at large was beginning to "de-secularize." Charles Rosenberg, a sociologist and historian of medicine and science, judged at the end of the century that "students of American social and intellectual history will find it more profitable not to assume a necessary conflict between religion and science, but to describe and understand the intricate yet ever changing symbiosis which they have maintained" (1997: 4).

Transpersonal psychology—its origins, development, and continued marginality—provide a glimpse into the terrain of this intricate symbiosis. It started with a perhaps too confident pronouncement of itself as a "fourth force" in psychology, but as it enters its fifth decade it continues to grapple with questions related to the scientific study of human spirituality. It has developed a number of institutions and a considerable library dedicated to exploring questions that upend the normal distinctions between

secular science and religion by placing consciousness and the possibility of transcendence at the center of study. Transpersonal psychologists and psychiatrists[1] claim to integrate western scientific rationalism with diverse aspects of the world's wisdom traditions in order to understand the natural world and the role of human beings and human consciousness in the natural world.

Perhaps the most fundamental question concerns the issue of value. As Sandra Harding (1998) has noted, while science has existed in various forms in every part of the world the proposition of value-free science has been a uniquely western development. Robert Bellah has traced the separation of values from fact in the social sciences over time and argues that value-free paradigms often have the unintended effect of disguising market-based priorities in the name of scientific objectivity. He proposes that there is a need "to retrieve some older ways of thinking in which [value and fact] are seen as overlapping" (1997/2006: 377). Maslow clearly had these objections in mind as he delivered his talk announcing the birth of transpersonal psychology:

> I am speaking as a scientist. What I have just been saying are things which can be confirmed or disconfirmed by anybody who is interested. It can be checked; it can be verified. At another *level*, however, I am denying the whole modern history of science which has from its very beginning claimed the need to be value-free, value-neutral, value-rejecting. This was a correct thing to do. The world of objects and the world of things is, in a sense, value-free. However, human beings are not value-free; they lives by values, they live for values
>
> (1969a: 4)

Charles Rosenberg's observation that science and religion have maintained a close but ever changing relationship raises a number of questions for sociologists

[1] It is standard practice among transpersonal psychologists and psychiatrists to use the term "transpersonal psychology" to denote both fields simultaneously. Except where noted, this dissertation adopts the same practice.

interested in science, culture, and knowledge. Do the participants of religious and scientific communities acknowledge a close relationship, or are they most likely to characterize the relationship in oppositional terms? If science and religion exist symbiotically, what are the contours of this relationship in contemporary social and intellectual contexts? How do shifts in the relationship between science and religion affect the assumptions, narratives and practices of the human and social sciences?

Many scholars use the language of opposition when they examine the relationship between science and religion—language that is particularly stark regarding the social sciences—although they do not always presume the division to be a "necessary" one. Robert Bellah, for instance, has written frequently over the past several decades that the social sciences systematically exclude religious considerations. In the transcript of one his public addresses, Bellah suggests that the pillars of modern social science—positivism, reductionism, relativism and determinism—"conflict and conflict sharply not only with biblical religion but with every one of the great traditional religions and philosophies of mankind" (1982: 3). As a result, he judges, the social sciences have done away with the possibility of intrinsic meaning and purpose, or a sense of wholeness to which humans can be related. "[T]he social scientist," Bellah states, "says a lot about the self, he has nothing to say about the soul" (3).

The psychologist Robert Sollod (1992) echoes a number of Bellah's concerns. Sollod served as a member of the Task Force on Religious Issues in Graduate Education and Training in Division 36[2] of the American Psychological Association (APA). He explains that his work for the panel alerted him to the extent to which university curricula and professional training programs filter out religious and spiritual questions as if they

[2] Division 36 is the American Psychological Association's division devoted to the Psychology of Religion.

are unrelated to the scientific study of the human psyche or human behavior. Even those courses and programs devoted to multicultural education, he claims, tend to undervalue or to adopt a patronizing approach toward the religious concepts at the heart of the cultures being studied. Sollod believes that such an approach leads to "superficial empathy but no real, in-depth understanding" (1). Of most concern to Sollod is the extent to which religion has become a "mysterious and taboo" topic in psychology programs, where virtually no courses prepare prospective therapists for dealing with the religious values of clients and where textbooks make either no or only passing reference to spirituality.

The historian Page Smith, in a critical history of American academic culture in the twentieth century pointedly titled *Killing the Spirit* (1990), details a profound and decisive shift from the broad inclusion of matters of religion and faith in intellectual culture in the 19th century to their near total exclusion in the 20th. Indeed, many aspects of nineteenth century scientific writing and research were framed in spiritual terminology. But, Smith concludes:

> By 1900 the university had cast out every area of investigation and every subject that could not be subsumed under the heading "scientific" and had made all those that remained (like literature and philosophy) at least profess to be scientific. Excluded were such ancient and classic concerns as love, faith, hope, courage, passion and compassion, spirituality, religion, fidelity—indeed, one is tempted to say, anything that might be somewhat encouraging to young people eager to receive some direction
>
> (20)

This dissertation explores the intellectual, institutional, and social conditions that gave rise to the transpersonal psychology movement. It examines the instances in which

transpersonal psychology has exerted an impact on the intellectual, theoretical, and methodological practices of the social sciences at large. It traces the spiritual concepts, terms and approaches of the transpersonal psychologists that have encountered the greatest criticism, as well as cases in which practices that encountered earlier resistance—such as meditation—gained gradual acceptance.

THEORETICAL AND EMPIRICAL ENTRY POINTS

In his preface to *Varieties of Religion Today* (2002), the philosopher Charles Taylor explains that his volume grapples with the question of what it means to call our present age secular. This is a question that Robert Bellah, in a review of Taylor, calls "central for understanding modernity" (2002: 1) and one which suggests long-term problems regarding social consensus. To narrow the question but to preserve the same complexities that Taylor explores, the theoretical question this dissertation asks is, "What does it mean to call the *sciences* in our present age secular?" How do the sciences construct their borders with the overtly religious or the more generally spiritual, and in what ways do the scientific and the religious influence each other? As Taylor illustrates with the modern age in general, the question of secularity remains unsettled in the sciences. Scientific data and theory are interpreted through cultural lenses and employed in ways that inform cultural actors about their place and role in the social and physical world. The lenses themselves are shaped by cultural interpretations and vocabularies of both secularity and spirituality.

The empirical question of this dissertation asks, "What types of interactions occur when a group of scientists—transpersonal psychologists and psychiatrists—adopt explicitly spiritual modes of inquiry and terms of discourse, while *also* claiming the

mantle of science?" In other words, this project examines the responses of professional associations, journals, university departments, hospitals, and what is often the ultimate arbiter of scientific practice—the state—to transgressions of customary scientific approaches to religion and spirituality. Of perhaps greater significance in tracking the history of the transpersonal approach, it asks why an organized challenge to agreed-upon assumptions regarding religion emerged in the first place. What cultural and historical developments led this group of psychologists and psychiatrists trained in traditional American graduate and medical programs to systematically challenge some of the basic assumptions of their fields? Finally, it asks what we, as sociologists and as social scientists more generally, can learn from the communicative exchange between the advocates of a more spiritually inclusive science on the one hand, and more conventional science on the other.

The literature of transpersonal psychology makes serious attempts to address concerns that are central to all of the sciences, including questions of proof, reproducibility and confirmation. Transpersonal psychologists and psychiatrists have devoted numerous publications to debating appropriate uses of empirical data, types of measurement, and the meaning of rational deduction. Regarding the study of human beings, they interrogate the ways in which cultural expectations may influence research questions and findings. They challenge disciplinary boundaries, often insisting that disciplinary paradigms forestall the integration of advances in knowledge among fields. They weigh the impact that the privileging of masculine values has had on the historical development of psychiatry and psychology and on intellectual culture at large. Finally,

they address the question of how science should approach phenomena which cannot be easily empirically detected, such as human emotion and altered states of consciousness.

This dialogue also raises questions about the utility, cultural impact, and cost of the customary distinction between "natural sciences" and "social sciences." From the outset, psychology, psychiatry, sociology, economics, and political science modeled themselves on their natural science forerunners. Though proponents of the social sciences may now acknowledge that their disciplines fall short of the predictive capacity achieved by the natural sciences, the influence of natural science remains palpable. When mainstream psychologists reject the spiritual claims of the transpersonal psychologist, the grounds for doing so usually center on concerns that the claims are not adequately measurable, not sufficiently reproducible, or did not occur in controlled settings. In other words, they fail according to the criteria of the natural sciences. But human beings and their interactions with social environments are notoriously unpredictable and ill-suited for experimentally controlled settings. They are also emotional, often irrational and, if we take the human population as a whole, usually religious. To what extent do natural science assumptions and methods continue to shape social science practices?

Scientists encounter difficult choices when faced with undeniably human properties. They may opt, as behaviorism did for much of the 20th century, to study only that which is observable and quantifiable. In this case, consciousness literally becomes a non-entity and only observable behaviors matter. They may decide, as psychoanalysis did, to study the hard-to-see emotions by operationalizing them in a more-or-less predictive theoretical framework. In this case, the unconscious looms large and most

conscious behaviors—and at least in classical psychoanalysis, all religious ideation—become side effects of unconscious motivations. Or they may find, as biopsychiatry increasingly posits, that most human behaviors can be traced to the particulars of brain biology and chemistry. In any case, psychology experiences the dual pressure to consistently affirm its status as a science while justifying itself as independent of biology, genetics, psychopharmacology or neuroscience. But it may be the case that the more psychology patterns itself on the natural sciences, the more that it must exclude aspects of human thought and behavior that cannot be subsumed under such related disciplines. Transpersonal psychology is interested in the many meanings of the root word "psyche," some of which—such as "mind" and "soul"—are regarded warily by mainstream psychologists precisely because of their imprecise nature.

THE TRANSPERSONAL CRITIQUE OF SCIENCTIFIC CONVENTION

Since its emergence in the late-1960s, the literature of transpersonal psychology has critiqued conventional science in a number of ways, all of which suggest the possibility that spirituality could play a more productive role in informing the sciences. First, they suggest that the social and human sciences implicitly center Euro-American understandings of culture and knowledge, health and illness, and human psychological development. American academic psychology, the transpersonalists claim, excludes the knowledge gathered by the world's wisdom traditions and replaces it with a Euro-American, empiricist approach. Secondly, the Euro-American emphasis on empiricism creates an unnecessarily restricted view of the psyche, which eliminates from consideration purportedly "higher" levels of development because such levels are

generally associated with spiritual traditions. Thirdly, advocates of the transpersonal approach charge that dominant psychological and psychiatric approaches adhere to a nineteenth century materialist worldview which has yet to incorporate the revelations of twentieth and twenty-first century physics.

Finally, the transpersonal critique of science centers on a conviction that the cultural worldview of science has itself begun to resemble many features of institutionalized religion; it has become, alas, the religion of scientism. While transpersonal authors note the enormity of science's contribution to understanding the physical world and to technological and medical advances, they suggest that scientism frequently oversteps the limits of science's genuine ability to reveal how the world works. Scientism, they suggest, is a creed based on the claim that only what can be observed through the five senses and measured by scientific tools is real or of any consequence. Thus, transpersonalists believe, scientism has led to the exclusion of a great range of experience and knowledge. It has led to what many transpersonal authors see as an almost inexplicable error in psychology—the reduction of human consciousness to an epiphenomenon of matter or, in the most extreme cases, the exclusion of consciousness altogether from the study of human psychology. The legacy of this reduction, the transpersonalists claim, continues to exert a profound impact on the imagination of both the academic and wider cultures.

Many of these critiques of the scientific worldview have been addressed by others, including feminists, postcolonial theorists, postmodernists and critical theorists. But whereas these positions sometimes disregard the spiritual, or treat it as an important background issue, the transpersonal psychologists differ by systematically treating

spirituality as a foreground issue. If postmodernists subject scientific logic and rationality to scrutiny, they frequently view religion with an even more jaundiced eye due to monotheism's history of the repression of the feminine, its often violent exclusion of other perspectives, and its role as an ideological bulwark for any number of regressive political forces. While transpersonalists acknowledge these aspects of religion, they propose that critics of religion operate with a definition that focuses on the most destructive historical capacities of belief systems. They support efforts to deconstruct cultural mythology, but they also propose the need for a constructive project that attempts to identify the optimal aspects of both religion and science and the terms under which both of these knowledge systems can best coexist.

FRAMING THE PROBLEM

Robert Bellah has written in his oft-cited book, *Beyond Belief* (1970), that the barrier between religion and science has never been as clearly defined as is sometimes assumed, and has shifted continuously since the development of modern science. Transpersonal psychology and its interaction with the scientific mainstream offer an advantageous sociological entry point for examining how this porous barrier works in practice. This study approaches transpersonal psychology—a cross-disciplinary epistemic community of psychologists, psychiatrists and social scientists—as a case study for examining how a minority view of spirituality has coalesced within the human sciences, how that view has been challenged and defended over time, and how the minority approach has affected broader professional and academic practices. Transpersonal psychologists approach their subject as scientists and propose that a dialogue with religion—or with spirituality more generally—would be more fruitful than

the current convention of exclusion. They propose that spirituality has been excluded from the natural, social and human sciences for historical reasons rather than for sound theoretical and factual bases.

Transpersonal psychology is based on the premise that human consciousness extends beyond the ordinarily observable self and that the self has access to levels of awareness that stretch beyond (trans) the "persona" of the separate individual. Transpersonal psychologists suggest that there has been within psychiatry and psychology a suppression of religion, spirituality, and subjectivity, not because such exclusion is scientifically necessary; in fact, they insist that in many cases patterns of repression occurred for overtly unscientific reasons. Transpersonal psychologists claim to be in pursuit of a fuller map of reality and of human experiences, one that includes all strands of human awareness.

Transpersonal psychology challenges the secular, empirical and rational bases of modern western science in the name of furthering knowledge and understanding. In so doing, they raise a number of questions regarding the meaning and practice of science. If science rests on the requirement of empirical verification, how do branches of science respond to that which is felt but not seen, sensed but not measured, registered but not predictable? How do the human sciences, for instances, approach issues of creativity, love, or emotions not seemingly explainable as evolutionary requirements? Transpersonal psychologists insist that there is an animating force in human life that has never been satisfactorily accounted for by physiology, evolutionary biology or chemistry. In certain contexts this drive has been called "spirit," "soul," "essence" or "God," but

these words evoke such profound mistrust that the phenomena which they signal has been excised from most of the body of modern science.

A Spiritual Discourse Runs (Quietly) Through the Sciences

In their report of a three-year study of professionals funded by the National Institute of Mental Health, sociologists Charles Derber, William Schwartz and Yale Magrass conclude that credentialed experts have been able to exert a steadily expanding power over ever-increasing aspects of modern life. Experts have established a "general perception of credibility" (1990: 15) by successfully interpreting everything from physical geography, to human labor, to the human psyche in rational-scientific terms. Derber et al explain that modern professionals depend for much of their credibility on the paradigm of rational discourse, their "statement to the world" that they are in pursuit of objective, impersonal truth (28). The university, Derber, Schwartz and Magrass claim, functions as the "true institutional church of the professions" (33) that conveys an aura of public legitimacy and "real science," even on professions as far afield from the natural sciences as law, journalism and psychology.

But Derber and his team also describe a state of paradigm warfare in the university in which a minority of professionals openly challenge the dominant professional claim of objectivity. Derber et al have labeled the dominant paradigm "rational discourse," against which a contingency of dissenters engage in "critical discourse." Professionals who work in the mode of critical discourse oppose not science but the possibility of value-free research. They are "heretics" who "aim a steady volley of intellectual fire against their mainstream colleagues, arguing that rational discourse serves truth less than professional wealth and power" (45). Critical discourse, they note,

has "gained a foothold in professions like physics, sociology, psychotherapy, (liberation) theology, and art, as well as sectors of the nonprofit economy, including universities, research institutes, advocacy groups, and the government itself," but, they claim, "is limited by undisputed minority standing" (50).

I claim in this dissertation that another strand of discourse runs through the sciences and through academic culture, with an even more marginalized standing. I label as "spiritual discourse" academic and professional research and writing that makes explicit reference to human spiritual properties and traits, borrows considerably from religious traditions and concepts, or refers to forms of human development that reputedly extend beyond the normally recognized range. It would appear, from Page Smith's (1990) history of academic culture that in the 18th and 19th centuries, that rational and spiritual discourse were fairly intertwined, with spiritual references appearing frequently in much serious academic research in the U.S. It is now often taken for granted that scientific practice gradually and decisively replaced religious thinking as the former improved its methods and the latter lost explanatory legitimacy. Most academic critics of scientific practice today make no reference to human spirituality and often identify religion, if they refer to it at all, as a prescientific cultural product or as a source of repression and ignorance. Nonetheless, the spiritual vocabularies developed by William James, Carl Jung and Erich Fromm, suggest that interest in spiritual aspects of human life did persist in the twentieth century, even if in relatively obscurity alongside the more dominant rational discourse.

Of sociological interest is how scientific knowledge and social science practice today define themselves in relation to spirituality and how they discuss purported human

spiritual properties. To argue that such properties do or do not exist, and to define the form, nature and content of such qualities, influences how science is "done" and how knowledge is accumulated. When natural or social scientists insist either on the existence of spirit, or on its absence, they shape subsequent observations of and assumptions about human interactions and culture.

Often when the proponents of spiritual discourse refer to more mainstream or dominant intellectual approaches, they use terms that imply standing up to the potential for recrimination or the expectation of fear. For example, Candace Pert, who served as a chief of brain biochemistry at the National Institutes of Health (NIH) for thirteen years, writes of the expectations of her audience: "They know I'm not afraid to use what most scientists consider a four-letter word—*soul*—in my talks, and they want me to address their spiritual questions" (2003, 15). Similarly, the transpersonal psychologist Charles Tart runs a website entitled, The Archives of Scientists' Transcendent Experiences (TASTE), in which practicing scientists may anonymously post what they consider to have been intense first-hand spiritual or religious experiences. He describes it as a "safe space" for scientists to write about "experiences that intrigued them and/or were emotionally important to them, but *which they could not tell to their colleagues or friends for fear of rejection or ridicule* (emphasis in original)" [www.issc-taste.org].

OUTLINE OF CHAPTERS

To my knowledge, there exist at this time no other sociological studies of the transpersonal psychology movement. Moreover, there are few sociological studies that attempt empirical examinations of the broader cultural relationships between science and religion within academic environments. This study differs from Robert Bellah's general

approach to the question of spirituality and science because it follows an empirical account of one particular epistemic community—transpersonal psychologists and psychiatrists—and the types of discursive exchange that occur between this community and mainstream science. It does in fact challenge Bellah's claim, to an extent, by noting that a spiritual discourse persists within university and scientific cultures—even if it has been at times all but imperceptible. This project proceeds in four steps. The first is to outline the general claims of transpersonal theory and method. It will then explore the wider spiritual discourse that has run through the academic disciplines. Thirdly, it examines the arguments proffered by both mainstream psychology and psychiatry regarding the nature of the human self and their claims about appropriate ways to study the human psyche. Finally, it notes the terms under which there appears to be the potential for agreement between the transpersonal and mainstream views as well as those areas where there appears to be, in Erich Goode's words, a "great divide" (2000: 64).

The chapters of this dissertation proceed as follows:

Chapter 2 – Secular Societies, Iron Cages, and Melting Institutions

This chapter establishes the context for an examination of the relationship between science, religion, and spirituality. It situates the problem within the context of classical sociological literature as a way of contextualizing social science understandings of religion and science over the course of the late nineteenth and early twentieth centuries.

Chapter 3 – Framing the Relationship Between Science, Religion, and Spirituality: The Contemporary Literature

This chapter explores questions of religion and spirituality in the context of the contemporary literature in the sociology of science and knowledge and in the terms of social science more generally. It examines the ways in which sociological and other social science observers have addressed and conceptualized the boundaries between science, spheres of knowledge, and the religious and spiritual traditions.

Chapter 4 – The Emergence and Development Transpersonal Psychology

This chapter examines the basic claims of the transpersonal approach and its several branches. It opens by exploring the implications of the term "transpersonal," and the ways in which "going beyond the personal" parallels aspects of religious and spiritual traditions. It then notes the ways in which transpersonal authors have proposed that spirituality might be integrated with a scientific worldview. Subsequently, it traces the historical factors that gave rise to the transpersonal movement, as well as the circumstances under which transpersonal institutions were formed. Next, it probes the various ways in which transpersonal psychologists and psychiatrists have both critiqued the more dominant models of psychology and psychiatry and attempted to reconcile a transpersonal approach with other approaches. It concludes by noting those aspects of the human "psyche" which transpersonal psychologists and psychiatrists believe traditional psychology and psychiatry cannot sufficiently explain and the methodological approaches they have proposed to complement these issues.

Chapter 5 – Hallucinogens, Psychiatry and Psychology: A Special Case

This chapter treats research with psychedelic substances as a special case for a number of reasons. Unlike the two other two major currents of transpersonal thought—spiritual psychology and parapyshcology—research with hallucinogens receives not only intense professional scrutiny but is banned by law under most circumstances. Those few instances in which psychedelic researchers have received government approval for experimentation with humans reveal the terms under which transpersonal psychiatrists have gained the support of colleagues, university and hospital administrators, and other critically-positioned gatekeepers. It also illustrates what terminology and claims that they have learned to avoid. In other words, researchers must choose whether to classify phenomena encountered under the influence of psychedelic drugs as genuinely "spiritual," "hallucinatory," "parapsychological," or as temporary "psychotic" symptoms.

The historical context of psychedelic drug research in the United States demonstrates the complex interplay between science, popular culture, religion, the globalization of ideas, and psychological/psychiatric thought. Aldous Huxley, for example, interpreted his psychedelic experiences through Hindu and Buddhist texts and religious symbols that had been available in the West in the late 19th century. Timothy Leary and others followed suit by using the Tibetan *Book of the Dead* (*Bardo Thodol*) as a basis for conducting psychedelic experiments. Even though Leary was widely discredited and denounced by other psychedelic psychiatrists, it is clear that his use of the *Bardo Thodol* and similar texts influenced others to draw parallels between religious mystical texts and psychedelic drug states. Most recently, psychiatrists have published a

number of works noting the role that psychedelic drugs played on introducing religious concepts to psychiatry and to medicine more widely.

Chapter 6 – Psychology: Science and the Self in the Mainstream

This chapter explores the shifting meanings of the term "psychology" within the discipline, and how changes in meaning signify changes in the perception of what it means to scientifically study human beings. On the 100th anniversary of the founding of Wilhelm Wundt's laboratory—widely regarded as the birth of scientific psychology—the American Psychology Association (APA) published a self-critical collection of 41 articles by 43 contributors assessing the state of science within the field. A content analysis of this work forms the centerpiece of this chapter, as these articles reveal ways in which psychologists from diverse traditions grapple with what it means to be a psychologist, how scientific methods and practices should be applied to human behavior, and how to approach the subject of the human psyche. As the volume is deliberately self-critical, and aims at identifying research areas that are lacking or assumptions that various authors believe must be corrected, it offers a sound entry point for an examination of the ways in which spiritual questions are phrased in psychology. One cannot escape the conclusion that, with some exceptions, practitioners of this erstwhile "science of the soul" judiciously avoid using the term.

Chapter 7 – Psychiatry: Science and the Self in the Mainstream

This chapter attempts to discern the role and meaning of science within mainstream psychiatry and how psychiatric understandings of the role of science within the profession have changed over time due to cultural and social developments. At the

turn of the millennium, the American Psychiatric Association Press published *Psychiatry and Religion* (2000), a volume of collected works by noted psychiatrists on relationship between science and religion and what it means for the field as a whole. The book's subtitle, "Convergence of Mind and Spirit," implies a rethinking of the role of spirituality in psychiatry as a clinical practice. James Boenlein, the editor, writes in the introduction, "The major theme of this book . . . is the proposition that psychiatry and religion are parallel and complementary frames of reference for understanding and describing the human experience and human behavior" (xvi). He elaborates that psychiatry must prepare for and appreciate the globalization of ideas and knowledge in the twenty-first century, including the ways in which religions are coming into contact with each other and with science and are contributing to new thinking about human behavior and mental health. The content analysis of texts gathered for this chapter from a variety of psychiatric authors and traditions attempts to assess whether and how a general "convergence of mind and spirit" is taking shape in the field of psychiatry.

Chapter 8 –Transpersonal Psychologists and the Mainstream: Bridges and Barriers

By asking transpersonal authors to describe their encounters with mainstream institutions, this chapter probes whether and in what ways the mainstream consensus regarding spirituality and religion is constructed and reproduced in the respective fields of psychiatry and psychology. John Mack, in his foreword to the transpersonal classic *Paths Beyond Ego* (1993), refers to transpersonal and mainstream psychology as "two opposing ontologies" (xi). Many respondents in interviews disagreed, proposing that rather than a wall between the mainstream and the transpersonal model there exists a bridge. Nonetheless, several who suggested the metaphor of a bridge acknowledged that

the bridge had to be constructed nearly entirely on the part of the transpersonal psychologists who have successfully distilled at least some of their ideas regarding spirituality and religion to the mainstream. Where the dominant model has begun to open itself to spiritual questions, the transpersonal authors propose, it has done so because the interest in spirituality among the public at large has burgeoned.

For this chapter, I conducted a series of in-depth interviews with a spectrum of key transpersonal authors. Questions were directed toward understanding the exchanges which interviewees have had with mainstream academic institutions, including professional associations, scientific journals, publishers, departmental colleagues, and annual conventions, as applicable. All chosen informants were trained in mainstream academic institutions, and now occupy positions ranging from faculty membership at transpersonal and mainstream institutes, to medical posts at major university hospitals, to private practice. Responses shed light on the dynamics of individual, institutional, and theoretical communications between the transpersonal and mainstream paradigms.

Chapter 9 – Conclusions: Science, Knowledge, and Engaged Humility

The evidence explored in the following chapters points to contradictory conclusions. For instance, as a blanket statement, the claim by transpersonal psychiatrist and theorist Stanislav Grof's that science behaves "like a fundamentalist religion" in its refusal to consider spiritual claims is demonstrably inaccurate. Chapter four notes any number of instances in which both religious and spiritual claims have been embraced in scientific contexts. Chapter seven also includes a number of statements by transpersonal psychologists who indicated in interviews that they found widespread support for their views among mainstream researchers and writers. On the other hand, Grof would appear

to be accurate in substance if he is implying that in general the sciences remain deeply uncomfortable with any terms, symbols, claims, or investigations of spiritual or religious phenomena. The content analysis in chapters five and six reveal a clear and pervasive tendency to avoid such references, even as mainstream psychiatrists and psychologists express widespread internal disagreement regarding nearly all other psychiatric and psychological claims.

Jorge Ferrer, critiquing transpersonal psychology from within, implies that transpersonalists overstate the uniformity of mainstream opposition to all things spiritual. He writes in *Re-Visioning Transpersonal Theory* (2001), that the "positivist myth of a single epistemology and unified methodology for all human knowledge is only alive in the minds of a few recalcitrant scientists" (58). He continues that "epistemological pluralism is widely embraced today not only between but within the natural and human sciences" (59). While it would seem that Ferrer's judgment regarding the openness of the sciences to pluralistic approaches is indeed well-founded, this dissertation suggests that such openness does not apply broadly to the posing of spiritually-oriented claims by scientists. While one can find specific instances where spirituality has been expressed and explored by serious writers in all branches of sciences, they do not reflect the dominant approaches within their fields.

CHAPTER TWO:
SECULAR SOCIETIES, IRON CAGES, AND MELTING INSTITUTIONS

> If religion protects man against the desire for self-destruction, it is not that it preaches the respect for his own person . . . but because it is a society. What constitutes this society is the existence of a certain number of beliefs and practices common to all the faithful.
>
> (Emile Durkheim, 1897/1976: 170)

At the core of Durkheim's sociological project lay the observation that societies reinforce solidarity through the construction of meaning and ritual systems. In *Suicide*, he recognized the impact that the conditions of modernity—industrialization, new and continuously changing technology, extensive prosperity, and population shifts—would continue to exert on shared meaning systems. "Religion has lost most of its power," he concluded, "and government, instead of regulating economic life, has become its tool and servant" (1897/1976:256). As industry and the market were displacing the salience of all traditional institutions, Durkheim saw that only occupational groups, with their internal moral understandings and enforcement mechanisms, were likely to provide a source of solidarity in the fully industrialized future. More than a century has passed since Durkheim described the sources and impact of anomie in *Suicide*. This chapter and the next construct a genealogy of the ways in which sociology has chronicled and responded to the decline of religion and the impact of secularity in American society since the publication of Durkheim's 1897 masterpiece.

Science and extra-scientific thought—including religion and spirituality—may represent separate spheres of inquiry, but they co-exist within the same culture. Therefore, though science and extra-scientific inquiry may construct separate discourses they are on some level also inseparable. One inevitably influences the other. In the

Durkheimian sociological vein, morality and culture are nearly identical terms. In more traditional societies, religions formed the core of a society's moral force. That force exerted a physical power bonding individuals to their society and strengthening both individuals and society in the process. For believers, Durkheim noted in *The Elementary Forms of Religious Life,* even in the modern period, religion continued to exert a force, whose "true function is to make us act and to help us live" (1912/1995: 419). But if Durkheim traced the power and impact of religion in various contexts, he also devoted attention to the process and consequences of the contemporary transformation from mechanical to organic, post-religious societies.

A century after the publication of *Suicide*, Erich Goode (2000) observed that science had already become the hegemonic cultural force in the West from about 1900. When a culture places science in the center, then it assumes a moral role of high importance despite its own claims to value-free knowledge. In fact, much of science's moral authority is derived from its previous claims to value-free knowledge production. During the conservative ascendancy in the United States of the past three decades, the science of economics in particular became perhaps our culture's highest—although not only—moral arbiter. Though that conservative rise benefited in part from the mobilization of religiously-motivated constituencies, its dominant ideological theme has rested on the claim of some economists that the highest moral responsibility of government—and perhaps entire societies—lies in market deregulation and in maximized privatization. This appears to be an intensification of the extension of the market into all realms of society which Durkheim both described and criticized.

Goode described science in the twentieth century as high culture, and in the universities science carries moral weight in the sense that Durkheim described morality. Perhaps this equation is what led Charles Derber to describe universities as the "high churches" (1991) of the sciences. In much of the broader culture, the language of free trade and free markets seems to have established a narrative for itself as embodying the moral qualities of prudence, responsibility, and realistic thinking. There are plenty of critiques within university culture of narrowly economic interpretations of social and state policy, but religion appears to have been relegated to the far margins of universities as a distrusted "other."

As I construct this genealogy of ideas regarding the responses and the relationship of science to secularity, I return to theoretical questions established in the introduction. Sociology has accumulated a vast body of literature dedicated to the exploration of secularity and modernity. It has always been alert to the ways in which religious belief, action and communities have shaped social arrangements. Nonetheless, what appeared in the mid-twentieth century to be a settled issue—secularity as an established aspect of American society that would by most accounts continue to deepen and replace religion—now appears unsettled, unfinished, and uncertain. Charles Taylor, a notable philosopher of the social sciences, introduces his recent work *Varieties of Religious Experience* (2002) and *A Secular Age* (2007) by asking what it means to call our present era secular. His very question implies that any response must be subtly tuned to the complexities and counternarratives of the relationship. This is a question which Robert Bellah, in a review (2002) of Taylor, agrees is central to understanding modernity and its impact.

Taylor posits that we may have emerged into a post-Durkheimian period, in which there no longer exists a society-wide basis of shared symbolic meaning or common sense of destiny. Bellah speculates that this may indeed be the case and wonders whether such a post-Durkheimian society is viable over the long term. He reports elsewhere (1997/2006) having grown more pessimistic about that question since his earlier work on civil society and since publishing *Habits of the Heart* (1985/1996). With Taylor's broader question in mind, I ask the narrower question of what it means to call the sciences in our present age secular. Nearly a century after Weber and Durkheim wrote about the impact of disenchantment and anomie, respectively, in what ways has the relationship between scientific culture and secularity changed?

The utility of such a question is that it requires an unpacking not only of the terms "science" and "secularity," but also of the cultural assumptions regarding these two terrains constructed by professional and academic communities over the past century. I have followed Erich Goode (2000) in using the twentieth century as a significant timeframe, as he has established the opening of that century as the approximate date that science became the hegemonic cultural framework in the United States. It established itself as, he states, the language of high culture, against which the validity of other knowledge frameworks were to be judged. I wish to draw out the full implications of Goode's observation. If science had achieved hegemony early in the twentieth century, it had consequently achieved in large part the ability to determine which ideas and premises would deserve a hearing in university culture.

The sense that the relationship of science to religion—and a more vaguely-defined "spirituality"—is uncertain seems to have returned only in recent years. By the

middle of the twentieth century, for example, C. Wright Mills (1959/2000) was able to write as if the separation were all but total. He observed that science had indeed begun to encounter rising doubts following World War II, both as an intellectual style and as the source of dubious technology. But whereas religious questions had once represented a significant challenge to science, their power to mount a challenge had subsided and been overtaken by criticism from other sources. "The adequacy of scientific styles and thought and feeling, imagination and sensibility," wrote Mills, "has of course from their beginnings been subject to religious doubt and theological controversy, *but our scientific grandfathers and fathers beat down such religious doubts*. The current doubts are secular, humanistic" (15, emphasis added). Writing a decade later, Peter Berger, observed: "If commentators on the contemporary situation of religion agree about anything, it is that the supernatural has departed the modern world" (1969:2). While feminism, postmodernism/post-structuralism, critical theory, and post-colonial thought proved to be increasingly effective—and primarily secular—challenges to scientific positivism and to science as a self-sufficient explanation of human life, religion would scarcely register as a critical voice in academia for much of the remainder of the twentieth century.

The general decline of religious salience appears to have accelerated in the years following the publication of Mills's *Sociological Imagination*. By the mid-1970s, responding in part to a countercultural movement that had largely run its course, Peter Berger, Briggitte Berger and Hansfried Kellner wrote *The Homeless Mind: Modernization and Consciousness* (1973). Their thesis proposed that the decline of primary religious institutions which had long been a defining characteristic of modernity

reached a precipitous moment in the second half of the twentieth century. In addition, neither occupational life nor political parties continued to offer plausible meaning or value structures. As a result, individuals in increasing number found themselves culturally adrift. In the absence of shared values or narratives, radical subjectivity became the central—perhaps the only—viable point of reference for most Americans. Their description of cultural homelessness resembles the post-Durkheimian condition which troubles Robert Bellah. The United States has become, Bellah writes, "a nation whose citizens feel no lasting solidarity beyond themselves and their families" (2002: 4).

In writing about the post-Durkheimian homeless mind, Berger, Berger, and Kellner joined Weber's metanarrative of rationalization with Marx's descriptions of capitalism as productive of continuous revolutions and disturbances of social relations and institutions. Instead of a transition to a post-capitalist order, modernity was leaving us culturally homeless and without mooring. The coercive aspects of what Max Weber described as an "iron cage" of modern economic rationality remained, they claimed, but the institutions that once provided solid complementary structures of meaning had begun, in Marx's of-repeated phrase, "to melt into air."

In a recent volume dedicated to evaluating Peter Berger's lifetime corpus of work, Paul Heelas and Linda Woodhead (2001) revisit the "homeless mind thesis" and ask whether it remains applicable to the conditions of the twenty-first century. Given the uninterrupted pace of bureaucratization and technological change, and deepening pluralization due to globalization, one would expect the state of intellectual and cultural homelessness to have deepened. Heelas and Woodhead, however, judge that while the

relevance of primary religious institutions continues to deteriorate, there is considerable evidence that individuals are finding homes in secondary institutions.

The energy behind the countercultural ethos has declined, but it has been replaced by "spiritual outlets." Such networks are usually small, diverse and fluid, but their existence is widespread in both large urban centers and rural regions. They defy both "church" and "sect" forms of organization, in that they are "face-to-face, open, tolerant, inclusive, non-judgmental and democratic" (2001: 64). They include humanitarian and deep ecology focus groups, and they often intersect with primary religious institutions which now often incorporate the spiritual focuses of these secondary groups. Heelas and Woodhead are so sanguine about this development that they herald it as a "spiritual revolution" which has all but dismantled the repressive aspects of the "iron cage." In his response, Berger demurs. He sees not so much evidence of a spiritual revolution as a widespread institutionalization of the counterculture that interpenetrates with commercial capitalism, "exercising remarkable coercive power in a large number of institutions" (2001:192).

Most recent sociological work on secularism examines the phenomenon as it appears in the culture at large—the culture of the West, for instance, or of Europe, Great Britain, the United States. This reflects sociology's longstanding interest in explaining the sources, contradictory directions, and diverse impacts of modernity. However, sociologists have devoted less focus to the particular formations of secularity within the scientific disciplines and in the universities which house them. This seems an unlikely omission, given that sociologists have long noted the ways in which intellectuals might experience a particularly acute version of the "homelessness of the mind" of which

Berger writes. In *Suicide,* for instance, Durkheim devoted special attention to the ways in which the weakening of common religious beliefs affects intellectual culture and produces the grounds for egoistic suicide. Weber, likewise, noted the ways in which the explanatory powers of the natural sciences are "apt to make the belief that there is such a thing as the 'meaning' of the universe die out at its very roots" (1946:142). Despite the loss of traditional meaning incurred by the further development of science, neither Durkheim nor Weber suggested turning away from it. Indeed, Durkheim concluded that "far from knowledge being the source of evil, it is its remedy, the only remedy we have" (1897/1979:169).

As the twentieth century neared its close, Charles Rosenberg (1997) advised those who would study intellectual culture not to assume a necessary conflict between science and religion but to note the ways in which they have maintained an intricate and symbiotic, if ever-changing relationshi It is the unraveling of that relationship that Berger, Berger and Kellner saw as at least partially constitutive of the homeless mind. Though writing in recent years, Rosenberg's history of intellectual culture focused primarily on the development of science and medicine in the nineteenth century. If his advice is to a present generation of scholars, his own genealogy of science and medicine seems to have much less to say about the current era. If there remains some kind of symbiotic relationship between science and religion, what shapes does it assume at the present moment and how do practitioners of science perceive this relationship? Rosen

As E. Doyle McCarthy (2003) has pointed out, a primary lesson of the sociology of knowledge is that science *carves* knowledge, concepts, and images of the physical and social world as much as it observes them. "To assert that *knowledge is culture*," she

writes (emphasis in original), "is to insist that various bodies of knowledge, such as those of the natural sciences or the social sciences, operate *within* culture—that they contain and transmit and create cultural dispositions, meanings, and categories" (108). Both psychology and psychiatry were western disciplines that began with the notion of soul—as illustrated by their root words "psyche"—but have engaged in different ways of carving concepts of the self over the course of the twentieth century. Varying currents within these fields have at times explicitly rejected the soul as a useful concept, and even the concept of mind has aroused considerable ambiguity. McCarthy's point that such developments are happening within a culture—or within several layers of culture (the cultures of two separate disciplines, the shifting language and terminology of science, and culture of the secular university)—is apt. Body, brain, soul, mind, self, organism, and similar possible references to aspects of the human self are first and foremost linguistic and cultural constructions. They have shifting meanings, with evolving implications.

Following McCarthy, I argue that science actively "carves" definitions of the self and the social. Even when it claims a rigorous value-free platform, she maintains, it sculpts our understanding of reality by eliminating certain questions and stressing others. I am interested here in how social science carved its understandings of the self and the social at certain historical junctures, with certain understandings of what was possible for scientific knowledge production. For instance, Durkheim wrote *Suicide* as part of a larger project to establish the rules of scientific practice for the relatively new field of sociology. He argued in his preface that "*instead of contenting himself with metaphysical reflection* on social themes, the sociologist must take as the object of his research groups of facts clearly circumscribed, capable of ready definition, with definite limits, and

adhere strictly to them" (1897/1976:36-emphasis added). He wrote this during an era when faith in the progress of positive science and its ability to account for all things had yet to encounter the uncertainty principle, quantum mechanics, or later critiques of eurocentric rationality and objectivity by feminists, postmodernists, and critical theorists. The decision to eliminate metaphysical questions is precisely that—a cultural decision from within the foundational heart of the discipline. Robert Bellah, who views himself as a neo-Durkheimian, has argued that the absence of metaphysical questions from the social science curriculum now actually contributes to the anomic and egoistic conditions which Durkheim saw as "afflictions" of modern society. It has had the impact of confirming the operation of the market and its values as real, while eliminating ideals other ideals of human interconnectedness as unreal.

Durkheim and Weber both noted that science emerges from religion. "Today," Durkheim wrote in *The Elementary Forms of Religious Life* , "we agree to recognize that law, morals, and scientific thought itself were born in religion, were long confounded with it, and have remained imbued with its spirit" (1912/1995:66). The question at the heart of this project involves the extent to which and the ways in which this imbuing of the spirit of religion has been severed in science. Is that what secularization means in the current context of social science understandings? To what extent does the western religious tradition continue to—subtly or not so subtly—shape scientific assumptions? What changes have occurred as a result of the "Easternization of the West," as Colin Campbell (2001) has labeled the New Age spiritual turn? The emergence of the transpersonal psychology movement and the response to it by its more established scientific counterparts offers an empirical entry point into this question. I turn in the

remainder of this chapter to the classical sociological tradition, and then in the following chapter to more recent work by sociologists of culture, religion and the professions to examine the ways in which sociology has addressed these questions.

THE CLASSICAL SOCIOLOGICAL TRADITION

Introduction

The relationship between science and secularity has been a dynamic one, and it is closely related to questions that have been central to the sociological tradition. Durkheim, for instance, was concerned with the sources of morality and community, and with the impact of egotism and anomie. "A society," he emphasized in *The Elementary Forms of Religious Life*, "is not constituted simply by the mass of individuals who comprise it, the ground they occupy, or the movements they make, but above all by the idea it has of itself" (1912/1995: 425). If Erich Goode is correct that science has become the eminent expression of high culture, a question raised by the Durkheimian tradition might center on how science contributes to the ideas that contemporary American society has of itself. This is a complex question because as Goode notes, "science is defined not by the *content* of scientific beliefs but by the *method* by which evidence is gathered and their conclusions are reached" (2000: 29). Is a method able to method serve as the hegemonic belief system for a culture? What values, beliefs and norms does it provide and how have they changed over time? What has been the impact of the decision to exclude metaphysical questions early, but persistently, in the twentieth century? Do metaphysical questions begin to appear foreign, irrational, soft and perhaps trivial, while economistic questions appear sensible, rational and reasonable?

Max Weber examined modernity by tracing the process and consequences of rationalization. The penetration of rationality into all aspects of life in the modern West exerted powerful consequences on the subjective experience of individuals. If science in the seventeenth century was seen as a way of finding God, Weber writes in "Science as a Vocation," the sciences had by the twentieth century become more likely to dissolve any sense of meaning in the universe (1946: 142). If the world of individuals has been transformed by rational calculation, so has the social order witnessed a narrowing of ethical influences. In "The Religious Rejections of the World and Their Directions," Weber traced the impact of the consequences of disenchantment borne of rational capitalism. In the economic sphere, he wrote, the capitalist economy becomes less accessible to "any religious ethic of brotherliness" (1946: 331). Likewise, in the political sphere bureaucratic calculation of ends and means diminishes the possibility of moral considerations.

Weber spoke to the "fate of our times," in which "ultimate and sublime values have retreated from public life either into the transcendental realm of mystic life or into the brotherliness of direct and personal human relations" (1946: 155). The young, he explained, would continue to wait in vain for the prophet who would be able to inform them how to live or whether anything is worthwhile. These were questions to which science and rationality could not speak.

But the contemporary sociologist may inquire whether the sphere of scientific rationality plays the same role or has the same effects as it did when Weber wrote earlier in the twentieth century. Weber assumed that the continued development of science would provide the tools to "master all things by calculation" (1946: 39). In a culture

witness to such progress in science, religion, and metaphysics would surely erode and lose their determining role in the public sphere. But in a post-Kuhnian, post-Heisenberg scientific world this assumption has weakened. Sociologists have returned—perhaps in small number—to the question of whether and in what ways the supernatural, the theological, or the teleological may again reassert their influence in the public domains of science, politics, and culture. Peter Berger, for instance, while describing himself as an "unreconstructed Weberian," notes the ways in which both science and religion have changed substantially enough to produce new possibilities and new terms of conflict (1969, 1999, 2001).

Though he predates Durkheim's canonical works by several decades, Karl Marx produced a body of work which exerted enormous influence on the ways in which science, objectivity, social structure, and truth would be viewed throughout the twentieth century. The critique of religion and the ideological impact of religious justifications of existing social conditions occupied a central place in the Marxian tradition. "Hitherto men have constantly made up for themselves false conceptions about themselves, about what they are and what they ought to be," Marx and Engels wrote in their preface to *The German Ideology.* "They have arranged their relationships according to their ideas of God . . . The phantoms of their brains have got out of their hands. They, the creators, have bowed down before their creations" (1977a: 159). Thus, the materialist conception of history would lay bare the real conditions of human existence—and of the state and social structure—as humans "operate, produce materially, and hence as they work under definite material limits" (1977a: 164). David Kessel explains that Marx argued that the critique of religion is the "premise of all criticism," for "religion embodies the state of

alienation which is derived from man's material conditions. Because religion sanctions this alienation . . . it is necessary to criticize the 'effect' to get to the source" (1983: 4).

If Marx proposed a thoroughgoing critique of religion, so as to free humans from their enslavement to the ideological superstructure of religion, Robert Bellah argues that Marx was continuing in the Jewish prophetic tradition. Not unlike the ancient prophets, Marx viewed himself as engaged in a mission of tearing down the false idols of the state, the economy, and religion in the name of human freedom from bondage. Bellah muses that the parallels between Marx and the prophetic tradition are such that during Bellah's early education his "exposure to the Hebrew prophets and their concern with social justice made a significant impression on me, sufficient that my college Marxism seemed only a more contemporary version of themes already familiar" (2006a: 3).

Sociologists also dispute the extent to which Marx engaged in teleological explanations of history, staking varying positions on the degree to which he viewed history as unfolding through stages toward a fully evolved communist social form. Paul Paolucci (2005), for instance, disagrees that Marx operated under the assumption that history moves forward with intention. Rather, Paolucci claims, the only aspect of Marx's theory that can be reasonably called teleological is his view of human labor, which results in the ability of the species to "conjure up an image in the mind of some desired result" (2005: 16). Thus, while presuming that although humans operate with intention, nothing about Marx's theoretical position would suggest intention in nature or in history. But in the process of building his argument, Paolucci also documents a veritable genealogy of divergent claims by sociologists who have detected a teleological vision in Marx.

Durkheim: Solidarity, Religion, Anomie, and Egoistic Suicide

Durkheim's central theoretical question concerned the cohesion of society. What forces hold a society together, and what conditions threaten social solidarity? He grappled with the changes induced by industrialization, including the weakening of the collective conscience. Durkheim identified religion as the moral force that held mechanical societies together; indeed, in such traditional societies religion and society were identical. What moral forces were likely to serve similar functions as modernity brought with it increasing human density, growing occupational differentiation and specialization, and migration patterns that confronted members of societies with entirely different symbolic forms, belief systems, and norms?

Durkheim's work provides both a framework for understanding the emergence of the transpersonal psychology movement, and a theoretical model for posing questions about the significance of this development. Regarding the sociological study of religion and its role as a force in social life, Durkheim presented a seeming paradox. "This entire study," Durkheim wrote of his masterpiece *The Elementary Forms of Religious Life,* "rests on the postulate that the unanimous feeling of believers down the ages cannot be mere illusion" (1912/1995:420). Durkheim took a careful, sensitive and nuanced approach to the social sources that give rise to religious formation. In contrast to the anthropological school, which "assume(s) that man possesses a religious nature in and of himself...independent of all social conditions" (91), Durkheim's sociological position held that religion corresponded to a definite object. That definite object is society itself, for in the most basic form of religious life—the totemic form—the symbol for "the god and the society" are identical (1912/1995:208).

The paradox arises because in affirming that his study of the religious life rests on the premise that seemingly universal feelings of believers cannot be mere illusion, his solution implied exactly that. He rejected the animistic theory that religion arose from the attempts of pre-state people[3] to reconcile their experience of "two-ness" or of "traveling" in the dream state, insisting that no enduring religious structures could possibly arise from such a fleeting state. Likewise, he dismissed the naturist accounts which argued that religions arose in response to the feelings of wonder and awe that pre-state humans experienced when confronted with the power, terror and beauty of the natural world. Such societies were far more likely to experience nature as mundane, and often threatening than as the source of inspiration which would institutionalize sacred rites and beliefs in tribute to nature. Rather, only a definite object—society—could account for the religion. Society, Durkheim wrote, "simply by its effects on men's mind, undoubtedly has all that is required to arouse the sensation of the divine" (1912/1995:209).

Society induces this religious energy and stimulation because human beings are entirely dependent upon it. "We speak a language we did not create; we use instruments we did not invent; we claim rights we did not establish; each generation inherits a treasure of knowledge that it did not itself amass," Durkheim elaborates (1912/1995: 214). As a result of this latent awareness, religion develops and serves "first and foremost as a system of ideas by means of which individuals imagine the society of which they are members and the obscure yet intimate relations they have with it" (1912/1995: 227).

[3] Durkheim uses the term "primitive" in his text, but I here substitute the term "pre-state" in keeping with contemporary terminology (as per Robert Bellah).

Thus, religion is not an illusion in this view. It corresponds to a definite object. But the object to which the believers, the practitioners, the participants understand themselves to be in some form of communication is an illusion. Karen Fields, Durkheim's most recent translator, informs us that this was a deeply controversial thesis during Durkheim's time, excoriated both by secular thinkers who dismissed it as "metaphysical," and by others who charged him with committing the sin of reductionism. Fields argues that it was neither. In any case, the idea that religious systems are based on an illusory premise but a definite object has been steadily integrated into the sociological mainstream so that it is largely unproblematic in the sociology of religion, secularity, and culture. It is in this context of a dominant social science perspective of religion as essentially illusory, during the latter half of the twentieth century, that transpersonal psychology emerged—concurrent with postmodernism, postructuralism, and critical theory.

Transpersonal psychology revisits many of Durkheim's premises about the ways in which a science positive has the capacity to fruitfully examine religion. Ken Wilber, it would appear, was the first transpersonal psychologist to address Durkheim's work directly in his treatise on sociology, *A Sociable God* (1985). He proposes that in *The Elementary Forms* Durkheim made a revolutionary advance in the scientific study of religion, but that developments in science over the course of the twentieth century called for revision.

One such revision might have included Durkheim's claim to have found that "there really is a part of us that is not directly subordinate to the organic factor: That part is everything that represents society in us" (1912/1995: 274). Transpersonal psychology

dedicates itself almost entirely to the question of whether there is some aspect of the human self—and of society—that is not subordinate to organic factors. It synthesizes the work of scientists across the disciplines to build precisely such an argument, which will be explored at length in chapter four.

Apart from these questions, the Durkheimian framework raises a number of further questions about the study of religion, secularity, anomie, and the prospects of solidarity in the contemporary age. At least two fruitful—and pressing—questions arise. As Karen Fields notes in her translation of *The Elementary Forms*, Durkheim could not have anticipated the events of the late twentieth century. Perhaps the most significant political revolution during the latter half of the century was the 1979 overthrow of the Shah of Iran and the erection of a theocracy in his place. Likewise, as the Soviet Union faded rapidly into history many formerly significant religious institutions reemerged in the one-timeSoviet empire and began to play a central role in everyday life. "And who would have thought," she writes, "in 1912 that, three generations later in America, religion would be a hot button political topic, the object of undignified excitement, the locus of dispute over where the authoritative designation of where right conduct lies and must lie?" (1912/1995: xxvi).

Religion may be an opium of the masses, Fields opines, but "it is not only the opium that puts people to sleep but also the one that makes legions of people go to great lengths to get their own dose of it" (xxv). Religion has not withered in quite the way that Durkheim suspected that it would, and it now the question is to what degree it maintains a distinctly different relationship to other explanatory systems—particularly to science. The relevant question here concerns whether nineteenth century assumptions that a

cumulative science positive would uncover the laws of the natural, biological and social worlds conditioned the ways in which social scientists were able to view and determine which properties of the self and the social world were real and which were illusory. This question lies at the heart not only of the transpersonal project, but also of various versions of postmodernism, feminist epistemology, postcolonial studies, and the philosophy of science.

This question is what prompted Peter Berger, in *A Rumor of Angels* (1969), to revisit Durkheim's distinction between the anthropological school and the sociological school. Durkheim stressed in *The Elementary Forms* the strength of the sociological perspective over the merits of anthropology, by noting that the former begins with the premise that "social facts exist in relationship with the social system to which they belong" (1912/1995: 91). Anthropology misses this essential relationship between humans and their social structure when it begins with the premise that "man possesses a religious nature in and of himself, by virtue of his own constitution and independent of all social conditions" (1912/1995:91). Berger instead attempts to balance both sociological and anthropological approaches to transcendence. "Any historical society is an order, a protective structure of meaning, erected in the face of chaos," he writes, "Deprived of such order, both group and individual are threatened with the most fundamental terror, the terror of chaos that Emile Durkheim called *anomie*" (1969: 53 – emphasis in original).

In the face of mounting anomie, Berger the sociologist goes looking for anthropological signals of transcendence. He finds not many remaining plausible signals in the modern social order, but those that do remain include the human propensity for

order, which is "grounded in a faith or trust that, ultimately, reality is 'in order'" (1969:54). Thus, a parent's act of reassuring a frightened child is another signal of transcendence. "If there is no other world, then the ultimate truth about this one is that eventually it will kill the child as it will kill his mother," Berger expounds, "(but) there is an intrinsic impulse to give cosmic scope to this order, that implies not only that human order in some way corresponds to an order that transcends it, but that this transcendent order is of such character than man can trust himself and his destiny to it" (1969: 56). Other signals include the persistence of play—and therefore joy—in a tragic world; the "unconquerable propensity to hope for the future...even in the face of experiences that seemed to spell utter defeat" (61); displays of courage that are "linked to hopes for human creation, justice, or compassion" (62); and the human capacity for humor, which "reflects the imprisonment of the human spirit in the world...(during which) the tragedy of man is bracketed" (70). By turning his attention to signals of transcendence, Berger illustrates in some depth McCarthy's point that sociology *carves* and continues to *carve* reality, as much as it explains or reflects it. It faces choices about what signals to look for and which to reject, and whether to permit metaphysical speculation or discard it.

The second question concerns Durkheim's understanding of the potential for organic solidarity in a post-religious society. When he wrote *Suicide* nearly a century ago, Durkheim observed that industrialization and economic progress "mainly consisted in freeing industrial relations from all regulation . . . Religion has lost most of its power, (and) government, instead of regulating economic life, has become its tool and servant" (1976: 255-256). Many observers might agree that these secularizing conditions have only intensified since then. Even at that time Durkheim was arguing that the market had

begun to penetrate all sectors of the lifeworld, every aspect of daily and institutional life, and that industrial production was serving less as a means to an end than as the very end itself. Durkheim did not witness the eclipse of industrial production and the rise of consumer society as a central formation of western economic life over the course of the century. It is tempting to speculate on how he might have approached the question of solidarity in such circumstances. In any case, Durkheim's concern was with the already ubiquitous effects of anomie and the development of potentially destructive forms of egoism. "Egoistic suicide," he wrote, "results from man's no longer finding a basis for existence in life...and anomie results from man's activities lacking regulation and his consequent sufferings" (1976: 258).

His proposal at the time was that occupational groups held the most likely potential to function as a moral replacement for the mechanical solidarity that traditional religion imposed. Modern occupational groups had the advantage of being the ubiquitous social form in industrial societies, and they extend more control and regulation over social networks than any other modern social institutions. "Thus," he concluded, "the corporation has everything needed to give the individual a setting, to draw him out of his state of moral isolation; and faced by the actual inadequacy of the other groups, it alone can fulfill this indispensable office" (1912/1995:379). It is doubtful that Durkheim would be so sanguine about occupational groups today. Sociologists and other social observers in the latter half of the twentieth century have been more likely to note the "degradation of work" (Harry Braverman), the "corrosion of character" (Richard Sennett), the division of professional labor between a new "logocracy" and an increasingly disempowered "lumpenlogocracy" (Charles Derber), the pressures of the

"second shift" (Arlie Hochschild), and a "jobless recovery" (Stanley Aronowitz) than they have been to find evidence for organic occupational solidarity. It may not be overstating the case that transpersonal psychology, new religious groups, and Christian fundamentalist movements are all responses to the functional void left by the declining salience of mainstream religion, labor unions, and voluntary organizations.

Durkheim: Thought and Action in Traditional and Secular Societies

Prior to the publication of Durkheim's *Elementary Forms*, most social observers of religion had focused on beliefs and disregarded the importance of rites. Durkheim found that for members of religious communities, beliefs do not hold the position of highest importance. To such believers, Durkheim wrote, "the true function of religion is not to make us think, enrich our knowledge, or add representations of a different sort and source to those we owe to science. *Its true function is to make us act and help us live*" (1912/1995:419, emphasis added). Religion therefore provided action possibilities, including restraint and direction imposed upon everyday behavior as well as the possibility of human salvation through the ritual communion with a chosen god.

Most importantly, religion provided the basis for community. Herein lies the importance of Durkheim's insistence that to understand the emergence of religion in human life it is necessary to study the most basic forms of religion. The earliest religious systems had no conception of divinity. Instead, the totemic religions provided a force that bound individuals together. Members of a clan considered themselves to be kin because they have the same name—the same totemic symbol. The totem provided a moral power, binding all members of a clan together and imposing a set of expectation for action. "The totem is above all a symbol, a tangible expression of something else,"

Durkheim explains, “But of what? . . . It is the flag of the clan, the sign by which each clan is distinguished from the others, the visible mark of its distinctiveness . . . Thus, if the totem is the symbol of both the god and the society, is this not because the god and the society are one and the same” (1912/1995:208).

Here Durkheim staked a claim of utmost importance. He justified his sociological stance by positing that religion, given its pervasiveness in human history and prehistory, must correspond to a definite object. In this case, the definite object is the external social world which exerts the same degree of power and force over human beings that religious believers claim for their gods. Individuals live in total, if not always acknowledged, dependence on their society. “We speak a language we did not create,” Durkheim writes as a way of explaining the power that a society exhibits over its members, “we use instruments we did not invent; we claim rights we did not establish; each generation inherits a treasure of knowledge that it did not itself amass...We owe these varied benefits of civilization to society, and although in general we do not see where they come from, we know at least that they are not of our own making” (1912/1995: 214).

Society thus exerts the power of a god, and early religious peoples had available to them a means of communing with that god which increased the intensity of their bond with each other and strengthened the power of each individual. People in early religious societies divided their time between mundane time during which they provided for the daily economic requirements of life and sacred time, during which the population congregated together and participated in extraordinary rituals. To commune in early societies was to leave the “languid” world behind, and to congregate in the most intense means possible. “[A] sort of electricity is generated from their closeness and quickly

launches them to an extraordinary height of exaltation," Durkheim wrote of the ceremonial rites of the Australian peoples. "From every side there are nothing but wild movements, shouts, downright howls, and deafening noises of all kinds" (218).

When Durkheim studied suicide, he identified egoism as one of the foremost modern social causes of suicide. Egotism is a condition, the roots of which he attributes to religious developments. Protestantism, where it was successful and permanently established itself as the dominant religion, overturned the traditional authority of the Catholic Church. In the process, it created the grounds for free inquiry among individuals. "Reflection develops only if its development becomes imperative," Durkheim explained, continuing that such conditions arise when "certain ideas and instinctive sentiments which have hitherto adequately guided conduct are found to have lost their efficacy" (1897/1976: 150). Free inquiry becomes a social condition contributing to rising rates of suicide because it weakens common beliefs and consequently diminishes previous bases of social solidarity. Among the intellectuals most likely to engage in free inquiry, the absence of traditional beliefs leaves in its place a "state of the ego living its own life and obeying itself alone" (1897/1976: 220). Thus, humans in modern, increasingly post-religious societies face a dilemma: the prevalence of suicide increases with knowledge, but with access to knowledge egoism increases due to the further erosion of tradition. "Man seeks to learn," Durkheim wrote provocatively, "and man kills himself because of the loss of cohesion in his religious society" (1897/1976: 169).

Durkheim demonstrated a commitment toward balance between unrestrained egoistic inquiry and organic solidarity, by warning that social controls on egotism are no

longer possible or desirable. Such social compulsion could only be a threat to the dignity of the individual. "Far from being the source of evil," Durkheim wrote decisively, "it is its remedy, the only remedy we have....for only reflection can guide us in life" (1897/1976: 169). Such conviction underlies Durkheim's commitment to moral education.

But egoism provides the underlying cause of suicide for a smaller proportion of those who take their ownlives than does the looming threat of anomie, a more pervasive affliction in post-mechanical societies. "Unlimited desires are insatiable by definition," Durkheim observed, "and insatiability is rightly considered a sign of morbidity... Inextinguishable thirst is constantly renewed torture" (1897/1976:247-248). Traditional societies provide regulations that limit desires and regulate human passions. Anomie arises when such restraints are removed by increasing prosperity, or when their power to regulate the individual weakens due to rapid social change. Durkheim witnessed such rapid changes amidst the increasing industrialization of France, and he observed that "industry, instead of being still regarded as a means to an end...has become the supreme end of individuals and societies alike" (1897/1976:256).

The grounds for both anomie and egotism persist in the twenty-first century, and the intensity with which both conditions undermine social solidarity has most certainly increased. If Durkheim noted that societies had lost sight of the ends to which industry was to contribute, post-industrial societies appear to have lost sight even of industry itself. Productive labor is all but hidden in prosperous post-industrial societies and consumption has become perhaps the supreme social end. If regulations upon desire were weakening as Durkheim wrote *Suicide*, post-industrial societies appear committed

to increasing and extending desire to infinite potentials. Consumption fed by such desire may in fact have become our sole social means of solidarity, for we in post-industrial may share only the common symbols of price, product, and brand.

Durkheim, of course, proposed that if a basis for organic solidarity in post-traditional societies exists, it lies in occupational groups. If religion no longer provided sufficient moral solidarity, family life even in Durkheim's time was shifting so rapidly that it also failed to do so. But he saw in occupational groups a social ubiquity, combined with the necessity that individuals have to participate in them, which promised the potential for solidarity. Such groups would regulate behavior, institute expectations, and provide moral norms that their members could sufficiently internalize so as to limit both anomie and egotism. However, it must be noted that occupational groups have themselves become deeply commercialized and the inter-group relations highly monetized.

With accelerated movement of individuals from occupation to occupation, and from one type of corporate culture to another, the potential of occupational groups to provide social regulation is in doubt. Those who have studied occupational and professional groups in recent decades, such as Harry Braverman, Stanley Aronowitz, Charles Derber, and Arlie Hocschild, for instance, have often observed that they may contribute to individuals' alienation as much or more than they provide a basis for solidarity and meaning. Occupational groups may exert demands—the demands of marketplace competition and rigorous work schedules—without providing a basis for common moral purpose.

Thus, I view transpersonal psychology as one particular attempt to reincorporate an essentially religious view, within academia, within science, but on at least partially secular terms. By religion, I mean here a view occupied with "ultimate meaning." It is a response to the reining scientific materialism of contemporary economics which implicitly argues that there is no basis in meaning outside of the "hidden hand" of the market. They propose a cosmos saturated with meaning and propose moral visions orientation toward the full interconnectedness of human beings with each other and with world itself. It is an answer to anomie and to egotism. In fact, its strong orientation toward Buddhism (non-attachment, etc) and toward mystical Hinduism make the transpersonal vision quite similar to Durkheim's focus on egotism, and to the torture induced by unlimited, constantly renewed desire. It also reinvigorates the goal of reflection, a goal that Durkheim affirmed but which subsequent strands of scientific behaviorism and empiricism rejected.

It resurrects the notion of the Soul, which Durkheim wrote is an idea that "seems to be contemporaneous with humanity" (242). The point is not that the transpersonal psychologists have built a correct, true, or otherwise better social science. As a sociologist, I mostly follow Erich Goode's instructions not to take a position on the *truth* of the argument, but on the *struggle to achieve it as true*. Therefore, I study transpersonal psychology here only as a means of studying one way in which the religious questions—the ultimate meanings questions--re-emerge in the sciences. But I use the qualifier "mostly," as I must divulge my own interest in resolving questions of anomie and meaninglessness in a consumer society. I do not judge transpersonal

psychology to be a correct interpretation or integration of science with spirituality, but to understand the sociological conditions under which it emerged.

As a Durkheimian, Robert Bellah visited all of these questions within the context of higher education as a potential source both of solidarity, anomie, and the further penetration of market ideology. Like McCarthy, he argues that education is constitutive of a particular way of life. Bellah is convinced that the predominance of rational choice theory in much of the social sciences instructs students that instrumental rationality is the only genuine motive for human behavior. In the context of rational choice theory students are bound by the rules of good science—and this is a moral prescription—to observe the world in terms of self-interested behavior. There is here the danger of self-fulfilling prophesy. Bellah also argues that the removal of all reference to religious values in the modern university contributes to the alienating egotism of contemporary life. Again, Durkheim's words seem to be so apt an application of Bellah's more recent concerns. "Egoistic suicide results from man's no longer finding a basis for existence in life," Durkehim wrote in 1897 (258). For Bellah, there are any number of ways that higher education could re-incorporate discussions of religious ideas without harming the scientific enterprise.

Durkheim and the Notion of the Soul

Durkheim devotes one of his chapters in *The Elementary Forms of Religious Life* to "The Notion of Soul." He observes that, "Just as there is no known society without religion, there is no religion, however crudely organized, in which we do not find a system of collective representations dealing with soul—its origins and its destiny. So far as can be judged from the ethnographic data, *the idea of soul seems to be*

contemporaneous with humanity" (1912/1995: 242–emphasis added). Therein lies the significance of exploring what happens as the notion of soul begins to disappear from a culture. Durkheim notes that the idea of the soul "was and still is the most widely held form of the idea of personality" (1912/1995: 272). In scientific practice, what replaces the idea of soul? The utility of studying the construction of ideas of the self and of personality within the fields of psychiatry and psychology is to trace the terms under which soul has been replaced by other conceptions—such as the stimulus-response organism, the inheritor of genetictraits, the brain-powered being and a product neurotransmission.

Robert Bellah contrasts the conception of the soul with its scientific replacements. "The very notion of soul," he writes, "entails a divine or cosmological context that is missing in modern thought. To put the contrast in another way, the traditionally religious view found the world intrinsically meaningful. The drama of personal and social existence was lived out in the context of continual cosmic and spiritual meaning. The modern view finds the world intrinsically meaningless, endowed with meaning only by individual actors, and the societies they construct, for their own ends" (1982: 3). I posit that transpersonal psychology arose in response as a return to the older notions of the soul that concerned Durkheim. Transpersonal psychology is a meaning-making enterprise, positing an eclectic set of paths of return to the soul by simultaneously incorporating and critiquing twentieth century mainstream social science.

Another treatment of the soul, which borrows form the Durkheimian, Weberian, and Marxian traditions, is Michel Foucault's treatment of the soul in *Discipline and Punishment* (1997). Michel Foucault offers a history of the soul, making the point that

the soul has been constructed by the practices of the modern penal and medical systems. He parts company with Durkheim, arguing that to study the general form of the soul—in this case the incarcerated soul—is to miss the ways in which the soul is a process, a dynamic and continuously changing outcome of techniques of state power and scientific knowledge. Here he distinguishes between the earlier conceptions of the soul produced by the "illusion of the theologians" from the "historical reality" (1979: 29-30) produced by technologies of state and disciplinary power.

This reality of the soul can be located by tracing the question of what entity the state punishes when it rescinds the right to directly punish the body of the accused through techniques of torture or execution. As it retreats from the use of corporal punishment as a punishment for specific crimes, the state brings into being a new entity—the soul of the accused. The state no longer directs punishment solely in response to a criminal act, but instead directs judgment onto the individual who has committed the act. In so doing, the state constructs a continuously expanding edifice of scientific knowledge aimed at uncovering the character, the background, the consciousness, and the mental state of the offender.

Dimensions of the soul receive further scrutiny—and thus gain more elaborate "reality"—as the institutions of law and punishment become entwined with psychiatric expertise and the distinction between culpability and insanity. If it has been the tradition of theologians to view the soul as an entity wrapped within the body, Foucault demonstrates that the soul brought to being by the techniques of surveillance, education, and diagnosis "is the prisoner of the body" (1997: 30). The soul then is an object constructed and elaborated by the "judges of normality" (1997: 304).

George Marsden takes an approach to the construction of the "soul" which differs considerably from the path etched by Foucault. Marsden has written an account of the historical evolution from Protestantism to "established nonbelief" within American higher education which he has titled *The Soul of the American University* (1994). In the decades following the 1960s, he wrote, "the original intellectual rationale for excluding religious perspectives was much weakened. Few academics believed in neutral objective science any more and most would admit that everyone's intellectual inquiry takes place in a framework of communities that shape prior commitments" (1994: 430). Nonetheless, most members of the academy and affiliated institutions generally avoid the term "soul" because that has for so long been the practice. He notes that postmodern theorists who engage in reflexive critiques of scientific practice continue to insist on exclusively naturalistic premises.

If Marsden is correct that mainstream university culture, postmodernist or otherwise, continues to "penalize anything but pure naturalism" (1994: 436), transpersonal psychology will remain a wholly marginalized discourse whose terminology will not even register in the mainstream of psychology or psychiatry. Durkheim, on the other hand, approached the soul by acknowledging its veracity, — within limits. "Like the ideas of religious force and divinity," he wrote, "the idea of the soul is not without reality. It is quite true that we are made of two distinct parts that are opposed to one another as the sacred is to the profane, and we can say that in a sense there is divinity in us" (1912/1995: 266). For Durkheim the idea of the soul pointed to something that really existed because it represented the part of society that was embodied in the individual. Here he means that "the world of representation in which social life

unfolds is added to the material substrate, far indeed from originating there" 1912/1995) 274).

In this way, I contend that Durkheim, Foucault and Marsden in a sense all point to the same implications. Social life unfolds in a world of representations, and these representations are derived from social morality, from the state, from the normalizing institutions of penal "corrections" and psychiatry, and from the university. The types of representations that exist, that move to the fore, that shape our lives reflect to some extent social choice. Science itself is both influenced by and productive of such social choices, as illustrated by the struggles within science to establish which various narratives are more legitimate than others. These include battles over the veracity of rational choice theory and liberal economic theory more broadly and strong forms of empiricism.

Weber: Rationalization, Theodicy and Disenchantment

One way to read Weber is to note the melancholy with which he describes the unfolding rationalization of the world. Rationality produces modernity, but at the expense of something lost. There is value in what was lost, though clearly Weber does not wish for a return to the enchanted world of magic and tradition. An example of Weber's ambivalent, and pessimistic view of rationalization can be heard in the following haunting words from *The Protestant Ethic and the Spirit of Capitalism:* "The Baptist denomination along with the predestinationists, especially the Calvinists, carried out the most radical devaluation of all sacraments as means to salvation, and thus accomplished the religious rationalization of the world in its most extreme form" (1958: 147).

There is a certain aggressiveness, if not violence, in the ways in which modernizing Protestantism tore at the threads of prior enchanted worldviews. "Christian

asceticism," Weber wrote, "now strode into the marketplace of life, slammed the door of the monastery behind it, and undertook to penetrate just that daily routine of life with its methodicalness" (1958: 154). Just as Durkheim noted that industry in the late nineteenth century seemed to be instituting itself as the goal of society, rather than as a means, so Weber noted the social transformation wrought by the activities of the ascetic Protestants. Capitalism emerged in a cultural context in which "labor came to be considered in itself the end of life, ordained by such as God" (1958: 159).

Weber famously concluded his lecture "Politics as a Vocation" by projecting the future that might arise in the face of a rationality unconstrained by other value spheres. Though it would be preferable, he exclaimed, if Shakespeare's Sonnet 102 foretold our civilization's future, no such outcome awaits. It is not Shakespeare's "summer's bloom" that lies ahead," Weber warned, "but rather a polar night of icy darkness and hardness" (1958: 128). He delivered that speech in 1918, following the enormous destruction of the Great War and the sense of cultural crisis that it ensued. Therefore, Weber's foreboding of a dark future carved by unrestrained rationality may have been conditioned by those immediate circumstances.

On the other hand, his warning may have been more general. He may have perceived the rationalization of all human value spheres as potentially unstoppable and corrosive. Weber's work displayed a perception of continuous change, and therefore the sense that there could be no projection on the basis of iron-clad social laws. Thus, the rationalized present may not in fact be the hard calculative future which he surmised may have come to pass. He did, in the oft-quoted concluding pages of *The Protestant Ethic* speculate about the far-off future. No one could yet predict, he wrote, who will live in

the iron cage created by rationalization, bureaucratization, and capitalism, "or whether at the end of this tremendous development entirely new prophets will arise, or there will be a great rebirth of old ideas and ideals" (1958: 182).

As Peter Berger notes consistently in his work (1968, 1969, 1994, 2000, 2001), Weberian sociology has done more than any other social science and more than the natural sciences to highlight the contradictions in and social causes that gave rise to all particular forms of religion. As sociology was more and more able to explain and account for all variations in religion through historical and cultural factors, transcendence in the modern world is "reduced to a rumor" (Berger, 1969: 74).

One example of such relativizing appears in *Economy and Society*, wherein Weber provides exacting detail of the sheer variety and continuous local change in early religious formations. "As forms of the gods vary," Weber wrote, "depending on natural and social conditions, so too there are variations in the potential of a god to achieve primacy in the pantheon or to monopolize divinity" (1978: 415). Weber further elaborated that religious behavior, as distinct from religious belief, is primarily oriented to *this* world and follows the rules of experience. Most ends and means of religious behavior have economic motivations. Religions took their forms in response to a "whole series of purely historical motives" (1946: 286).

At the same time, it is difficult not to discern in Weber a sense of what religions provided and what the modern world stands to lose. "The conflict between empirical reality and (the) conception of the world a meaningful totality," Weber wrote, "produces the strongest tensions in man's inner life" (1978:451). Prophetic religions always include a vision of the world as a meaningful cosmos. Metaphysics directs itself ultimately to the

question of what the world would look like if it were to have meaning. Religions and their directions also arise in response to the "rational need for a theodicy of suffering and of dying" (1946: 276). We do not have recourse to these metaphysical meaning structures anymore in a modern, scientific culture, Weber wrote in "Science as a Vocation." We must accept our fate "like a man," or return to the open arms of the churches.

Robert Bellah (2006b) discerns in Weber an unrequited "yearning" for religion. As against the bureaucratized and routinized modern world order, Weber for instance describes religious practices in India or in the Catholic church, the origins of which included the "orgiastic and mimetic components of the religious culture—especially of song, dance, drama" (1978: 422) or in the other-worldly traditions which produces states of "cosmic love, ecstasy, orgiastic ecstasy" (1946: 278). In these selected quotes, Weber was not affirming such states or properties as much as debunking them. Those properties were only those of religious virtuosos, not of the ordinary member of any culture whose motives were nearly always directed toward the material here and now. But Bellah, though deeply appreciative of Weber, argues that Weber faced selective choices. Whatever he may felt about religion and the forlorn prospect of "brotherly love," Weber developed a theoretical corpus of work which stressed power as the most significant dimension in human life—perhaps the only one which truly matters. Though he could have done otherwise, Bellah adjoins, in his sociology of religion Weber stressed not the Franciscan ethic of all-embracing love but the Calvinism "succumbed to 'the world dominion of unbrotherliness'" (2006: 391).

Joel Elliot concludes his examination of the theme of irrationality in Weber's work with an epilogue that asks how we in the modern world are to endure life in the iron cage. Weber understood that humans tragically seek consistent meaning in an ordered and unified cosmos, while they paradoxically pursue the very knowledge that destroys any possibility of a religiously meaningful cosmos. Elliot sums up the fate of human beings in a rationalizing world as Weber viewed it: "Intellectual contemplation and reflection as a form of inner-worldly salvation, hammered with the uncompromised reality of a disenchanted, morally vacuous world, confronted with the realization that the course of human knowledge progresses *ad infinitum*" (1998: 24).

Accordingly, there can be salvation in a rationalized world but it is only of a reflective inner-worldly nature, while the reflecting subject is cognizant all the while of the impossibility of a role for moral questions or purpose. If Weber hesitated about fully predicting the future, it would seem that moral emptiness would only intensify along with human scientific and technical knowledge. But Elliot continues his epilogue with one narrow possibility for rationalized re-enchantment. "Perhaps somewhere along this infinite trajectory of intellectualization," he writes, "others will find a way to serve both this intractable, inexhaustible, perhaps self-destructive, will-to-knowledge—Weber's life 'without illusions'—and also the irrational human demand for life saturated with meaning and purpose" (1998: 24).

It is not my intent to suggest to that the transpersonal psychology movement fulfills Elliot's position that there must be a solution to the problem of disenchantment. But it cannot be doubted that their intensions follow along these lines. The authors of the transpersonal literature come from disciplines dedicated to the inexhaustible will-to-

knowledge—for the psychologists and the psychiatrists, the knowledge of the very workings of the human mind, brain, and personality—but their pursuit of meaning seems to weigh even heavier than the technical task of achieving pure knowledge. We do indeed live in a rationalized society, but the other non-rational value-spheres continue operating. There are choices in social science about which dimensions of the self and human interconnection to emphasize.

Marx: Species-Being, Capitalism, Alienation

Marx's depiction of humans as a species-being raises a number of intriguing questions as to what he meant by such a designation. "Man is a species being," he wrote, "not only because in practice and in theory he adopts the species as his object, but...also because he treats himself as the actual, living species; because he treats himself as a *universal* and therefore a free being" (1964:112). In the narrower interpretation, Marx meant by species being the distinction of humans from other animals because, unlike other species, "man makes his life activity itself the object of his will and of his consciousness" (1964:113). In this case, by "life activity" Marx primarily referred to the human production and the ability of humans to conceive in their imagination a product prior to actively producing it. Humans prove themselves to be species-beings through work. But when referring to the ways in which capital estranges labor from the species-being, he refers to the quality of the species-being as "both nature and his spiritual species property . . . his spiritual essence, his *human* being" (1964:114-emphasis in original).

In an interesting comparison of political-economy to religion, Marx divulges aspects of his view of the purpose of inquiry. Adam Smith, he wrote, following Engels's

earlier work, became the Luther of political-economy when he began to see labor—rather than private property alone—as the principle of the discipline. Other political economists were "adherents of the money and mercantile system, who look upon property *only as an objective* substance confronting men, (and) seem therefore to be *fetishists, Catholics*" (1964:128 – emphasis in original). But even Smith's political-economy ultimately betrayed labor, externalizing human qualities and thereby assisting in the objectification of the essence of the species-being. Likewise, Hegel's emphasis on absolute consciousness—absolute spirit, or God—has the effect of alienating humans from species life. The human subject "emerges as a result" of consciousness rather than the source, and "real man and real nature become mere predicates—symbols of this esoteric, unreal man and of this unreal nature" (1964:188).

We can see why Robert Bellah and Bryan Appleyard, among others, have argued that Marx carried on the Jewish prophetic tradition by other means. His language is vivid, poetic, angry, indicting of the power structure, and in search of redemptive power of correction. "The raising of wages excites in the worker the capitalist's mania to get rich, which he, however, can only satisfy by the sacrifice of his mind and body," Marx wrote in *The German Ideology* (1964:69). Workers, Marx argues, serve the interests of society, but seldom is the reverse true. In the line of fire for Marx lay the political-economists and piecemeal reformers who justified such meager benefits for the proletarian and in the long run contributed to further immiseration. The political economist distorts the reality of the landlord—who has his origins in theft—and turns the productive fertility of the land into the landlord's accomplishment.

Marx sought to end—to destroy—the mystification of the social system, of labor and of the commodity form. Many have noted the difference between the early Marx and the later Marx, where Marx adopted a much more technical, scientific, and postivistic tone. But in *Capital* the voice of the angry prophet is not muted. He even made a passing reference to the Hebrew scriptures as he described the historical development of capitalism: "With the birth of large-scale industry in the last third of the eighteenth century," he wrote, "(there followed) an avalanche of violent and unmeasured encroachments. Every boundary set by morality and nature, age and sex, which in the old statutes were of pleasant simplicity, became so confused that an English judge, as late as 1860 needed the to rely on an interpreter of the Talmud to explain 'judicially' what was day and what as night. Capital was celebrating its orgies" (1976:390)

Marx addressed himself to the inequities of capital, just as the prophets addressed the harsh inequities developing in the ancient states of Israel and Judah. His language is angry, piercing, and unrelenting as he eviscerates the "spirit" of capitalism in consuming the lives of the workers. "Hence it is self-evident (to the capitalist) that the worker is nothing other than labour-power for the duration of his whole life, and that therefore all his disposable time is by nature and by right labour-time, to be devoted to the self-valorization of capital," Marx wrote. "Time for education, for intellectual development, for the fulfillment of social functions...for the free play of the vital forces of his body and his mind, even the rest of Sunday (and that in a country of Sabbatarians!)—what foolishness! But in its blind and measureless drive, its insatiable appetite for surplus labour, capital oversteps not only the moral but even the merely physical limits of the working day" (1976:375).

Marx's dialectical approach had the effect of illustrating the increasing immiseration of the working class as a progressive development toward a communist society which would enable the free and full development of all. Hence, in *The Communist Manifesto*, the bourgeosie "has pitilessly torn asunder the motley feudal, patriarchal, idyllic relations...and has left remaining no other nexus between man and man than naked self-interest, than callous 'cash payment'" (1977:223). Exploitation would become more brutal and more apparent in a bourgeois society no longer preserving the religious illusion that theretofore veiled class relations. The bourgeoisie had "drowned the most heavenly ecstasies of religious fervour, of chivalrous enthusiasm, of philistine sentimentalism, in the icy water of egostistical calculation" (1977: 223).

Marx was perhaps the most optimistic of the great founding sociological thinkers. He believed that while even as exploitation grew ever more brutal, there remained at least the possibility that capitalism's own contradictions would generate the grounds for a fully conscious revolution—"the forcible overthrow of all existing social conditions" (1977:246). Though some Marxists, such as Ellen Meiksins Wood (1995, 1997, 2002) and Ralph Miliband (2003) continued to affirm that the transformation to a classless remains possible, it is difficult at this historical juncture to see developments beyond the immediate and continued penetration of the market into ever more aspects of human life. At least in the United States, the labor movement appears for the moment to be in a state of near fatal collapse.

Transpersonal psychology offers an intriguing return to Marx's theory of class, class development, and the possibility of a future classless society. Ken Wilber, for instance, advocates for a "mystical Marxism" that "cover(s) the intricate relations

between the 'material-technological-economic' base of any society and its worldviews, legitimation strategies, and consciousness states/structures" (1993:263). Here he suggests that Marxian analysis accurately analyzes and describes the most fundamental, material processes of human production and material reproduction. In his view, it would become part of an overall analytical framework which includes Marx on labor and caital, Freud on emotional exchange, Habermas on communicative exchange, and Nagarjuna and Ramana Maharshi for an exploration of the transcendent realms. Each represented levels of human "beingness," none of which were complete without the others.

SECULARITY AND THE 1960s

Though the claim that the 1960s represents a pivotal point in American culture has been made so frequently that it approaches the level of caricature, the sheer velocity of scholarly change during that decade prompts me to revisit that era once more. The work of the great foundational sociologists—Marx, Weber, and Durkheim—withstood every emerging challenge that preceded and followed that moment. Nonetheless, it would appear from the vantage of the early twenty-first century that so many shifts in perspective either reached their culmination or emerged during the 1960s. Perhaps most prominent among these changes was Thomas Kuhn's shattering of the traditional view of cumulative science in 1962. Kuhn illustrated the quasi-metaphysical and metaphysical commitments that tell "scientists what sort of entities the universe did and did not contain" (41). Such a metaphysics also inevitably fashions methodology and determines which observations are accurate and complete and what shape that laws of observation must take.

It is this current of scientific critique, that intersected with and perhaps even gave rise to transpersonal psychology later that decade. Kuhn made certain questions possible, upon which transpersonal psychologists seized. Just beforehand had come Norman O. Brown's reappraisal of Freudian psychoanalysis in *Life Against Death* (1959), and following Kuhn in quick succession came Betty Freidan's *The Feminine Mystique* (1963), Abraham Maslow's *The Psychology of Science: A Reconnaisance* (1966), and the renaissance of Marxism in American sociology, to name a few. I do not suggest that any of the former, except Maslow himself as the founder of transpersonal psychology, would have supported any of the premises of the transpersonal psychology movement. But they were part of an environment which made it possible for practicing psychologists and psychiatrists to revisit fundamental questions of science and value. That era of cultural ferment was fueled not only by ideas in the academy, but by activist and political commitments external to it. Taken together, transpersonal psychologists could with some confidence begin to argue that all science operates with an implied metaphysics and a set of cultural values.

Enter the New Age (As Failure and Harbinger)

In the 1960s, the loosely defined "New Age" movement, based on a sometimes frenetic borrowing and often haphazard reformulating of religious ideas started to gain momentum in American culture. At the end of the 1960s, Peter Berger (1969) wrote of the declining—but not terminal—possibilities remaining for theology in a rationalized American culture. In retrospect, he now argues (2001) that the New Age was a signal, if a poorly organized one, of the development of a global culture. Berger explains that his institute—The Institute on Culture, Religion and World Affairs—has begun a multi-year

project, multi-country project on the effects of an emerging global culture and finds that in general as this world culture develops it largely involves the Western appropriation of non-Western concepts and creative hybridization. "But there are also movements," he continues, "of alternative globalization, cultural influences originating outside the West and impinging on the latter. Among these movements of 'Easternization,' the New Age is arguably the most important" (193). Thus, the New Age may be a harbinger of idea formations to come.

Transpersonal psychology belongs in a similar terrain, as it revisits concepts of the soul and engages in what is arguably a dialectics of Western appropriation and counterhegemonic Easternization. Berger views the New Age movement as a theodicy—an attempt to find meaning—and a challenge to the individualistic "view of the self that has been a major product of Western civilization" 2001: 193). For the New Age, these concepts include the incorporation of the Buddhistic practices and the Hindu concepts of samsara and karma.

But transpersonal psychologists and psychiatrists should not be conflated with the New Age movement. They clearly spring from the same sources, but transpersonal psychology attempts to do in practice what the New Age Movement so far has not. Colin Campbell, for instance, in his sociological examination of the New Age is sympathetic to the need for a modern theodicy. "That there is such a need arises from the fact that life itself contains no inherent or intrinsic meaning, or message," he writes, "such that people's experiences only become meaningful when set within a frame that culture supplies" (2001: 74). But he argues that the New Age involves a kind of "theomania," and is "profoundly asocial." In the 1960s, it signified a rejection of modernity and of

consumerism, but because the New Age embraces such an individualistic ethos it might, in fact, "be used to justify capitalism and inequality" (2001: 81).

For similar reasons, Steve Bruce judges the New Age to have been a failure. The central problem is that the success of any set of beliefs depends on the degree to which they can be organized. "I cannot see how a shared faith can be created from a low-salience world of pick-and-mix religion," he writes (2002: 105). Among those who embrace the New Age, "there is virtually no agreement on specific application" (2002: 94). Most damaging is that the there is virtually no sign that the New Age movement produced any concrete social impact or institutions.

One response is that transpersonal psychology involves much of the same religious and spiritual terrain of the New Age movement, but as it is in fact located within scientific disciplines it represents an attempt to produce exactly the same kind of systematization of knowledge that Bruce and Campbell find are missing from the New Age itself. Transpersonal psychologists have created permanent degree-granting programs and institutions, peer-reviewed journals, and professional organizations. They have also generated the theoretical work that attempts to weigh through, verify, and systematize the claims with which they work.

Though much could be written about the distinctions between transpersonal psychology and the New Age movement, I would like to close to this section with an observation by Paige Smith. He agrees with Steve Bruce on many points, but still he writes: "Flaky at the fringes and credulous to the point of gullibility...the New Age movement is so problematic that I would gladly leave it alone were it not for the fact that it has two things exactly right. First, it is optimistic, and we need all the hope we can get.

Second, it adamantly refused to acquiesce to the scientistic worldview. Instinctively, it *knows* that the human spirit is too large to accept a cage for its home" (1990:161).

Feyerabend: Science and the Iron Cage

More than a decade after Thomas Kuhn published *The Structure of Scientific Revolutions* (1962), Paul Feyerabend's *Against Method* would amplify the radical critique of scientific practice. When he died in 1994, Feyerabend left behind a manuscript on science and its outlook which has been published posthumously (1999). Within its pages, Feyerabend again proposes a radical revision of our conception of science with far-reaching implications. Science operates—can only operate—by abstracting from the abundance of possibly observable empirical facts and features of the natural world and social life. But when it shaves away a myriad of existing conditions in the process of extraction, it proceeds as if only that which remains is real and the totality is insignificant. Science changes phenomena through abstraction or by experimentation, thereby transforming the physical, natural or human realms that it claims to observe.

These premises have long been acknowledged in the methodological literature of the sciences, but Feyerabend extends this claim further and claims that science cannot be considered a system of knowledge decisively superior to past religious traditions. Since the advent of quantum theory, physics has been rent by a division between the laws and theories that guide the observation of sub-atomic particles and those that dictate the observation of large or normally observable objects. Quantum theory has also displaced the determine world of Newton. Thus, argues Feyerabend, "If one still insists that the bits and pieces that are flying around today are superior by far to the analogous collections of a past age—a live nature, whimisical Gods, etc.—then I must refer them to

what I said earlier: the superior is the result of having followed a path of least resistance. Gods cannot be captured by experiment, matter can" (1999:142).

Feyerabend emphasizes the "violence" with which the scientific stance has encountered and displaced tradition, "leaving nothing in place...but an anxious quest in a frozen universe of solitude" (1999: 6). He charges that only its astonishing technical success permitted science to displace the architecture of traditional belief systems, and then it "addicted" people to the constant quest for more products and more advanced technology. There is a colonizing spirit in science and in modern philosophy, he argues, disguised—as many colonizing enterprises are—in humanitarian language. Not unlike Hans-Georg Gadamer, who proposed a "hermeneutics of restoration," Feyerabend seems to mourn for the knowledge of the past which has been demolished by modern science and to propose that contemporary knowledge quests may yet make room for an ontological pluralism of knowledge sources. "[T]here are many things we can learn from the sciences," he writes, "But we can also learn from the humanities, from religion, and from the remnants of the ancient traditions that survived the onslaught of Western civilization" (1999: 159).

SECULARITY, POST-SECULARITY, AND THE POLITICS OF SOCIAL JUSTICE

There has been of late considerable debate about the influence of religious ideas on politics and political mobilization. The historian Warren Goldstein (2005) advises against ignoring the broad role that religion has played in shaping progressive ideas in American history, from abolitionism to the civil rights movement. Only by an odd twist of history, Goldstein writes, has religion come to represent political conservatism and an

anti-science stance in the U.S. cultural imagination. Liberal Protestantism, the mainstream of religion in the U.S. from the close of the 19th century to the 1960s, erected a tradition of reconciliation of Biblical teaching with the scientific worldview. Its social vision included focusing on problems of poverty, and at least one manifestation of Liberal Protestantism, the Social Gospel, was closely aligned with the labor movement and focused on urban poverty. Reinhold Niebuhr became the most influential Protestant theologian who, for a time, launched a critique of capitalism and sought a synthesis of Marxism and biblical Christianity.

Goldstein argues that the influence of liberal Protetantism has declined at least in part due to "academic condescension" (B6). He urges scholars to take note of the potential and the vision that liberal Protestantism continues to offer in matters of current political urgency. He writes of Martin Luther King's blending of the Sermon n the Mount and its "sublime teaching on love" with the Gandhian method of nonviolent resistance as a particularly effective moment. He has also written a book on William Sloane Coffin, the chaplain of Yale University in the 1960s and 1970s, whose liberal theology "fired the faith and activism of a generation" (B7). He reminds readers that as Ronald began slashing social programs, "it was religious institutions that housed and nurtured liberal dissent" (B8). Goldstein closes by noting how the role and vision of Liberal Protestantism has been "written off" by both conservative commentators and by academic scholars who see religion—inexplicably in Goldstein's view—as strictly a conservative force.

Michael Eric Dyson (2007) draws attention to the political impact of religious faith and the ways in which it provides a framework both for cultural critique and

national moral standards. Dyson assesses the political discourse that emerged following Hurricane Katrina's devastating impact on the Gulf Coast and notes that the tradition of black religious faith has provided one of the most stirring critiques of the dismal national response. If black faith and spirituality provided survivors with a means to make sense out of the widespread and overwhelming destruction, it also "commissions the rest of us to hold society responsible for the healthy and just reconstruction of poor black communities" (196).

In the face of a disaster whose effects continue to displace as much as a quarter of a million people from New Orleans alone, Dyson calls for "structures of justice" (203) to create long-term responses to the entrenched racial inequality that exacerbated the hurricane's impact. The tradition of black prophetic spirituality plays a role in balancing the politics of the conservative white Evangelical tradition during the current political moment. "Even as right-wing evangelical faith sanctifies the state, worships the market, and genuflects before conservative government," he urges, "black prophetic faith must uphold the blood-stained banner of a God who identified with human suffering and oppression, and who came to earth to die as one of the poor and outcast. Otherwise, our declaration of a 'preferential option for the poor' will echo as an empty theological issue" (197).

The Homeless Mind Revisited

Berger, Berger and Kellner (1974) deduced a condition of cultural "homelessness" that beset the late twentieth-century United States as primary institutions—religious organizations, labor unions, political organizations—began to lose their emotional appeal and social coherence. The condition accelerated as the

counterculture that once had offered vivid and public criticisms of these primary institutions began to lose its social energy. Durkheim had much earlier recognized that for a culture to provide a "home," it must provide a symbolically significant set of widely-shared meanings which assume the status of a moral force. Modernity had already begun to disrupt the possibility of a single set of such meanings, but Durkheim held out the possibility that occupational organizations would provide the basis for organic solidarity with the system of occupations. Berger, Berger, and Kellner found such a resolution to anomie and to egotism had begun to diminish—if it had not been obliterated altogether in the United States—by the end of the Vietnam War era.

In the new century, Berger sounds at once both more and less optimistic than he did when he co-wrote *The Homeless Mind*. He describes (2001) himself as having found a fruitful position of "homelessness" between sociology and theology, relying on the former for its ability to offer a value-free lens on the social order and on the latter to remain attuned to the signals of transcendence that are inherent in the human condition. He has retracted his earlier predictions (1968, 1969) of a progressively secularizing world—or even a progressively secularizing U.S. culture—in a world a post-Iranian revolution world "full of massive religious explosions (2001: 194). Sociologists of culture must contend once again with the prospect of increasingly politicized religiosity. Berger does agree with those, such as Steve Bruce (2006) who still defend the secularization hypothesis that pluralism continues apace. Such pluralism undermines religious dogma, but has not ultimately led to a fully secularized modernity. Indeed, modern scientific pluralism has begun to undermine scientific thinking itself and to

reopen some of the previous scientific certainty that theology had no public role to play in scientific thought.

I think that we do have a common cultural ethos in the United States, a hegemonic set of ideas that retains the status of a moral imperative. That ethos is the predominance of market rationality. It is by no means universal, and it is frequently countered by various other narratives of the self and of society. But it is undergirded by particular versions of the social sciences. It is embodied in rational choice, and neoliberal economics, and in a vision of the university as a center for job preparation.

"Modern politics seems to oscillate between believers in the free market and believers in the bureaucratic state," warns Robert Bellah. "If those are the only options then our outlook is bleak indeed, for both destroy the lifeworld if they have their way unimpeded" (2006: 118). Somewhat more explicitly than Peter Berger, Robert Bellah is interested in the ways in which theological questions—or their absence—affect the predominance of market rationality and state bureaucracies. Robert Bellah observes that Protestantism—especially the "dissenting Protestantism" of the Baptists and similar sects—has consistently formed the American majority tradition in the United States almost since John Winthrop proclaimed it to be a City on a Hill in the 17th century. Therefore, all Americans have been influenced by the spirit of dissenting Protestantism whether or not they have been aware of its impact. It provided the roots of both capitalism and democracy, and the basis for the claims of both self-determination and consumerism. Now, Bellah argues, both democracy and self-determination are being replaced by hegemonic consumerism.

Bellah urges sociologists to consider the ways in which the "minority traditions" might be incorporated within social scientific culture to provide alternative models of the self, the social world, and of American empire at the beginning of the twenty-first century. There are "Flaws in the Protestant Code," as he has entitled one of his essays (2006: 333) and our national culture, however secularized, inherited the Protestant roots of individualism. But it has always coexisted with "traditions with a stronger sense of the common good" including certain versions of Judaism, Catholicism, and the minority traditions—Islam, Buddhism, and Native American spirituality. "All of them," he writes, "in one way or another, have ways of thinking about the world that are less individualistic and privatizing than our dominant tradition" (2003: 8).

The culture of the American university has a dialectical relationship to these questions of science, secularity, and the narratives from the spiritual traditions. As Charles Derber argues, the university is in a position of power as the "high church" of scientific culture—a hegemonic scientific culture which is largely philosophically materialist. But it also has had to play an increasingly subservient role to the market itself, as Bellah argues. He worries about the monetization of everything, including higher education, which "makes us simply a sector in the market, the 'higher education industry'...and subject to all the strictures that apply to any other part of the market economy" (206: 413).

Science continues to evolve, and with it the metaphysical assumptions that surround the scientific enterprise. The principle that there can be no metaphysics in sociology, as Durkheim affirmed in 1912, is a metaphysical assumption that emerged during an era that had not yet withstood the critiques of scientific rationality and

positivism that the later twentieth century would bring. The premises, structures, its methods change of the natural and the social sciences have evolved, although as Marsden has written those ideas which stray from the purely naturalistic are not yet welcomed even in the most pluralistic of academic settings. Bellah and Berger show that its meaning structures operate in conjunction with other cultural premises. Perhaps most importantly, science in the West has existed in a dialectical relationship with a history of previous religious domination over science. Bellah argues that this dialectics of domination has made the Enlightenment tradition hesitant not only of the spiritual tradition, and suspicious of moral claims altogether.

If we can say that there exist three strands of thought in sociology, two of them are deeply rooted in moral questions. Marxist conflict sociology decries injustice, and the Durkheimian tradition has been concerned with aspects of modernity that undermine solidarity. The Weberian strand, however, generally sets the standard—the value-free standard. Weber, of course, did address morality by paying close attention to the ways in which conceptions of morality produce social, cultural and institutional change. Unlike Marx or Durkheim he did not see the scientific observer's task as contributing to morality, only observing it with disinterest. Berger and Bellah both suggest that the value-free stance as it has been constructed by twentieth century is constitutive. It is productive of change and carves knowledge.

A question that has continuously troubled me throughout this project concerns the relationship between science and scholarship. Does science represent the entirety of modern of the aims of scholarship? In a sense, this is an empirical question. It assumes that the relationship between science and scholarship varies with time, place, context.

Institutions and culture determine what relative weight ought to be given to science and "extra-science" or to non-science. Sometimes extra-scientific thought is incorporated and called "science," and sometimes it is not.

In Weber's words, science is a "specifically irreligious power" (1946: 142). But I take seriously Bellah's claim that Marx—and much of the Marxist tradition—operated in the prophetic tradition. Buddhism, Hinduism, Marxism—perhaps scholarship most broadly interpreted—all represent a search for a means to free us from the iron cages that would imprison us. The following chapter revisits these questions of the relationship of science and secularity by examining the social science and philosophy of science literature of the final two decades of the past century.

CHAPTER THREE
FRAMING THE RELATIONSHIP BETWEEN SCIENCE AND SECULARITY: THE CONTEMPORARY LITERATURE

A number of contemporary sociological threads intersect in the attempt to understand the relationship between science, religion, and spirituality in American culture. Charles Rosenberg (1997), John Ziman (2000), and Sandra Harding (1998) probe the ways in which science both resembles and differs from other beliefs systems. Robert Merton (2005), David Bloor (2005), Stephen Toulmin (2001), Karin Knorr-Cetina (2005), and E. Doyle McCarthy (1995) examine the ways in which values have shaped science as a form of cultural knowledge production in ways which often go unacknowledged. David Harvey (1990) provides a framework for understanding knowledge systems within the context of modernity, modernization, and postmodernity. Erich Goode (2000) frames his discussion of science as the formation of a hegemonic discourse which rules out certain claims and interpretations without ever confronting counter-hegemonic ideas on their own terms. Robert Bellah (1970, 1982, 1999, 2000, 2002, 2003a, 2003b) and Robert Wuthnow (1991, 2000) make the sociological case for the inclusion of certain counterhegemonic claims within the discourse of academic science.

Another strand of sociological scholarship that helps to frame the relationship between science and religion involves the historical construction of secularity as both a set of methodological assumptions and a set of cultural values which guide scientific practice. The anthropologist Talal Asad and the sociologist Peter Berger have written at length about the contours and implications of the relationship between science, modernity, and secularity. Another theme which contributes to the understanding of

science and religion is the impact of the professionalization of knowledge, a process which inevitably includes the making of claims to knowledge by challenging and ruling out the validity of other claims to knowledge. Andrew Abbott (1988), Joseph Bensman and Robert Lilienfeld (1991), and Peter Berger and Thomas Luckmann (1966) provides useful frameworks for understanding the ways in which professions construct the contours and terms of reality.

SCIENCE, RELIGION, AND SPIRITUALITY: COMPLEXITIES AND DEFINITIONS

One of the difficulties of discerning the borders between science and religion lies in the multiple meanings of the term "science." Charles Rosenberg writes that within his own work, science is "assumed to mean a number of different things: an accumulating body of knowledge and the techniques for acquiring it, a community with peculiar ideas and values, and, in addition, the images and emotions which scientific knowledge and the figure of the scientist have conjured up in American minds" (1997: xviii). To those who would examine the cultural development and impact of science, Rosenberg cautions that science cannot be separated from values and institutional structures, from internal or external political pressures, nor from the individuals who carry out the work of science. He notes that previous generations of sociologists have treated science as heroic, and thus as something that could not be studied on the same level or in the same ways as other institutions. It was seen as decisively above the mundane activities of business, politics, and personal life. The effect of Thomas Kuhn's *The Structure of Scientific Revolutions,* published in 1962, was to launch the tradition of viewing science as a set of institutions, participants, and cultural and ideological practices.

Sandra Harding (1998) and John Ziman (2000) also offer broad views of science as a highly varied system of knowledge—or systems of knowledge—similar to that with which Rosenberg operates. Harding disputes the "unity of science thesis" to which she claims most scientists and observers subscribed up to the early twentieth century. The unity thesis held that, in Harding's words, "there exists just one world, one and only one possible true account of it, and one unique science that can piece together the one account that will accurately reflect the truth about that one world" (167). But Harding believes that even if most scholars who have seriously examined this "older theory of science" now regard it as little more than "folk belief," it still prevails as a dominant model of science. Even those who now acknowledge that science cannot generate a "mirror image" of reality continue to believe that *trying* to do so is the best route. These beliefs within the scientific community, Harding argues, emerged within the structure of European colonialism and continue to equate the West with rationality and "the rest" with bias, irrationality, and superstition.

Ziman (2000) argues that the claim that basic science is sealed off from the influence of the outside world amounts to little more than an ideology. "Indeed," Ziman writes, "the claim to be distinctive as a mode of knowledge production is one of the most distinctive features of science as a social institution" (55). Despite the legend that an inviolable moat surrounds the work of basic science, many bridges—both epistemic and educational—assure the flow of ideas and cultural values onto the island of science. Thus, Ziman settles on what he labels the "Continental European usage" of the term "science," according to which science "should always be interpreted to cover the whole range of organized knowledge" (27).

If "science" refers to the entire spectrum of systematized knowledge, how is it possible to distinguish science from religion—or at least from systematized theology? Ziman argues in part that on close examination such distinction is not readily apparent. "In other words," he writes, "'science' and 'religions' are very much alike, in that they are general systems of belief from which people seek guidance in their life-world thought and actions" (310). Science may diverge from the religions on any number of bases, including that of human origins, the nature of the universe, the source of consciousness, and the nature of the human self, and in some cases the differences sometimes "arouse violent social conflicts" (310). Ziman points out, however, that an emphasis on the sharp differences *between* science and religion obscures or ignores the great—and often conflicted—diversity *within* the two categories of knowledge. Ziman allows that the "real" distinction might center on the attitudes of the believers—or practitioners—of science and religion, but in that case too he finds that the differences lie on a spectrum rather than exist as polar opposites. If religious believers sometimes exhibit rigid dogmatism, so too do some advocates of science who approach their belief system as singularly virtuous and mission-like. If scientists are schooled in the importance of value-free knowledge acquisition, so too are some religious believers—Ziman here singles out Hinduism and Buddhism—"open to new wisdom gained by personal enlightenment" (311).

Ziman writes not as a postmodern critic of science, but as an advocate of science who argues that its future health will depend on recognizing its limits and affirming its capabilities. "Contrary to the Legend," he concludes, "science is not a uniquely privileged way of understanding things" (327). Therefore, "[t]he best way to defend the

research culture is not to try to patch up the Legend but to depict science honestly as a systematic, rational, human activity performed by ordinary people on common-sense lines...[to] show how essentially *reasonable* these methods are, and how well adapted they can often be to the logic of the situations where they are employed" (329).

In their exploration of the definitions of science, Rosenberg, Harding, and Ziman offer some guidance for exploring the problematics of the relationship between science, religion, and spirituality. Ziman notes that science is shaped by the cultures that produce it, and scientists employ their own particular "scientific machinery" which in turn shapes the perception and description of the world of reality. Social science definitions of spirituality are more difficult to locate. The shortage of works which try to define spirituality might result partly from the difficulty of defining such a complex and nebulous topic—a topic which some define in part as ineffable. But it might also result from a shared cultural sense that spirituality and scientific rationality conflict with each other. Matthew Schneirov and Jonathan Geczik (2003), two sociologists who explore the significance and cultural appeal of alternative medical practices, note that some social scientists have noted the ways in which scientific rationality marginalized that which might be called spiritual. "Rationalization is understood in a Weberian sense," they write, "as the absorption of actors into instrumental relationship *in which their emotional and spiritual dimensions are erased*" (33, emphasis added).

Sociologists who do offer definitions of spirituality have been rather indeterminate. Rosenberg writes that the spiritual is that which stands in contrast to cultural materialism. It is "a quest for personal integrity" (1997: 123). Robert Wuthnow's book, *After Heaven: Spirituality in America Since the 1950s* (1998) examines

the ways in which spiritual practices are changing without himself ever venturing a definition of what "spirituality" means. He observes that American spirituality has gradually become more focused on seeking or practice and less so on dwelling (or "churchedness"). "Spiritual practices," he writes, "put responsibility squarely on individuals to spend time on a regular basis worshipping, communing with, listening to, and attempting to understand the ultimate source of sacredness in their lives" (1998: 13). He concludes that when individuals pursue spirituality in the form of practice, rather than in the form of dwelling, "the practitioner retreats reflectively from the world in order to recognize how it is broken and in need of healing; then, in recognition that the world is also worthy of healing because of its sacral dimensions, the practitioner commits energy to the process of healing" (197).

Robert Bellah does not generally use the word "spirituality" in his considerable library of scholarship on the sociology of religion. But he does offer a consistent critique of the culture of liberal capitalism—characterized by "radical secular individualism"—to which he counterposes qualities such as "tradition," "true scholarship," and "public commitment." Modernity, Bellah assesses, posits that all social forms and relations are to be explained in terms of social or psychological utility. In traditional societies, "the drama of personal and social existence was lived out in the context of continual cosmic and spiritual meaning. The modern view finds the world intrinsically meaningless, endowed with meaning only by individual actors, and the societies they construct, for their own ends" (1982: 3). Spirituality relates to the intrinsically meaningful, that which provides a sense of the human role in the cosmos. Rather than engage claims of spiritual meaning, the social sciences have in many ways displaced theology from its tradition role

of telling us "what kind of creatures we are and what we are about on this planet" (1982: 1).

Joel Kovel offers a similar contrast between spirituality and liberal capitalism. "[I]t is capitalism which has created modernity in such a way that traditional spirituality has been eroded," he writes, "and it is capitalism which remains spirit's greatest antagonist" (1991: 9). Modernity itself advances important spiritual properties, Kovel elaborates, such as "emancipation, critique, respect for science, the happiness of the body" (3), but capitalism alienates spirit through "its iron tendency toward corporate gigantism, its staggering concentration of power and wealth in the hands of a few, its global reach and the systematic impoverishment of masses of people around the globe to aggrandize the few, penetration and colonization of all spheres of life, its insensate plundering of the earth, its fantastic creation of waste and toxins" (10). Spirit is that which seeks to heal, that which "creates a new sense of the possible, and the belief that the possible is worth striving for" (13).

Thus, Kovel views science as deeply spiritual in potential, but often deeply de-spiritualized in practice. Science, he posits, exists dialectically between the domains of Ego and of Soul. "There is," Kovel elaborates, "an immense space between reality and what we think or say about reality. Ego, which does not recognize the Other, cannot appreciate this space, nor can it appreciate the understanding of it" (230). Egoic science, Kovel elaborates, "makes unreal what the intellect cannot grasp, and deprives it of being" (232). Soul-science is characterized by openness to the Other, to other possibilities, to empathic knowledge.

Science, Spirituality, and Secularity

The divergence of science from religion during the modern era is often framed as the logical outcome of secularization in an age of growing scientific explanatory power. According to Charles Taylor (2002), the shape and impact of secularity were conditioned upon a number of cultural and historical contingencies which led to the dominance of one particular version of secularity rather than a range of other possible outcomes. Secularity can signify the absolute separation of science from religion, or it can mean the separation of scientific thought and rationality from the doctrines of *particular* forms of religion without necessarily rejecting all forms of spiritual content. Taylor contrasts two voices from the dawn of the twentieth century to illustrate the types of choices confronting social thinkers regarding religious experience during a formative period. Taylor chooses William James to represent the spiritual discourse that quickly went underground for most of the rest of the century, and William Clifford, James's lesser-known contemporary, to represent the voice of scientific secularity that came to dominate for most of the rest of the century.

"Like any sensitive intellectual of [the early twentieth century]," Taylor writes, "James had to argue against the voices, within and without, that held that religion was a thing of the past, that one could no longer in conscience believe in this kind of thing in an age of science" (43). He notes that in *Varieties of Religious Experience*, James voiced his ambivalence about a growing intellectual imperative to check any propensities toward reporting moments of inner expansion that would have been viewed as normal in an earlier era. Whereas James wrote of religious feeling as a deeply-rooted property of

human beings, he found that science as the voice of high culture by the twentieth century had vetoed faith as "something weak and shameful."

Taylor explains that William Clifford, on the other hand, began to lay down the terms of the twentieth century scientific creed in his late nineteenth century book, *The Ethics of Belief*. The title itself was a provocative statement, as Clifford was casting religious belief during an age of science as unethical and immoral. For Clifford, no hypothesis or general description of life was to be accepted until adequate empirical evidence confirmed it. The courageous and moral approach, therefore, is to resist the human desire to be comforted or flattered by religious myths. What Clifford made explicit, Taylor suggests, has come to underlie the implicit judgment about religion in the version of western secularism that took root in the twentieth century. In this view, Taylor writes, it became "the path of manliness, courage, and integrity to turn our backs on these facile [religious] comforts, and face the universe as it really is. But so strong are the temptations to deviate from this path that we must make it an unbreakable precept never to give our assent unless the evidence compels it" (44).

Just how thoroughly the view reflected in Clifford's *Ethics of Belief* has been absorbed into the ethos of the modern scientific worldview is an empirical question that I attempt in part to answer in the following chapters. Echoes of William Clifford run through Max Weber's canonical essay "Science as a Vocation" (1958) where, like Clifford, he equates scientific rationality with manliness and religious worldviews as its opposite. "That science today is irreligious no one will doubt in his innermost being," Weber writes (143). Science operates on the basis that there are "no mysterious incalculable forces that come into play, but rather that one can, in principle, master all

things by calculation" (139). As a consequence, science cannot serve as a source of meaning nor can it provide humans with guidance about how they should live. The historical and cultural sciences, likewise, may provide knowledge of the workings of human political, social and artistic phenomena but it can provide no sense of whether these endeavors are worthwhile. In the resultant disenchanted world, Weber judges that the "person who cannot bear the fate of the times like a man...may he rather return silently, without the usual publicity build-up of renegades, simply and plainly. The arms of the old churches are opened widely and compassionately for him" (155).

Weber (1958) outlines a number of distinctions between science and religion which he deems "inescapable." Science, he explains, is free from "all knowledge of miracles and revelation...nor does it partake of grace of seers and prophets dispensing sacred values and revelations, nor does it partake of contemplation of sages and philosophers about the meaning of the universe," (152). In separating itself from such encumbrances, science is able to yoke itself to the path of progress. But Weber is writing prior to certain rather profound shifts in the sociological view of science which have questioned to the degree to which science is free from revelation, sacred miracles, or a partially predetermined philosophical worldview. Sociologists of religion have also noted the spectrum of religious worldviews and the variations within them regarding the extent to which they make use of and understand the role of miracles (as facts or as metaphors), prophets (as chosen messengers from God or as those who speak for the marginalized and the oppressed or respond to crises), and sacred values (as mechanisms which separate the sacred from the profane or attitudes which cherish the material world

and daily life). "The tension between the value-spheres of 'science' and the sphere of 'the holy' is unbridgeable," Weber concludes (154).

Transpersonal psychologists propose a number of ways to bridge the value spheres of science and religion, beginning with expanding the value sphere of religion to include more than the narrowly "holy." Many transpersonal psychologists see William James as a forerunner to the transpersonal movement. They cite his prescription of "radical empiricism," which holds that all claims of experience deserve investigation and scrutiny, as an alternative to the social science practice of excluding anomalous or unusual claims. They also resemble James in that they have tended to emphasize religious experiences as rooted within personal experience, and to view organized religion—at least in its western monotheistic forms—with ambivalence. James, Charles Taylor writes, went so far as to describe organized denominations as religion's "wicked, practical partner" (2002: 7). Taylor argues that James's rejection of institutionalized religion, but simultaneous sensitivity to religious experience, is in fact a modern, secular view. Rather than the total displacement of religion in the fashion of William Clifford's view, Taylor judges that "a striking feature of the Western march toward secularity is that it has been interwoven from the start with [a] drive toward personal religion" (13). In this sense, transpersonal psychology might in fact be regarded as a modern secular movement, as it is beholden to no particular branch of religion but attempts to incorporate what it sees as valuable and applicable in all religions.

Another parallel between James and the transpersonal movement is their shared view of the melancholy which can result—or perhaps inevitably results—from the absence of personal religious belief. But James, writing at the beginning of the twentieth

century, valued melancholy and its resultant psychic pain as something that might ultimately induce clearer personal vision. James wrote of instances wherein the morbid vision induced by melancholy led to individual rebirth and a deeper sense of personal religious experience. Taylor argues that, a century after James wrote *Varieties of Religious Experience*, an entirely different order of melancholy threatens. James could not have foreseen the formative events that would shape the collective memory of the twentieth century, including the development of fascist and totalitarian states, the outbreak of two world wars followed by regional wars with staggering casualty levels, the nuclear annihilation of Hiroshima and Nagasaki, and the development of mass consumer culture. Today, Taylor claims, melancholy looms less as a constructive force and more as a source of "ultimate meaninglessness . . . We readily see it as a danger that menaces us all" (41). These words echo those of Max Weber, who wrote of the disenchantment induced by modern rational science: "the prophet for whom so many of our younger generation yearn simply does not exit" (1953, 152). The transpersonal project aims to counter the ultimate meaninglessness that lurks in the fabric of modernity. To do so, they proffer, requires reconceptualizing the relationship between science and secularity.

In *Formations of the Secular* (2003), anthropologist Talal Asad challenges many of the assumptions of the narrative of secularity. Social scientists, he claims, underestimate the extent to which "the secular" as an epistemology intertwines with "secularism" as a political doctrine. Anthropologists, for instance, devote considerable attention to the sources and impact of secularism, but pay comparatively little attention to secular epistemology, as they are writing from *within* the secular epistemological realm.

As a political doctrine, secularism separates private reason from public principle and insists that religion be placed in the private sphere. But secularism represents far more than the requirement of the separation of religious institutions from governments. Proponents of secularism, Asad states, posit a binary world of modern thought and action, on the one hand, which they claim has broken free of myth, religious conflict, and gratuitous cruelty, and a premodern world beholden to parochial identities, superstition, and pre-scientific irrationality. The U.S. model of secularism centers around free trade and private enterprise, Asad continues, and has increasingly come to dominate in much of the rest of the world in the form of American foreign policy.

Asad notes that the task of differentiating between the secular and the religious is by no means a straightforward one. For instance, Biblical scriptures can be viewed as inherently religious because of their supernatural subject matter. Or they may be viewed in more secular terms as literature or historical artifact; nonetheless, their supernatural context persists despite the choice to view them as art or poetry. The religious reader engages in layers of interpretation, viewing some passages as metaphor, some as programs of action for daily living, and some as media for contemplation of the sacred. The secular reader, in contrast, may see curiosity, beauty, superstition, a key to the past, or a source of imaginative inspiration.

Asad argues that because of the intersections of social situations, personal approaches, and traditions no action or belief is inherently religious or secular. Likewise, the modern liberal state poses as a bulwark against religious intolerance and violence, the removal of myths and irrationality, and the protector of human rights and integrity. Nonetheless, the modern liberal state is bound up in myths of its own. A number of

radical anthropologists, he notes, have shown that Max Weber underestimated the degree to which the modern liberal state is drenched in violence. While it stands against torture in principle and as a protector of "human rights," it quietly condones other forms of violence on a mass scale such as the "collateral damage" of aerial bombardment and the enormous social disruption resulting from neoliberal economic policies (128).

Asad suggests that it is helpful to ask what the world looks like *without* such binary assumptions as "religious" and "secular," premodern and modern, non-West and West. If one does not begin with such binary views, a different picture—and a different politics—of knowledge, thought, and human possibility emerges. Such a critique also challenges other binaries within secularism, such as the assumption that belief and knowledge are separate spheres of human activity; that reason is distinct from imagination; that history and fiction are opposites; and that the natural has no connection to the supernatural. The transpersonal approach can be read as just such an attempt to challenge the prevalent binary assumptions of modernity.

Peter Berger, who has been a long-time proponent of the hypothesis of a gradually secularization world, now judges that that "the whole body of literature by historians and social scientists loosely labeled 'secularization theory' is essentially mistaken" (1999: 2). Because western scientists and scholars primarily interact with other western scholars, or with the cosmopolitan and often western-education elite in developing countries when they travel, they have tended to see evidence of a secularizing world and the declining significance of religion. But the intensifying power of religion in the cultural sphere and in politics, both in the United States and worldwide, have convinced him that secular academics constitute an influential but small subculture. The secular academics "control

the institutions that provide the 'official' definition of reality, notably the education system, the media of mass communication, and the higher reaches of the legal system (and) are remarkably similar all over the world today" (10). Thus, they generally fail to note the degree to which intense religious feeling and identification continues to infuse the lives of individuals and cultures. Secular academics in the twentieth century, Berger argues, have come to understand themselves to be normal and to view the perseverance of religiosity as all but inexplicable in a rationalizing world. But Berger suggests that an accurate sociological approach begins with the premise that strongly-felt religious belief and identification has always existed. What needs explanation is its absence (in the form of secularity), rather than its presence.

Berger attempts to construct a rigorously value-free approach to what he terms the "de-secularization of the world." The tenacity or resurgence of religious belief, religious institutions, and religious influence is observable by those who would praise the persistence of religion in the modern world and those who would fear it. In that spirit, he writes, "The religious impulse, the quest for meaning that transcends the restricted space of empirical existence in this world, has been a perennial feature of humanity. This is not a theological statement but an anthropological one...It would require something close to a mutation of the species to extinguish this impulse for good" (13).

Science, Religion, Modernity, and Post-Modernism

The eminent philosopher and sociologist of science Stephen Toulmin (2001) proposes that elements of modern knowledge—science, rationality, and reason—are best understood in historical context. He deploys three historical frameworks simultaneously, viewing the unfolding of western human thought in terms of specific and immediate

"events" in the development of the cultural or philosophical approaches to knowledge; in terms of "episodes," which are historical developments that typically last one, two, or several decades; and in terms of *"la longue durée,"* or the "deep-water" questions whose historical time frame can stretch over the course of millennia. Toulmin does not entertain overtly spiritual questions or terminology in his analysis, but he does note the return of "values" to the arena of knowledge since the 1960s, before which they had been progressively separated from science and philosophy and treated as foreign. The seeds of modernity ushered in by the Enlightenment, Toulmin states, involved not only a progressive secularity but ultimately a confidence that a singular, objective scientific method would reveal universal and timeless truths about an ordered universe. From the time of Ancient Greece to roughly 1600, no area of human life, action, or thought was dismissed as intrinsically un-philosophical—and thus as inherently separate from rationality or reason. "Not until 1600," Toulmin writes, "was there any widespread tendency to insist on the superiority of theoretical abstraction and logical deduction, at the expense of directly human modes of analysis" (29) Subsequently, the growing prestige of abstract theoretical formulations imparted authority to formal consistency and to deductive proof at the expense of other modes of reasoning.

In his examination of the episodes of modern science, Toulmin notes that the human sciences based their agenda not only on the framework of Newtonian physics, but on a *misunderstanding* of Newton's work. Newton's *Principia* appealed to the human scientists due to its reputed predictive capacities. "Yet no work," Toulmin argues, "has been more deeply misunderstood" (47). The stable solar system "proven" by the mathematicians following Newton, Toulmin notes, was a product of fantasy—or the *hope*

for a fully calculable solar system—rather than a genuine depiction of the solar system that we now know to exist after the development of Max Planck's quantum theory of light absorption, Einstein's theory of special relativity, and chaos theory. Newtonian physicists observed a stable solar system because they *assumed* a stable solar system. Likewise, economists and other human scientists observed stable and predictable human behavior because they patterned their assumptions on a misreading of Newtonian physics.

Academic culture since the advent of modernity, Toulmin judges, has evidenced an increasing "obsession with rationality" at the expensive of Reason. He takes "rationality" to mean "without distortion" and reason to mean "without injustice." The seventeenth century dream of imposing a "single mathematical package" onto the observable universe and the humans that reside in it—"inflict[ed] a wound that remained unhealed for three hundred years" onto Human Reason (13). This scientific commitment to and desire for a rationally ordered universe resulted in part from the enormity of the destruction wrought by the Thirty Years War, in which cities across Central Europe were destroyed by clashes between Protestants and Catholics. It also emerged during a period of intense religious ferment in Britain, wherein the power of both state and the established church were challenged by multiple religious movements. "The alliance of the Angelican Religion with Newtonian Mechanics and Constitutional Monarchy," Toulmin explains, "came in time to form a unitary Ideology...which seemed to justify the English in their imperial mission and provided a model for all other countries—a stance that would be taken over in the late twentieth century by the United States" (157).

Toulmin argues for a Return to Reason (the title of his 2001 book), which would make room for narratives based on practical knowledge and particular experience—

including geographically particular knowledge, rooted in non-western cultures and in contrast to the universalizing values of the world financial institution. He argues that a return to reason would "allow us to revive moral argumentation...(and) bridge the gulf between Science and Literature" (123). He turns to the pragmatist tradition, particularly as embodied in William James's *Varities of Religious Experience*, as a starting point. Where rationalists value knowledge only—or primarily—in the shape of formal theory, pragmatists acknowledge the ways in which knowledge may take the form of tacit awareness. "Instead of all knowledge being based on a single kind of experience," he urges, "we must acknowledge a spectrum from the verbally articulate to the unspoken" (175).

In a similar vein, David Harvey's monumental study of the transition from modernity to postmodernity (1990) provides a framework for examining the intellectual currents within which the transpersonal movement emerged. Harvey uses more emphatic terms than Toulmin to describe the project of modernity, but both assessments are similar. "Enlightenment thought," Harvey assesses, "operated within the confines of a rather mechanical 'Newtonian' vision of the universe, in which the presumed absolutes of homogeneous time and space formed limiting containers of thought and action" (252). Following Jurgen Habermas, Harvey views the Enlightenment project as a secular movement which "sought the demystification and desacralization of knowledge, and social organization in order to liberate human beings from their chains" (13). But human liberation was predicated, in the Enlightenment view, on the domination of nature and this domination would inevitably come full circle and entail the modernist domination of human beings. The modernity that was birthed by the Enlightenment embraced

technological progress under the assumption that it was not only possible for humans to control the world but that such control must be desirable given the modernist faith in linear progress. This embrace of technology combined with the belief in linear progress would lead to the twentieth century high modernist "celebration of corporate bureaucratic power and rationality...(and) worship of the efficient machine as a sufficient myth to embody all human aspirations" (36).

From the beginning, Harvey illustrates, modernism sowed many currents of internal contradictions, including "the tensions between internationalism and nationalism, between globalism and parochialist ethnocentrism, between universalism and class privileges" (25). By 1848, following the violence spawned by all sides of the failed revolutions that swept across Europe, the modernist premise that there was only one possible mode of representation began to dissolve. The sense of disorder and uncertainty laid the groundwork for Nietzsche and Freud to begin to investigate the irrational and the erotic. Between the two world wars of the twentieth century, modernism embraced the positivism of the Vienna Circle, a period that Harvey describes as one in which "houses and cities could be openly conceived of as 'machines for living in'" (33). But in the decades following World War II, various cultural currents began to undermine the homogenizing tendencies of scientific rationality.

Harvey explores the ways in which perceptions of time and space serve as "primary vehicles for the coding and reproduction of social relations" (247). During the period of European feudalism, "external space was weakly grasped and generally conceptualized as a mysterious cosmology populated by some external authority" (241). The Renaissance brought a "radical reconstruction" of space as a result of the "voyages

of discovery...(and the) astounding flow of knowledge about a wider world" (244). Renaissance perceptions of infinite space surrounding a finite globe, Harvey claims, established the rules of perspective that would guide European science and social thought up to the middle of the twentieth century. The time-space compression heralded by the technological feats of air travel, rapid and integrated global trade, and instant electronic communication have altered the Renaissance perceptions and created the basis for postmodern critiques of science and rationality.

David Harvey rarely addresses the question of spiritual interpretations in *The Condition of Postmodernity*, but he provides fertile grounds on which to examine the transpersonal project. "I think it important," he writes, "to challenge the idea of a single and objective sense of time or space, against which we can measure the diversity of human conceptions and perceptions" (203). Arguably, such a challenge lies at the heart of the transpersonal movement. It is significant that the movement itself coalesced a year after the date that Harvey figures as most important in the rise of a postmodern ethos: 1968. The tumultuous uprisings and public demonstrations of that year, Harvey notes, helped to set in motion a "deep aversion to any project that sought universal human emancipation through mobilization of the powers of technology, science, and reason" (41). The resultant postmodern ethos included not only an embrace of otherness, but an "acceptance of ephemerality, fragmentation, discontinuity, and the chaotic" (44).

Transpersonal psychology appears to tread the ground between modernist universality and postmodernist fragmentation. It searches for human liberation in non-western philosophical traditions—particularly in variations of Buddhism, Hinduism, and Taoism—while eschewing fragmentation. If, as Harvey writes, postmodernism is

"concern[ed] with the surface" (61), transpersonal psychology claims to search for depth. Harvey also suggests that postmodernity may also be a form of a "new romanticism," which he describes as "the exploration of global meanings and the prospects for Becoming through the release of romantic desire out of the stasis of Being" (359). Transpersonal psychology also exhibits this search for global meaning and the search for Becoming, and many might judge its means—meditation, intuition, lucid dreaming, spiritual awakening, the evolution of consciousness—as tinged with romantic fancifulness and unreason. In any case, one sees the transpersonal movement engaging with the contours of time and space as it wrangles with questions about the boundaries of mind and body.

Sandra Harding (1998) examines the post-colonial challenges to modernist universality which arose in the 1970s and 1980s combining aspects of feminism, African philosophy, and African-American thought. Following the anthropologist David Hess, Harding situates the "'postcolonial' as a kind of critical discursive space opened up both within and after the end of formal colonialism, where diverse positionings, discussions and other practices can occur" (16). Here too seems to be ground shared by the transpersonal movement, which challenges the limits of western scientific rationality. Harding explores the construction of the narrative of Eurocentric science, wherein other (non-western) knowledge systems "were presented as anthropomorphic or religious beliefs about nature, full of superstitions, magical beliefs, and dangerous patterns of ignorance" (33).

Harding offers a thoroughgoing critique of the universalizing approach of the Eurocentered science narrative. Whereas Thomas Kuhn offered a reformulation of the

traditional narrative of cumulative scientific progress, Harding maintains that even the post-Kuhnnian approach "can sometimes appear parochial if one starts asking epistemological questions from outside the European-American intellectual traditions" (4). Following the work of the postcolonial philosopher Joseph Needham, Harding maintains that modern western science was patterned as much on external cultural factors as it was on the internal features of scientific method. Early western science posited the existence of universal laws of physics and nature because it patterned itself on European absolutism and thus imagined the universe as a "great empire, ruled by divine Logos" (57). Ironically, she writes, while Taoist influence on the culture of China may have prevented Chinese philosophers from exhibiting a similar interest in searching for precise and universal laws in nature, the development of chaos and relativity theory have led to something not unlike a convergence between western science and Taoism.

Harding maintains most observers of science do not sufficiently understand or acknowledge the degree to which western—or northern—science converged with and developed along with imperial conquest. She notes that a number of Marxists have suggested that it was capitalist expansion which drove scientific breakthroughs rather than the other way around. Contemporary narrative of science, she states, continue to pose that European "exploration" of territories that would eventually became colonies resulted from Europe's greater command of science and technical knowledge. If Europe was more advanced, so that narrative goes, then Africa and Asia were not spoiled by colonization but modernized by it. Ignored by the dominant narrative are the ways in which European science was driven by the navigational needs of "exploration" and benefited from the appropriate of localized knowledge, such as the advanced mathematics

of India and the Arabic world, and the magnetic needle, rudder, and gunpowder of China. Even the appropriation of the accomplishments of ancient Greece as a forerunner of European culture rather than the Turkish and Arabic Mediterranean is a cultural artifact of European imperialism.

Transpersonal psychology seems to follow a similar logic in its proposition that the western (and northern) human sciences were also products of the age of empire which failed to recognize the existence of advanced systems of knowledge regarding human states of consciousness and conditions of emotional suffering. Harding writes that academic disciplines continue to depict "objectivity and rationality as at home in the West and 'bias' and irrationality as at home with the rest of the world's cultures" (1998: 10). Charles Tart, whose work has been at the center of much transpersonal scholarship, offers a similar criticism of western psychology. Scientific experiments regarding human consciousness, he writes, are highly conditioned by cultural conceptions of what is possible and what is desirable. As much as psychologists have critiqued naive and oversimplified views of perception—of the ability to perceive reality as it is—"these same psychologists seldom apply their understanding of the complexity of perception to their own lives" (1983: 37). Harding insists that "local features of knowledge systems are not just 'prison houses of belief,' but also 'toolboxes' that enable scientific and technological traditions to understand more about their natural and social environments" (1998: 190). The same is as true of western and northern science, she states, as it is of the regions of the world that were formerly colonized or targeted by the west. In a similar vein, Tart had begun as early as 1975 to incorporate scholarship on the ways in

which Zen Buddhism, yoga psychology, Sufism, and western magic could inform western psychology.

Robert Bellah on Science and Religion

Perhaps no contemporary sociologist has written more widely and vigorously over a longer period of time about the connections between science and religion and spirituality in the United States than Robert Bellah. His corpus of work provides a framework for understanding the ways in which science and religion shape each other and how they maintain their boundaries with each other. Bellah traces the instances of conflict between science and religion to historical sources and exploring the cultural consequences that derive from the particular stances of religion and science to one another. Bellah's concerns include the purpose and function of higher education, the content and import of teaching, and the sources and cultural definitions of the human self.

In "Between Science and Religion" (1970), Bellah draws attention to the fact that the individuals whom he considers to have been the great architects of modern social science—Emile Durkheim, Max Weber and Sigmund Freud—were non-believers convinced that religion would inevitably whither away as rationality took increasing hold over the culture. Nonetheless, they devoted great attention to the study of religion and in explores some of the limits of scientific empiricism. Durkheim's exploration of intense moments of "collective effervescence," Bellah states, pointed to potential patterns of human behavior that lie beyond Enlightenment conceptions of human reality. The centrality of charisma in Weber's work enabled him to examine and understand aspects of the extraordinary in much the same way that ancient religions used the term to describe "a divine gift." Finally, Freud brought the Enlightenment to its zenith by

subjecting even the unconscious to scientific examination, and dug its grave by revealing the vast realm of non-rational thought that remains beyond the purview of science.

"Convinced of the invalidity of traditional religion," Bellah writes, "these masters of social thought 'each discovered the power of the religious consciousness" (1970: 240). But he judges that subsequent generations of social scientists have not been as sensitive to the subtler aspects of social inquiry as their forerunners. He suggests that although non-cognitive and non-rational aspects of social life continued to find a place in the literature through the work of systems theorists such as Talcott Parsons and Karl Deutsch, a positivist outlook that denies any validity to religious thought remains widespread throughout the social sciences. This split between religious and scientific thinking, according to Bellah, has resulted in a "dessication of the culture" and in "fragmentation and anomie in the universities" (244).

Bellah revisits Max Weber's influence on the sociology of religion and on the social sciences in general (1999), concluding that a misunderstanding of Weber's intent has profoundly—and in Bellah's view unfortunatley—shaped twentieth century social science. Bellah argues that *Theorie der Stufen und Richtungen religiöser Weltablehnung*" is "perhaps *the* key text in Weber's entire corpus." Unfortunately, its German title has been mistranslated and understood to mean "Religious Rejections of the World and Their Directions." Weber's intention in describing his chosen religious archetypes—St. Francis, Jesus, and Buddha—was to show that they world-denying only in the sense that gave up narrow attachments to intimate love and pursued impersonal universal love, Bellah explains. These and other world renouncers "are persons who stand outside everyday existence and question many of its most basic assumptions"

(1999: 6). Jesus extended the "notion of neighbor...to the strange and the alien...and even to the enemy, as in the Sermon on the Mount" (1999: 6). Saint Francis embraced "absolute non-violence" against all living things. The Buddha attacked the perception of separate individuals as one of false appearances.

But Bellah believes that Weber was himself ultimately not only mistranslated and misread but mistaken in his assessment of the incompatibility of religion and rationalization. Weber found that in a rationalizing world, "the religion of brotherliness"—Bellah's favored term for what has otherwise been translated as a religious rejection of the world—"finds itself at odds with each sphere, and increasingly so as each sphere is rationalized. In the economic sphere it is the "interest struggles of men in the *market*' that it finds offensive" (1999: 10). Weber judged that given the incompatibility between an "ethic of universal brotherliness" and a rationalized market economy, there was no room for the former in the modern economy and society. "Weber seems remarkably contemporary," Bellah writes, "in viewing any effort to 'interfere with' the market economy as destructive of the viability of such an economy, as his lifelong hostility to socialism also suggests" (1999: 13). Bellah critiques Weber's position as one which in essence instructs us to accept the "the sole dominion of the 'gods' of money and power unrestrained by brotherliness" (1999: 14).

If we accept the social-scientific premise that universal brotherliness is impracticable, impossible, and out of place in market-oriented rational world, we are not accepting a reality as much as we are constituting a reality. One effect of the rejection of the possibility of nonrational human capacities has been to teach students that all human action can be explained in terms of a competitive struggle for advantage. "The

universities bear the message of 'radical secular individualism,'" Bellah writes, "which is 'much more than an ideology; it is a way of life. It resonates with our economy, our political system, even with the way we organize our private lives" (1982: 8). In a period of ascending American economic and military might, these questions of rationality and moral purpose become even more acute. "Since we dominate the world, not absolutely but still enormously," he writes, "we are responsible for the world we dominate. That, I think, is the greatest challenge for American education" (2003b: 20).

In an essay titled "Education for Justice and the Common Good" (2003), Bellah notes that there are three "rival versions" of education that could work in complementary fashion but are more and more viewed as exclusive to each other. The first version is the liberal arts education which aims at cultivating wisdom, judgment, and leadership, and which placed philosophy and theology at the center of education with science as a complementary but secondary partner. "Although the liberal arts understanding of higher education has not disappeared," Bellah assesses, "it has been under overt or covert attack for over a century" (8). It has been replaced increasingly by a model which places criticism at the center of education, and even more recently by one which focuses on the university as a center for job preparation.

Universities can and should serve as places for job preparation and as centers of criticism, Bellah judges, but when they do so exclusively the older liberal arts tradition which imbues a sense of justice and common good suffers. Criticism without the older human tradition emphasizes detachment rather than engagement and loses sight of justice and the common good. "It consists," Bellah writes, "in learning to test and criticize beliefs with the object of building up a body of well-established 'facts' and principles or

laws of how things work" (2003b: 13). He is careful to note that the critical tradition is a healthy one, and that its best features were fostered precisely by disentangling science from theology and metaphysics and by approaching nature objectively. But science is one part of education and science absent a liberal arts context produces information without meaning. "If, in our desire to avoid indoctrination," he concludes, "we deprive our students of the knowledge of how the great traditions have answered these (human) questions we are surely short-changing them" (2003b: 15).

Sociology of Knowledge and the Border Between Science and Religion

E. Doyle McCarthy (1996) notes that sociologists of otherwise divergent approaches—from Marx to Durkheim to Mead—have generally adopted a pragmatic approach to the study of knowledge. In other words, most sociologists have viewed knowledge not in terms of how well it reflects or represents reality but in terms of the social action to which it contributes. "Pragmatists borrowed from the idealists the metaphor of knowing as 'carving,'" (4), she writes, in which human beings through their cultural institutions actively ascribe meaning to features of the natural and social world. Culture involves the process of selecting the features of the natural world that are worth knowing and the techniques and tools through which to know them.

In this pragmatic sense, the role that modern science ascribes to religion and spirituality takes on sociological significance because it contributes to the way that science *carves* its images of the world and the role of humans in the world. Science constructs and communicates narratives about the kind of world we inhabit. Physics, biology, and economics, for instance, craft narratives that explain how the world and its parts work. Not unlike religious narratives, these explanations provide active

interpretations that help to orient human action toward the world and other humans. There are active choices involved in choosing between narratives which describe living organisms as distinct resources to be maximized, on the one hand, or as part of cooperative systems whose fates are interconnected.

The noted sociologist of knowledge David Bloor (2005) explores the impact of cultural and historical circumstances upon scientific interpretations of the universe and the natural order. Newtonian physics, and its attendant mechanical philosophy, had become the dominant and stable model of the physical universe by the mid-1600s after its adoption by the Royal Society of London and remained so for more than two centuries. It posited that "nature was to be understood in terms of particles of inert matter blindly obeying laws of motion and operated on by forces such as gravity...Matter was brute, inanimate, and irrational, and could neither move nor organize itself" (77).

Robert Boyle, who led the group that ultimately became the Royal Society, had previously accepted the idea of an animated universe, composed of self-organizing matter. However, Boyle and the Royal Society adopted the mechanistic view when the civil war of the 1640s began to threaten English order. English society, Bloor writes, "witnessed the proliferation of radical religious groups and sects...[which were] disruptive and sometimes bizarre...and threatened to turn the world upside down" (78). These religious groups, or sectaries, challenged the Anglican Church, opposed tithes, and proposed a radical redistribution of property and political power. For the sectaries, God was to be seen in the animated order of the natural world. The members of the Royal Society found their personal interests in every way challenged by this disruption of order. Boyle advised that the Society would, in Bloor's words, "avoid any hint of this soul of

the world and speak only of the weight or pressure of the air" (78). Not only would the universe be viewed as devoid of intelligence, but humans would be "likened to particles of matter, and the forces of social order to the forces governing atoms" (80).

If Bloor's assessment is correct, it provides a highly instructive vantage point for understanding both the ways in the sciences in general took shape in response to external pressures, and the ways in which social scientific materialism patterned itself upon the interpretation of the Royal Society's interpretation of Newtonian physics. Robert Merton (2005) also notes the ways in which scientific interpretations of the physical, biological, and social worlds were shaped by external social conditions. He notes with some irony that Karl Marx subjected all forms of knowledge to criticism, probing the ways in which class relations and interests shaped both consciousness and social thought, while allowing that the natural sciences were exempt from such ideological forces. It was the precision of the natural sciences that persuaded Marx to so exempt the natural sciences from the ideological spheres.

But, Merton notes, the sociologists of knowledge in the twentieth century have noted the ways in which the natural sciences too have been patterned on existing social conditions. "The sociology of knowledge," Merton explains, "came into being with the signal hypothesis that even truths were to be held socially accountable, were to be related to the historical society in which they emerged" (2005: 38). To that effect, a number of sociologists of knowledge have noted the ways in which "Darwin's theory of selection was modeled after the prevailing notion of a competitive economic order, a notion which in turn has been assigned an ideological function through its assumption of a natural identity of interests" (59).

The philosopher of science Stephen Toulmin (2001) notes the impact of historical factors similar to those that Bloor and Merton cite when explaining major turning points in the scientific worldview during and following the seventeenth century. He explores the historical roots over the *long durée* that led human scientists to tirelessly pursue the "dreams" of a unitary nature, a universally applicable method with which to study it, and an exact mathematical language with which to report it. These three dreams are embodied most energetically in the figure of Leibnitz, who was born at the end of the Thirty Years' War, during which, Toulmin explains, "Central Europe was the locus of theologically rationalized brutality unparalleled in Lebanon, Yugoslavia, or Iran. All across Germany, prosperous cities were destroyed, while 30 to 40 percent of the country's population were slaughtered to the greater glory of a Calvinist, Lutheran, or Catholic God" (71).

Toulmin draws a sharp contrast between the trajectory science would follow after the beginning of the seventeenth century and the intellectual climate which came before. Leibnitz's predecessors in the sixteenth century, Michel de Montaigne and Francis Bacon, urged their readers to live with uncertainty and to rely on experience rather than to attempt mathematical proofs of their beliefs. "Such undogmatic (or antidogmatic) methods of inquiry," Toulmin writes, "appealed to the heirs of Renaissance humanism; but after 1610 religious conflict got out of hand and Montaigne's urbanity was no longer acceptable" (77).

Hegemonic Science and the Paranormal

The sociologist Erich Goode (2000) examines the bases on which certain ideas and premises are "excluded from the mainstream natural science and psychology journals" or are viewed by natural and social scientists as being on the other side of the scientific "Great Divide" (64). He defines paranormal beliefs as "claims or stories [that] invoke or make use of forces, factors, dynamics, or causes that scientists regard as inconsistent with a satisfying, naturalistic, or materialist, cause-and-effect explanation" (18). Goode takes care to state that he uses the term "paranormal" in a purely descriptive rather than a pejorative sense. "As a sociologist," he states, "I am interested less in whether a given claim is true and more in the struggle to establish a given claim *as* true" (21). Nonetheless, his treatment of paranormal thinking has the effect of cataloguing together ideas ranging from the belief in Big Foot and the predictions of Nostradamus, with the arguably more serious intellectual work of most transpersonal psychologists.

Goode's discussion provides a helpful context for framing a sociological examination of transpersonal claims, with important caveats. He casts paranormal beliefs as in sharp contrast to naturalistic science. "For the materialist, the world as the senses know it is all there is," he writes, "In materialism, there isn't any sphere or dimension worth knowing about outside of what the senses tell us exist . . . there is no 'higher' level of existence than this one, nor more 'advanced entity or being beyond humans" (181). Though he is writing about the contrast with paranormal thought, his description resembles precisely the transpersonal view—and critique—of scientific materialism. "The two lines of reasoning—the paranormal and the scientific—*cannot* be reconciled," he writes, "Nor can either be refuted or challenged to the satisfaction of adherents of the

other, because the entire logics of each are incompatible . . . conventional science and paranormalism exist in separate epistemological universes" (59).

But the following chapters of this dissertation include multiple accounts of scientists—both from within the transpersonal community and from scientists beyond it—who discuss interpretations under which the scientific and the extra-scientific can be reconcilable. Part of the confusion results from Goode's definition of a scientist as "a person with a doctorate in one of the natural sciences who conducts research that is or could be published in the professional journals in these fields" (20). In this case, Goode, a sociologist, chooses to exclude social scientists from the category of "scientist." It is unclear from his definition whether, or which, practitioners of medicine qualify as scientists. On the other hand, he does allow that parapsychology qualifies as a "deviance" science, because it "manifests the *form* but, according to most scientists, not the *content* of science" (119). The label "deviant" does not, he writes, "mean that it is wrong, invalid, pathological, or a 'pseudoscience,' only that it tends to be condemned or ignored by mainstream scientists" (134). Without necessarily intending to do so, Goode's definition illustrates the ways in which the likely content of science differs with the multiple ways of defining who is or is not a scientist. Transpersonal psychologists pursue a number of arguments regarding the malleability of just what the terms "science" or "scientific method" denote.

Goode's work also helps to frame questions regarding which aspects of paranormal or spiritual thinking encounter greatest resistance from scientists. "It is possible," he writes, "that no single axiom separates both paranormalism and common sense from scientific reasoning more sharply or profoundly than their respective views

toward *teleology* (emphasis in original). The issue of teleology produces a chasm of separation between these perspectives, an unbridgeable gulf" (64). Alas, teleology—the prospect of purpose or intrinsic meaning in the cosmos or in nature—lies at the heart of the transpersonal project. Indeed, the transpersonal psychologist Charles Tart lists "there is no purpose or reason for the universe existing" (1975: 66) as the first assumption of mainstream science which transpersonalists question.

Goode maintains the role of impartial sociologist weighing the struggle between hegemonic and non-hegemonic belief systems, but he does conclude with an implied warning about belief in paranormal phenomena. "As a general rule," he states, "people tend to see more patterning and order in events than exist in real life" (240). Indeed, this well-known tendency is the most frequently voiced objection to spiritual claims of any variety. But Goode also makes several strong cautionary observations regarding the reliance on science as the only acceptable source of truth claims. Competitiveness within scientific fields and institutions, he says, sometimes leads scientists to manipulate data. Sometimes, pivotal discoveries are discredited for years or decades before they receive acceptance. Finally, science cannot account for ultimate causes—such as the cause of gravity, quantum mechanics, or the speed of light. "Given the fact," Goode asks provocatively, "that science relies on what can only be described as mysterious, almost mystical and occult forces [e.g., gravity], how different is its reasoning processes from paranormal thinking?" (73).

In his book, *Science and the New Age: The Paranormal, Its Defenders and Debunkers*, *and American Culture* (1993) the anthropologist David J. Hess suggests that the role for sociologists and anthropologists in the division between paranormal thinking

and its scientific opponents should be to contribute toward the development of a "critical sociocultural perspective in this arena." Such a development would enable the various sides to "bracket questions of the relative scientificity or pseudoscientificity of a given set of truth claims and instead to discuss the cultural meanings and the sociopolitical implications of their paradigms, practices, and programs" (176). Hess examines three parallel discourses that have taken root in American culture since the 1960s—the New Age, which, following the work of the religious studies scholars J. Gordon Melton, he sees as a synthesis of transpersonal psychology and Eastern religions; the scientific skeptics, or debunkers, of the New Age; and parapsychology (in its academic, rather than popular form). Each of these movements has constructed a discourse defining itself as more genuinely scientific than its purportedly "unscientific others," including empiricism and positivism. This configuration of discourses, Hess writes, is only the latest "pattern in the development of the borderland between science and religion in the United States, wherein "each new movement situates itself as a more scientific variant of the previous movement" (32). Each side of the New Age/skeptical science debate "is good at seeing the social and cultural (influences on) its Others, but its boundary-work is obscured by a conviction that the Self possesses a transcendent, asocial knowledge" (17).

As a study of spiritual discourse within the sciences—focusing particularly on the fields of psychiatry and psychology—this dissertation explores ever-evolving cultural and sociopolitical construction of scientific meanings and practices to which Hess refers. It explores the cultural and sociopolitical power that both "hegemonic" and "deviance" sciences have to delimit phenomena in order to tell us what we are seeing and what we are not seeing. It explores the power to assess which methods and techniques are

legitimate and which are unacceptable. It examines the cultural meaning of health, wellness, and illness as terrains of expertise. For example, transpersonal psychologists have questioned some of the basic psychological assumptions regarding normal, abnormal, and optimal development; the causes of depression and suicidal ideation; and the relationship between consciousness and physiological processes. It can be seen that consensus about each of these factors has historical roots located beyond the disciplines themselves, and that judgments about such factors shift in response to scientific and extra-scientific knowledge. Arguably, the state of the cultural relationship between science and religion during any given period contributes to how such factors are viewed and which scientific opinions are regarded as deviant or legitimate.

Sciences and the Professions

The sociology of the professions literature offers another means for viewing the emergence and development of transpersonal psychology and psychiatry. Andrew Abbott, for instance, uses psychiatry as a case study in *The System of Professions* (1988). In Abbott's view, all professions operate within a competitive system relative to other professions. New professions emerge when a professional jurisdiction becomes vacant or when an existing profession is able to appropriate the jurisdiction of another profession. Professions always seek to expand their jurisdiction of experience, claims Abbott, lest they lose ground to a competing profession and they must consistently defend their jurisdictional borders.

"Personal problems," for instance, did not exist as an identifiable category in the mid-nineteenth century, when problems were experienced as diverge exigencies of life. Abbott explains that at that time the clergy was the "one group with a clear professional

construction for everyday life problems" (282) but only as such problems related to religious issues. Major social changes wrought by industrialization and its attendant urbanization brought life problems to increasing prominence. A host of competing groups sought to identify, explain and claim jurisdiction over social order and disorder, ranging from the police, to "positive thinking" movements and "psychic cults" (284) to deal with social upheaval; the expanding Masons and emerging Moose and Elks clubs to grapple with urban challenges; and a host of others who laid claim to "nervous disorders" and "general unhappiness."

The clergy and the neurologists were the first to compete for the jurisdiction over nervous disorders. Because the clergy "fail(ed) to provide any academic foundation for their practice with personal problems" (286) they made it possible for the neurologists who were returning to peacetime work after the Civil War to usurp the territory. Neurologists were able to develop extensive diagnostic categories for nervous disorders, but omitted references to treatment in most cases as the problems were diverse and the symptoms rarely treatable. Hence, psychiatrists perceived a jurisdictional opening and moved in to stake their claim.

Viewed form this lens, the development of transpersonal psychology might appear as an attempt by a group of professionals to take over another jurisdiction—or perhaps to re-appropriate the jurisdiction of spiritual issues that psychology and psychiatry surrendered at the close of the nineteenth century. But while one can certainly see in transpersonal psychology an attempt to develop expertise over spiritual issues and related problems, I submit that such a process does not adequately describe the *prevailing* tendency in transpersonal psychology. In fact, it would appear that transpersonal

psychiatry and psychology is best viewed as an attempt at least in part to *suspend* jurisdictional boundaries. One theme that runs consistently through the transpersonal literature seems to be that jurisdictional boundaries restrict knowledge more often than they contribute to it. Transpersonal psychologists and psychiatrists have demonstrated a clear willingness to work with and defer to others far beyond the jurisdictional boundaries of their fields—such as quantum physicists, Tibetan lamas, Hindu swamis, ecologists, and the prolific but uncredentialed (i.e., without a Ph.D. or M.D.) Ken Wilber, who was for decades at the center of much transpersonal theory and scholarshi

Joseph Bensman and Robert Lilienfeld (1991) examine the ways in which participation in a craft contributes to the shaping of "world images" (337) which are then "exported to the society at large, and color not only the culture of that society but even its property relations" (3). Their emphasis on craft contrasts with the traditional sociological emphasis on class, for they assess the former to have a role that is both independent from and larger than the role of class in constructing worldviews. The stress that scientific occupations place on detachment from felt experience and the objective measurement of time and human relationships, combined with the quest for scientific precision, has exerted a powerful hold over the participants of the scientific crafts and over the social imagination in general. Among scientific psychologists, Bensman and Lilienfeld judge that the scientific "quest for a specific demonstrable mechanism led to the exploration of the physiological systems, and the electrical and chemical bases by which external impression are picked up by receptors" (172). For behavioral psychologists, "the concept of mind was taboo, at least until very recently...because behaviorists were unable to deal with consciousness or mind by the methods they selected as being scientific" (173).

Crafts create taboos around certain topics, according to Bensman and Lilienfield, especially when their methods make the concrete assessment of such topics impossible. Berger and Luckmann (1966) have shown the ways in which language is both expansive and coercive. Language not only enables its users a means of actualizing and objectifying the world, but "all who employ this same language are reality-maintaining others" (154). Users of language are forced into certain patterns and must always "take into account prevailing standards of proper speech for various occasions" (38). A member of such a community internalizes the expectations of sanctions, such as ridicule, against certain "reality-disintegrating doubts...and knows that others would smile at him if he voiced them" (155).

Historicizing the Boundaries Between Science and Religion: The Case of Psychiatry

In 2000, the American Psychiatric Press published a collection of essays exploring the connection between science and religion within the field, noting the historical context in which various approaches to mind and spirit were crafted. Its theme is one of complementarity between religion and science after a century of conflict from the mid-nineteenth century to the mid-twentieth century. James Boehnlein, its editor, posits that only in the twentieth century did the role of the medical healer fully separate from that of the religious healer, and in the dawn of the new century conditions are leading to a convergence once again. As the world's population becomes ever more mobile, medical healers are increasingly confronted with and are absorbing belief systems and healing practices previously unknown to them. Boehnlein assesses that the net effect has been varied, with religious belief systems sometimes aiding in the capacity of psychiatry to treat those who have experienced trauma and sometimes providing the

basis for further psychic damage when religious beliefs have been used for aggressive political purposes.

Francis Lu, a transpersonal psychiatrist and one of the contributors of the Boehnlein volume, conducted research that has surveyed psychiatric training programs and has reported a large gap in perceptions regarding the importance of religion between mental health professionals and those of the general public. He quotes the psychiatrist M. Scott Peck, who wrote:

> American psychiatry is, I believe, currently in a predicament. I call it a predicament because its traditional neglect of the issue of spirituality has led to five broad areas of failure: occasional, devastating misdiagnosis; not infrequent mistreatment; an increasingly poor reputation; inadequate research and theory; and a limitation of psychiatrists' own personal development. Taken further, these failures are so destructive to psychiatry that the predicament can properly be called grave.
>
> (Lu, 2000: 52)

But Lu notes that since 1990, the American Psychiatric Association has taken several steps to shift its position regarding religious issues. In 1994, the DSM-IV became the first edition of the Diagnostic and Statistical Manual to include a category devoted to non-pathological religious or spiritual problems. In 1995, the APA's "Practice Guidelines for the Psychiatric Evaluation of Adults" began to incorporate several guidelines related to the sensitive assessment of patients' spiritual and religious beliefs. In the same year, the association issued new requirements for residency training programs which included guidelines for including religious and spiritual issues into psychiatric residency curricula.

Another contributor, J. David Kinzie, writes a historical overview in which he draws from his experience having worked in many cross-cultural settings and having

treated patients from each of the major religious traditions. Kinzine declares that he believes that a rational scientific approach offers the best possibility for understanding mental illness; religion, he states, should be taken seriously but also held accountable for the frequent gaps between its goals and its practices. But he notes that each of the major religions has exerted a constructive influence on twentieth century psychiatric techniques—generally not for the seriously mentally ill, but for those who have manifested neurotic, psychosomatic, or existential symptoms.

Psychotherapists of many stripes have adopted yoga practices, which Kinzie calls the "psychophysioligical methods of Hinduism that attempt to achieve control of bodily functions and to gain peace of mind" (19). Psychiatrists have learned from the trance and meditation practices of Buddhism, but Kinzie argues that certain Buddhist values related to human interconnectedness have been even more important to psychotherapy than meditation practices. Some research has indicated Morita, a therapy derived from Zen Buddhism, has shown to be more effective than western psychotherapy in the treatment of social phobias and obsessions. Regarding Judaism, Kinzie notes the profound influence of that religion on psychoanalysis, and notes that about 52% of all American urban psychotherapists are Jewish. Kinzie traces psychiatric interest among Jewish physicians to the sixth century C.E. He finds that medieval Christianity was "unique...[in its] religious and theological justification of cruelty toward the mentally ill," (14) but that modern Christianity has shaped the practices of psychiatrists through reform movements aimed at improving hospital conditions—many of which have been successful in numerous parts of the world. In many parts of the Muslim world, the mosque has

functioned as a center for the treatment of mental illness and has performed to prevent the mentally ill from becoming isolated.

CONCLUSION

Literature drawn from the sociology of science and knowledge, and from the sociology of the professions, suggests a number of possible ways in which to critically evaluate the intersection, overlap, and conflict between various strands of science, religion, and spirituality. John Ziman (2000) draws attention to the ways in which science and religion are both systems of belief. Both are capable of self-reflexive rationality and both are capable of dogmatic rejections of dissimilar worldviews. Sandra Harding (1998) suggests that after decades of criticism beginning with the rise of feminism in the 1960s and of subsequent forms of postmodernism and postcolonial theory, we have only begun to appreciate how deeply our scientific knowledge has been rooted in and shaped by its rootedness in the West. For centuries Western sciences viewed themselves as the loci of rationality, reason, and progress and the rest of the world knowledge systems as the home of bias, superstition and irrationality. Stephen Toulmin (2001) examines the elements of human reason—recognition of uncertainty, consideration of values, the use of philosophical speculation—which he believes have been suppressed since the seventeenth century are re-emerging only now.

Erich Goode (2000) concludes that no matter how elastic science may be, however, there exists a "Great Divide" on one side of which lies that which most scientists would acknowledge as credibly scientific, and on the other side of which lies that which virtually no scientists would credit with being scientific. Teleology—the belief that the nature world is endowed with purpose and assumes direction—marks the

great divide, according to Goode. It is just such a sense of purpose that underlies most theology, transpersonal psychology, and even—though Goode does not say this—Marxism, functionalism, and, to some extent, psychoanalysis. Thus, the following chapters probe the ways in which the acceptance or rejection of teleological questions—purpose, meaning, direction—shapes various traditions *within* science.

Regarding teleological questions, Robert Bellah, a sociologist, repeatedly emphasizes the "enormity" of the contrast between modern science and the great religious traditions, and he sees this contrast as a problem widely unacknowledged by most who practice the social sciences. "We live in a social system that tells us," Bellah assesses, "not just verbally but in the daily practice of life, that we are alone, that we are here to pursue our own interests, that neither anyone nor anything can save us except ourselves. It tells us that we must mistrust every noble impulse we feel because it must be only a form of our own self-seeking" (1982: 8). Bellah notes that de Tocqueville was "greatly concerned that Americans, archetypical representatives of the new society, were abandoning all heroic, spiritual, or aesthetic goals for the sheer pursuit of material comfort" (1982: 5). We are left with a scientific ethos which provides the universe, nature, society, and the human self with no intrinsic meaning.

Bellah believes that questions of human purpose take on new significance in era when the United States seems to be assuming some of the features of empire. In a piece which examines the consequences of American power (2003a), he notes the influences that American culture exerts on the rest of the world and asks what features within American culture might restrain U.S. military and economic power. Whether acknowledged or not, our scientific infrastructure, our governmental formations, and our

cultural features have been shaped by the tradition of dissenting Protestantism which throughout most of U.S. history demanded a strong society and a weak state. Evangelical Protestantism, Bellah judges, has created the individualism that has now become the basis for mass consumerism. With the rise of an enormous military infrastructure following World War II, the power of the state burgeoned while voluntary associations steadily declined. "We might even say weak society, strong state is a better description of our present reality," Bellah concludes (2003a: 2).

Bellah argues that value-free science exclusive of other stands of American cultural thought only serves to buttress the militaristic and technological features of American foreign policy. He worries that when the social sciences disengage from conversation with any of the religious traditions, they provide no meaningful counterbalance to the influence of dissenting Protestantism on American military and economic policy. Dissenting Protestantism creates polarities between the "saved" and the "lost," and this tradition provided extra thrust after the events of September 11, 2001 to those who embraced the idea of an American mission to combat evil.

Bellah contrasts "regardless power" with "careful power" and asks us to carefully examine the sources and potential impact of either approach in the unipolar world. "Regardless power is the great temptation of technology, military technology in particular," he writes. "But regardless power destroys what it touches, the environment, society, individual lives. Careful power is moderate and restrained...concerned that it nurture, not destroy" (2003a: 9). He asks us to take stock of our "minority traditions"—Islamic, Buddhist, Native American, and others. "Almost all of them, in one way or another, have ways of thinking about the world that are less individualistic and

privatizing than our dominant tradition" (2003a: 8). Their input will be necessary, he concludes, to steer our approach to power in the coming years and to ascertain that it be careful and nurturing, rather than regardless.

CHAPTER FOUR
THE TRANSPERSONAL WORLDVIEW: HISTORY, PREMISES AND APPROACHES

This chapter explores the basic premises of transpersonal psychology. It traces the historical roots that led to the transpersonal perspective, as well as the institutional contexts in which it emerged. It then notes transpersonal psychology's diverse theoretical and methodological premises, including how it defines "spirituality," how it attempts to verify the existence of the "spiritual," and how it endeavors to distinguish "true" premises from "false" premises. This chapter then explores the ways in which transpersonal psychology seeks to resolve some of the central questions regarding the meaning and practice of science, including the nature of empirical proof, the role of subjectivity, and the relationship between material substance and human consciousness. It concludes with an examination of transpersonal research methods. At each step, I attempt to craft sociological questions about what may be revealed when transpersonal psychology encounters mainstream science.

IF SPIRIT WERE TAKEN AS FUNDAMENTAL

Huston Smith, one of the world's foremost religious scholars and an occasional contributor to transpersonal literature, poses perhaps the central problematic raised by transpersonal psychology. How, he asks in *Why Religion Matters* (2002), might the world, or human beings, or our history and future appear to science if Spirit were to be taken to be fundamental? "Is there any *reason*," he enjoins (emphasis in original), "for thinking that consciousness, or sentience, or awareness—all of these being names for the

point where Spirit first comes to human attention—is less fundamental than matter? That we can lay our hands on matter but not consciousness is not a reason" (261).

If Spirit were regarded as fundamental, suggests transpersonal psychiatrist Bruce Scotton, the human sciences would likely alter their current approaches to understanding many facets of the human being, including human social and psychological development; the relationship of the human mind to the body and the physical world; and questions of health, illness and healing. To understand Spirit, the human sciences would avail themselves of the world's wisdom traditions and of the techniques that various cultures have developed for accessing various states of consciousness. Likewise, human scientists would take greater interest in such prospects as "universal brother- and sisterhood, surpassing love, attachment to principles above self, life beyond death, the search for connection between human beings and the world, and moral and ethical virtue" (1996: 5). These spiritual values, Scotton writes, have been rejected by "science" despite their importance to the art, literature and philosophical systems of all times and places.

The transpersonal critique of knowledge holds that modern science has been stripped of spiritual considerations due to, in the words of Ken Wilber, "extreme semantic and philosophic" misunderstandings (1999: 189). By revisiting the meaning of sensory proof, empirical verification, objective measurement, and even the term "science" itself, transpersonal psychologists propose that spirituality can be compatible with the rigorous, scientific study of human life. Some transpersonal authors propose that certain spiritual approaches—Vedanta, Yoga, or Zen meditation, for example—can themselves be scientific in every sense of the term, while others suggest that spiritual understanding runs parallel to, provides greater context for, or is otherwise

complementary to science. Openness to spiritual thought and practice, they assert, can provide greater understanding of human conditions ranging from the nature of mind and consciousness, to the process of death and dying, to the causes and alleviation of suffering. Indeed, transpersonal writers and researchers claim that the *a priori* exclusion of spirituality from any of these topics inevitably diminishes depth in scientific practice and leads to distortions.

The semantic problems to which Wilber alludes begin, he claims, when scientists fail to distinguish between three separate modes of knowing—the sensory-empirical, the rational-philosophic, and the contemplative-transcendental—which, when properly understood, each reveal "a different worldspace, with different objects, different subjects, different modes of spacetime, different motivations" (1999: 142). Each strand of knowledge involves its own means of data accumulation and validation. But twentieth century science has embraced the first mode, the sensory-empirical, to the increasing exclusion of the remaining two—the rational-philosophic and the contemplative-transcendental. Wilber asserts that the fundamental error of modern scientific culture has been to represent the sensory-empirical mode of knowledge as comprising the totality of what is knowable.

But the semantic problem also applies when science is understood as a fundamentally rational endeavor. "It is not generally realized that [modern] science...began as *antirationalism*," Wilber writes, noting that Galileo and Kepler had turned to hard factual evidence as a revolt against medieval rational thought. This is a matter of considerable importance, Wilber and others propose, because the best way to arrive at an overall understanding of reality is to separate the physiological from the

mental and contemplative modes of knowing. The danger of a distorting category error occurs when one of these modes is used to understand or evaluate what can only be understood by one of the others. Rational deduction was completely insufficient to make judgments about physical reality, as demonstrated by the now apparent inadequacy of Greek physics. Only empirical induction can verify how the physical realm works. Likewise, neither the empirical mode nor the rational mode can soundly make judgments about the transcendental or spiritual realm. But the great category errors of the present occur when empirical science rules out the existence of spirit because it cannot be measured by empirical tools, and when religions attempt to interpret the sensory realm (i.e., positing that the earth was created in six days and that all species have distinct lineages) with wholly inadequate empirical tools.

The great advance of empirical science, according to Wilber, is that it provides a means of measuring. Inductive experiments that measure changes in data have revealed an extraordinary range of knowledge about the physical-sensory world. But the gravest category error of the past century or so, he claims, has been the conclusion that only those propositions which can be measured, verified and confirmed empirically are true. Applications of psychology which empirically measure behavior patterns or brain physiology, for instance, are considered scientific while those based on dialogical observations about human interior states are more likely to be dismissed. Wilber's contention is that not only does such scientism disregard vast ranges of human experience, but it leads to a world devoid of value and meaning. That is, empirical science rests upon quantity (the measurement of time, space, or objects), and the act of quantifying everything leaves a "world without quality" (176). Wilber insists that despite

decades of criticism, this form of scientism still remains the organizing principle of most university education.

Thus, because they integrate empirical, rational and transcendental knowledge, the transpersonal psychologists frequently present their approaches as more complete and more appropriate than standard models for understanding human experience as well as for addressing social, political, ecological, and humanitarian crises. Daniel Rothberg (1998), for instance, describes the transpersonal approach as a response to the modern malaise of disenchantment. Max Weber, Rothberg writes, could not have anticipated the degree to which disenchantment would deepen in the West in the later twentieth century as the power of science would begin to decline as steeply as that of religion. Science, Rothberg believes, "often suffers from having lost the integrative power of tradition" (2), while religion is frequently impaired by rigidly adhering to premodern knowledge claims. The aims of transpersonal psychology are to understand how empirical science can make sense of religious experience without thoroughly objectifying it, and to borrow from the wisdom traditions to inform scientific investigation.

Overall, the transpersonal psychologists present themselves as contributing to a broad integration of human knowledge. They suggest that modern science, which emerged roughly 350 years ago, should not be so quick to disregard aspects of human knowledge and wisdom that have been accumulating since civilizations began to emerge ten thousands years ago. The wisdom traditions have developed extensive perspective on the subject of human suffering, states of consciousness, and the relationship between human beings and the physical and natural worlds around them. Therefore, if one

examines the vast map of human knowledge, modern science is an important and potent piece but far from the full picture.

DEFINING THE TRANSPERSONAL

Transpersonal psychology emerged in the late-1960s when a small group of psychologists and psychiatrists began meeting to discuss their concern that a range of human experiences were ignored, neglected, or derided by the mainstreams of their disciplines. Like the humanistic psychology movement that preceded it by a decade, the transpersonalists felt that psychology and psychiatry concentrated almost exclusively on psychological pathologies with virtually no focus on what it meant to be healthy, well-functioning, and fulfilled human beings. Many of the early transpersonalists, such as Abraham Maslow and Anthony Sutich, had themselves been part of the humanistic movement. With time, they came to feel dissatisfied with the humanistic approach's neglect of the "farther reaches" of human experience, and with its unwillingness to explore those dimensions viewed as spiritual, religious or extraordinary.

When Anthony Sutich founded the Association for Transpersonal Psychology in 1969 he dedicated it to the exploration of "human capacities and potentialities that have no place in positivistic or behavioristic theory, classical psychoanalytic theory, or humanistic psychology" (Sutich, 1969: 13). In the first edition of the *Journal of Transpersonal Psychology* (Spring 1969), Abraham Maslow offers an examination of such human capacities and an assessment of how they were treated by mainstream psychology. Behaviorism, he claimed, treats human beings as if they are objects and Freudian psychoanalysis treats human beings as if they are animals. Humans, of course,

are animals, but Maslow suggests that the problem lies with treating humans as if they are *only* animals and rejecting all considerations of uniquely human properties as inherently unscientific. All "higher values," for instance, are reinterpreted such that altruism or kindness become disguised forms of competitive hostility. Humanistic psychology restores the psychological focus on higher needs and views them as complementary to basic needs. But if one studies the motives of those who love and receive love, of those who have self-respect and whose safety and emotional needs are met, one discovers another realm—the "transhumanistic" realm[4]. He claims that in his studies with "self-actualized" persons, whose full spectrum of needs had been met, participants spoke of being motivated by values that transcend the self, such as "truth, goodness, beauty," etc. Hence, humanistic studies began to lead to the development of "transhumanistic psychology."

Maslow's emphasis at the time was on "peak experiences," and on "self-actualized individuals," or people who had demonstrated exceptional emotional health and creative potential and whose experiences were likely to contribute to the potential for similar developments in others and in society at large. Thus, he offers that there is a hierarchy of love, of sex, and of friendship in which the highest levels of such human characteristics involve the prospect of contributing to the peak experiences of others, whereas the lower levels involve more restrictive, self-centered and conditional behaviors.

[4] The article in question from Spring 1969 recounts a lecture delivered by Abraham Maslow at the First Unitarian Church in San Francisco in 1967. His use of the term "tranhumanistic" demonstrates that evolution of terminology amongst the first transpersonal psychologists. The term "transpersonal" was adopted sometime between 1967 and 1969.

Maslow also offers in this article his dual understanding of transpersonal psychology as a science: "I am speaking as a scientist. What I have just been saying are things which can be confirmed or disconfirmed by anybody who is interested. It can be checked; it can be verified. At another level, however, I am denying the whole modern history of science which has from its very beginning claimed the need to be value-free, value-neutral, value-rejecting" (4). Maslow's studies of what he called "Being-love" relationships led him to propose an altered meaning of "scientific objectivity." Traditionally, objectivity implies neutrality and distance, whereas scientists can cultivate a higher level of objectivity through maintaining a "Being-love" for the problem that they are investigating. One can remain objective but not distanced, and thereby contribute to a deeper level of knowledge.

Roger Walsh and Frances Vaughan have described transpersonal experiences as those "in which the sense of identity or self extends (*trans*-) beyond the individual to encompass wider aspects of humankind, life, psyche and cosmos" (1996: 17). "A transpersonal orientation," writes Tobin Hart, "presupposes that ego and rationality are not the highest attainment of human possibility, while it still acknowledges their essentiality. In other words, there is more to us than our small self-separate identity, and our knowing operates in complex dialectics that go beyond basic logic and reasoning," (2001: 7). The term also reflects the growing influence of Buddhist and Hindu thought on the transpersonal founders, who were interested in the prospect of transcending the ego that lies at the heart of those and other eastern religious traditions. William Braud (1998) explains that overall the transpersonal focus leads to a general perspective which "implies a connectedness among the various aspects of oneself, as well as a

connectedness of oneself with others and with all of Nature" (39). This approach, he believes, contrasts sharply with the individual-centered focus of traditional psychology.

The term "transpersonal" has evolved beyond the initial emphasis on extraordinary experiences and optimal development to include what the transpersonal psychologists see as the full range of human potential. Brant Cortright (1996) notes that transpersonal psychologists have gradually broadened their early focus on the root word "trans" as signifying "beyond" ordinary experiences, to include its other meaning, signifying "across" all human experiences. Rosemarie Anderson contextualizes this latter meaning of "transpersonal" when she writes that, "Implicit in transpersonal psychology are a sense of wonderment about the commonplace, an acceptance of life as precious, and a recognition of the miraculous strata of all experiences . . . transpersonalists seek to sacralize the ordinary" (xxiii).

Transpersonal Psychology and the Religious Traditions

Regarding specific religions or religious practices, transpersonal psychologists have written at length as to how Buddhism, Shamanism, Hinduism, and mystical traditions within Judaism, Islam and Christianity might be fruitfully integrated with psychological practice. Bruce Scotton writes that Buddhism "contains a comprehensive system for understanding the functioning of the mind and producing higher states of consciousness, a system that has been carefully elucidated over the course of two and one half millennia" (1996: 121). Moreoever, according to Scotton, it "places a value on empirical verification and practical effectiveness. One is not to trust the teachings implicitly but to test them on oneself" (115). As with psychiatry, the central aim of Buddhism is freedom from suffering. Buddhism offered a number of methods to

transcend various blocks to higher consciousness and meditative techniques to cultivate specific qualities such as benevolent love, compassion, joy and impartiality.

Scotton and Hiatt (1996) write that psychiatry might learn from Hinduism's emphasis on the evolution of consciousness and on the possibility of reaching higher states of consciousness in one's lifetime. Hinduism, they state, provides the "exact complement of western rational positivism" (105), for Hinduism posits that all we can know is internal and western positivism states that all we can know is external. Hinduism involves processes by which one can learn to dis-identify with the aging, limited body and its attendant anxieties and become more aware of *Atman*, the highest self. In contrast to western monotheism, Hinduism stresses a great multiplicity of paths. "In many ways," Scotton and Hiatt conclude, "Western and Eastern systems of mind are complementary, the former specializing in the study and treatment of lower levels of mental functioning with a relative lack of knowledge about high levels of consciousness and the latter with the opposite specialization and blind spot" (112).

Rabbi Zalman M. Schacther-Shalomi (1996) has contributed to the transpersonal understanding of Kabbalah, or Jewish mysticism, which he believes provides a "powerful terminology for inner states and transpersonal regions" (129). He believes it offers a counterbalance to "childish icons of God" and returns the focus to personal development and transcendence. The Kabbalah Tree of Life, with its four levels of the world and ten dimensions of God, offers a metaphor to help clients to balance aspects of their lives and consciousness. Provided that both the clinician and patient are sufficiently prepared to understand and invoke Kabbalah terminology, it can contribute insight to one's

understanding of morality, depression, changing psychological states and a potential encounter with the archetypes.

Christian mysticism, writes Dwight Judy (1996), restores some of the "exalted understanding of human nature" that he believes is missing from contemporary psychological and social science understandings. Judy explores Christian mystical writings and proposes that they provide a valuable sense of human dignity and of interconnections between the individual psyche and the collective psyche. He explores in particular St. Bonaventure, a Franciscan monk and professor at the University of Paris during the 13th century C.E. As with the Kabbalah Tree of Life, St. Bonaventure's map of human consciousness included four levels, from the sensory world at the lowest, to the human mind, to the heart and finally to contemplation at the highest. His exploration at each level offers an exalted sense of human capacities and shows how the contemplation of human sensory, mental and emotional capacities can lead to higher levels of development.

Other transpersonal scholars have written of the enormous potential afforded by Sufism, the mystical branch of Islam, to expand traditional western understanding of dimensions of human consciousness and psychological healing. "Psychiatrists," writes Arthur Deikman, "need to recognize that their patients' psychological distress stems from three levels: from conflicts of wishes, fears, and fantasies; from an absence of perceived meaning; and from a frustration of the need to progress in an evolutionary sense, as individuals and as a race" (1998: 260). Deikman defines Sufism as a complete scientific method for developing higher capacities and for transforming one's sense of connection

to others and to the world at large. He describes the technique of using Sufi "teaching stories" to cultivate and extend a sense of meaning among clients

Finally, a number of transpersonal psychologists have investigated Native American healing techniques and other forms of Shamanism. Psychiatrist Donald Sandner explores ways to balance the Native American emphasis on rituals meant to cultivate devotion and to heal disharmony with the western scientific approach. He recounts his patients' stories of how their encounters with the cold, sterile hospital environments and "supermachines" of western medicine created the sensation of fear and humiliation, even in cases where procedures were effective. "A balance between technical, secular knowledge and spiritual power," he writes, "seems to be the desired goal. Western medicine has pioneered one-half of that balance, and Native Americans...have developed the other half" (152). Likewise, Bruce Scotton explores Shamanic means of altering consciousness through the use of drumming at high tempos, the use of masks and clothing, sleep deprivation, extreme temperatures (e.g., sweat lodges), and the use of herbal substances. Shamanic rituals are believed to enhance concentration, remove distraction, and, because they usually involve the presence of family, tribe or community, foster catharsis and empathy. Scotton suggests that Shamanic models would aptly complement traditional psychiatric models through the expanded sense of meaning and their explorations of the importance of death and rebirth.

The Spectrum of Consciousness

Many transpersonal writers have compared the spectrum of psychological states to the electromagnetic spectrum that characterizes visible and invisible light. Until the discovery of infrared light in 1800, ultaviolet light in 1801, and x-rays in 1895 many

parts of the electromagnetic spectrum were unknown. Likewise, transpersonalists argue that many dimensions of human development or human consciousness are presumed by conventional research not to exist since they cannot be perceived by the analytical tools of cognitive psychology. In the transpersonal model, the spectrum of consciousness parallels and extends through the basic levels of development made familiar by Jean Piaget, Lawrence Kohlberg and others to the reputedly higher-level states that have been described by mystical traditions including Vedanta, Taoism, Buddhism, Tantra yoga, Kabbalism and Sufism.

Ken Wilber proposes that consciousness spirals through roughly ten stages, from the sensorimotor (matter to sensation to perception to exocept), to 2. the emotional-sexual (impulse/emotion to image to symbol); to 3. representational mind (endocept to concept); to 4. the concrete-operational (rule/role membership); to 5. formal-operational (formal logic); to 6. postformal logic (vision-logic); to 7. the psychic (referring not to the paranormal, but to contemplative development or panenhenic or nature mysticism); to 8. subtle (transcendent insight and absorption); to 9. causal (boundless universal self); to 10. ultimate (nondual). The first five stages are more or less universally accepted by traditional psychologists, ranging from Piaget to Kohlberg, and also by Habermas. The second five stages are drawn from the perennial thinkers, past and present. It should be emphasized that by "stages," Wilber is careful to state that he does not imply discrete or linear levels but uses "stage" to denote approximate location on a spectrum of consciousness.

One of Ken Wilber's other central arguments is that nothing in reality can be adequately understood unless it is examined from the vantage point of four "quadrants."

That is, every holon[5]—from a human thought, to an organism, to a social system—has an interior and an exterior, and exists as an individual and in a collectivity. If the spectrum of consciousness is the *vertical* hierarchy of development, the four quadrants represent the *horizontal* planes of existence. In terms of human consciousness, the quadrants represent, clockwise from upper to lower left, the intentional (mind); behavioral (brain); social (institutional); and cultural (collective mind). See Diagram 1, below:

	Interior	Exterior
Individual	Intentional: ideas (symbols, images, thought)	Behavioral: brain impulses, physiology (dopamine increases, jumps in synapses)
Collective	Cultural context: (language, historical development)	Social: (institutions, material base)

Diagram 1.

(Taken from *A Brief History of Everything*, 79)

He argues that most scientists, scholars and researchers have examined only one of two sides of the social world, or what he called to call "the two hands of God": the subjective (holons examined from within) and the objective (holons examined from without). The right hand can be examined only monologically ("every holon on the right can be seen empirically"); the left hand can be examined only dialogically ("none of the left hand aspects have simple location"). The scientific tendency has been to use the tools appropriate only to one hand to analyze both, or to recognize one hand only and to ignore the other. "Virtually every major knowledge quest," writes Wilber, "has split into

[5] Wilber argues that all "things" exist simultaneously as "wholes" and "parts." That is, there are distinct "things," but only wholes that are simultaneously parts of larger wholes. In this he, he develops a theory of infinite interconnectedness.

left versus right." Psychology, for instance, has split into psychoanalysis (left) versus behaviorism (right); sociology has divided into interpretive (left) versus empiricist (right); and linguistics has severed hermeneutics (left) from structuralism (right).

Likewise, the subjective "hands" also have two sides: individual and collective. Every individual holon exists only in communities of similar-depth holons. Human individuals possess interior thought as mind, while collective interiority exists as culture. The human individual also possesses the observable brain (exterior, because it is monologically observable), while the corresponding exterior structures of society are found in the material base and in patterned institutions. The monological gaze of the Enlightenment, however, collapsed the interior left hand into the right, Wilber charges, leaving a vast descriptive system of an exterior world now without interior meaning. The perennial philosophy, on the other hand, collapsed the right into the left, sometimes leaving a model of the self unconnected to the social world. His point is that we must take all four quadrants (the "four faces of Spirit," as Wilber came to see them) into account if we are to understand any holon without distortion. He writes: "The quadrants are all interwoven. They are all mutually determining. They all cause, and are caused by, the other quadrants" (1996, 81). Diagram 2 represents Wilber's estimation of how representatives of the great knowledge quests have approached the world primarily from a single quadrant.

	Interior	Exterior
Individual	Plotinus Freud Jung Piaget Aurobindo Buddha	Skinner Watson Locke Empiricism Behaviorism Physics, Biology, Neurology
Collective	Kuhn Dilthey Weber Gebser Gadamer	Parsons Marx Comte Systems Theory Lenski

Diagram 2.
(taken from *A Brief History of Everything*, 1996: 86).

THE PROJECT OF INTEGRATION

Religion and science are typically viewed as mutually exclusive approaches to human nature and human behavior as they apply different methods and reach different conclusions. Likewise, eastern and western conceptions of the role of human beings can differ so greatly that many see them as fundamentally incompatible. Ken Wilber suggests that spiritual and scientific, and eastern and western psychological orientations differ from each other because they address different levels of the spectrum of consciousness (i.e., different worldspaces). In other words, in addition to each quadrant of investigation, all holons exists at various levels of development or complexity. Wilber urges that scientists should avoid judging one general orientation as more or less accurate while dismissing others as deficient or fundamentally misguided. A more accurate view, Wilber proposes, is to understand that every major psychological approach is partial, if perhaps valid on its own terms, and in need of insight from other perspectives. Among

western approaches, behaviorism, psychoanalysis and existential psychology differ, he writes, because they focus on different levels of the spectrum. Each approach typically denies validity to the others because it misapplies analytical tools developed to understand one width of the spectrum to those widths of the spectrum that it is not equipped to grasp or prepared to acknowledge.

Wilber claims to have taken the "grand theorists of consciousness"—Sri Aurobindo, G.W.F. Hegel and Teilhard de Chardin—and integrated their theories of consciousness with an "actual hard look at anthropological data" (viii). He credits Jean Gebser and Jurgen Habermas with having pursued this path up to a point, but critiques Habermas for tracing the evolution of consciousness strictly to the rational stage and coming to an abrupt sto Gebser he allows moved further beyond rationality, but misunderstood spirituality because he did not include the contemplative traditions in his model. In Wilber's model, science itself is a product of the ongoing development of the spectrum of consciousness. Following Jurgen Habermas and Jean Gebser, he suggests that human consciousness at large has developed over the anthropological scale of time from an archaic level (before 50,000 B.C.E.) during which it was virtually merged with the natural and material world, to a consciousness dominated by magical perceptions (from about 4,000 B.C.E.) of the world and the environment, to various stages of mythic worldviews (4,000 B.C.E. to about 1600 A.D.), to the dawn of rationality (post-1600 A.D.). The transcendence of one stage by another reflects the ingrained spiritual drive to inquire, to know, to add depth. As with each general level of development, the rational stage emerged from its mythological precursor with great difficulty and resistance. But as its focus sharpened it blossomed into formal science in the modern era, complete with

the ability to sharply critique the shortcomings of previous mythological and magic worldviews.

Wilber and other transpersonal psychologists propose that formal-rationality, which gave birth to modern science, is likely only halfway along the spectrum of conscious. He labels the current state of overall human consciousness "vision-logic," which involves the possibility of integrating the formal operationalism of positivist science with the best aspects of postmodern pluralism and criticism and with religious mysticism. As science driven by vision-logic becomes more self-reflexive, it "can hold in mind contradictions, it can unify opposites, it is dialectical and nonlinear, and it weaves together what otherwise appear to be incompatible notions...which are negated in their partiality but preserved in their positive contributions" (1995: 185). Wilber and other transpersonal psychologists take these signs of a dawning vision-logic to suggest that science is gradually opening to deeper spiritual potentials.

Viewed very broadly, transpersonal psychology is concerned not only with those states and experiences that can be described as transpersonal, but with the entire spectrum of consciousness, and with the evolution of individuals and societies through the full possible range of awareness. In that sense, transpersonal studies presents a grand theory of human development and of reality itself. It offers an essentially developmental model of consciousness which, like the perennial philosophy, views the trajectory of human experience as a slow, spiral-like evolution from archaic awareness, to increasing mental and rational capacity, to the ultimate awareness of soul and spirit. The result of a fully-developed transpersonal model, writes Bruce Scotton, would be a "true science of body,

mind, and spirit, honoring the biopsychosocial continuum that is the human condition" (1996: 409).

Brant Cortright writes that the purpose of transpersonal psychology is to integrate psychology and the spiritual traditions so that each may provide the knowledge that the other lacks. "Seeking for the Divine, whether called God, Brahman, Buddha-nature, Reality, Being, Truth, Love," he writes, "has been a major aspiration and force in all cultures and periods of history, yet it has been virtually ignored by traditional psychology" (1997: 13). Psychology's disregard of this "central motivating force," he believes, leaves it ill-equipped to understand the human psyche. On the other hand, he insists that western psychology's contributions should not be minimized. He resists the tendency of some transpersonal psychologists to label Buddhism or Sufism or other traditions "psychologies." They must be combined with, not overshadow, the important and precise discoveries of modern psychology which include "categories of differential diagnosis, a theory of childhood development, a theory of psychopathology, views of intra-psychic conflict, defense mechanisms, the dynamic unconscious, and so on" (12).

Stanislav Grof, one of the central transpersonal theorists along with Ken Wilber, writes that "Even a cursory look at Western psychology reveals fundamental disagreements and controversies of enormous proportions concerning the basic dynamics of the human mind, the nature of emotional disorders, and techniques of psychotherapy" (1985: 138). Research that is mindful of the spiritual traditions, he proposes, may contribute "an element of clarity and simplification into the hopeless labyrinth of conflicting and competing systems of psychotherapy" (138). A spiritual interpretation, he argues, enables a re-evaluation of Freud's "strict determinism of mental processes"

(145). Freud, Grof writes, based psychoanalysis on the paradigm of modern physics with its emphasis on the separateness of objects and linear understanding of time. Freud's treatment of psychic "components" as distinct measurable entities with identifiable causal mechanisms leads to a model of humans as physical machines. It also isolates the human psyche from its "broader interpersonal, social, and cosmic context" (153).

Grof draws extensively from psychoanalysis but incorporates the existential philosophy of Soren Kirkegaard and Edmund Husserl whose insights suggest that science must acknowledge that "each individual person is unique and inexplicable in terms of any scientific or philosophic system" (176). Following Abraham Maslow and Victor Frankl, he rejects Freud's assertion that "such phenomena as love, appreciation of beauty, or sense of justice [reflect] either sublimation of low instincts or [are a] reaction formation against them" (178). But it is to the worldviews offered by Leibnitz in the West and various schools of Buddhism and Hinduism in the East that Grof turns for instruction on understanding the relationship of individual human beings and individual human consciousness to larger wholes.

Transpersonal psychologists often speak of a "pre/trans distinction" or a "pre/trans fallacy" when they attempt to delineate the proper relationship between scientific and religious knowledge. Religious thought and behavior, they assert, can either include or exclude science or rational criticism. A fallacy results when one conflates all religion and fails to distinguish between that which is "pre-scientific" or "pre-rational" from that which is "trans-scientific" or "trans-rational." Transpersonal psychologists such as Ken Wilber have criticized Carl Jung and most of the New Age movement for valorizing as sincerely "spiritual" much that is actually pre-rational.

Likewise, they have criticized Sigmund Freud for dismissing as pre-rational all mystical experiences which have actually included and transcended rational thought. Thus, most transpersonal thinkers urge a cautious approach to religious claims and warn that many alleged spiritual practices are pre-rational endeavors that encourage narcissism and regression rather than growth and transcendence. Likewise, they caution the field of psychology not to dismiss all spiritual claims simply because some spiritual practices have rejected science or embraced irrational expressions.

HISTORY AND DEVELOPMENT OF THE TRANSPERSONAL MOVEMENT

The transpersonal psychology movement cannot be understood apart from the psychological developments that preceded it. First, it must be noted that psychology more or less separated from philosophy and metaphysics and attempted to establish itself as an empirical science with the establishment of Wilhelm Wundt's laboratory in Leipzig in 1891 (the focus of chapter six). The century that followed was marked by attempts of the field, especially in the United States, to subject all study of behavior to precise measurement (i.e., in Wilber's terminology, the result of a massive "category error"). Despite the dominance of behaviorism, however, a number of countertrends emerged. Psychoanalysis, of course, is one of them, although it wavered over whether it was attempting to establish itself as an empirical science or whether it was willing to identify as a depth psychology. The Jungian analytical tradition also provided substantial historical grounding for a transpersonal outlook. Many transpersonal psychologists identify William James as a forerunner of transpersonal psychology—in fact, he was the first to use the term, but in a slightly different context—due to his close attention to religious experience and his "radical empiricism."

But of equal relevance to transpersonal psychology were developments happening in the religious or spiritual sphere. Theosophy at the turn of the nineteenth century attracted a number of scientists and public intellectuals who became interested in its admixture of science and theology. As dubious as the theosophical legacy may be, it played a considerable role in introducing Buddhist and Hindu practices to western elites. But perhaps the most decisive cultural turning point that led almost inevitably to a transpersonal approach was the intensive study of psychedelic substances among American psychologists and psychiatrists beginning in the 1950s. Psychedelic experiences were widely interpreted by some psychologists in Buddhist or Hindu terms, or through the lens of various other forms of religious mysticism.

In 1969, an "interest group" formed in the San Francisco Bay area, including many key figures from the humanistic psychology movement such as Stanislav Grof, Abraham Maslow, Fritz Perls and Anthony Sutich. Within months they had organized the Association for Transpersonal Psychology and by the end of the year had published the first edition of the peer-reviewed *Journal of Transpersonal Psychology*.

In 1971, the Institute for Transpersonal Psychology (ITP) opened in California, offering Ph.D. programs in Transpersonal Psychology and Buddhist Psychology. The founders of ITP, Robert Frager and James Fadiman, who had been teaching at UC-Santa Cruz and Stanford respectively, have indicated in interviews that it was a frustration with the limitations of those campuses that led them to consider what a "real" education in transpersonal psychology would look like. Also in 1971, the International Transpersonal Association formed, and eventually added member associations from Australia, New Zealand, Japan, Taiwan and sixteen countries in Europe. Many of the ITA's member

associations provide a contrast with the U.S. transpersonal experience. Some observers have noted the ease with which, for instance, the British Association for Transpersonal Psychology received formal recognition from the British Psychological Association while the American Psychological Association has not granted transpersonal psychology a similar status.

In the early 1970s, a group of transpersonal psychologists applied for recognition as a formal section of APA. They were rejected twice, which is the APA's limit after which no further applications will be considered. Today, transpersonal psychologists do have recognition as an "interest" group within the Humanistic Section of APA. Meanwhile, the American Psychiatric Association has never prohibited transpersonal psychiatrists from hosting forms and panels and such panels are reportedly well-attended.

In 1973, the first book-length transpersonal work, *Transpersonal Psychologies*, was published by Charles Tart. In addition to four chapters by Tart himself establishing transpersonal psychology within a scientific framework, the collection includes chapters by other contributors on Zen Buddhism, Yoga, Sufism, and Jewish and Christian mysticism as forms of distinct psychological systems and as contributing to an overall transpersonal psychology. *Transpersonal Psychologies* was followed, in 1980, by the next full-length transpersonal collection, *Beyond Ego*. That volume was expanded and revised as *Paths Beyond Ego* in 1993, at which point the authors noted they faced a new challenge. For the first volume they faced the challenging of finding enough articles to cover all of the major areas of transpersonal psychology but in the interim transpersonal psychology had expanded so extensively that their challenge was to pare down the number of submitted articles so as to present a manageable volume.

In the 1980s, Ken Wilber and Stanislav Grof each produced considerable libraries of theoretical work on the transpersonal vision. Wilber extended the transpersonal vision to anthropology in *Up From Eden* (1982), to sociology in *A Sociable God (1983)*, and to the practice and philosophy of science in *Eye to Eye* (1984), *Quantum Questions* (1984) and *The Marriage of Sense and Soul* (1998). He developed a comprehensive cross-disciplinary theory of human development in *Sex, Ecology, Spirituality* (1995). Since the middle-1990s, Wilber has distanced himself from the transpersonal psychology movement per se and pursued what he claims is a yet more comprehensive system in *Integral Psychology* (2000). Stanislav Grof has written with a somewhat more clinically-oriented focus as he has written of the techniques he has used in psychiatric practice to produce changes in consciousness. Like Wilber, he has produced comprehensive transpersonal theories in works such as *Beyond the Brain* (1985), *Spiritual Emergency* (1989), *Ancient Wisdom and Modern Science* (1990), *The Holotropic Mind* (1993), *Realms of the Human Unconscious* (1994), *Psychology of the Future* (2000), and more than a dozen others.

Since 1990, the transpersonal approach has grown so extensively that tracing its geneology would in itself make the topic of a fascinating dissertation. Michael Washburn, for instance, has devoted a number of works to exploring transpersonal psychology in psychoanalytic contexts. Seymour Boorstein has written extensively on clinical studies in transpersonal psychotherapy. Stanley Krippner has explored the connections between transpersonal psychology and anomalous experience. Dozens of authors have written about transpersonal psychology and psychedelic substances, which is the subject of chapter three of this dissertation.

THREE LINES OF INQUIRY WITHIN TRANSPERSONAL PSYCHOLOGY

There are three identifiable branches of work within transpersonal psychiatry and psychology, each of which has faced separate challenges and varied levels of success. The line of thought within each of these groups and the reactions to them deserve close scrutiny, as the experiences inform us of subtle differences in the ways in which the "mainstream" of psychiatry and psychology respond to different contentions.

The first branch is the spiritually-oriented transpersonal work based either on the work of one spiritual tradition, or on a synthesis of several such traditions. Researchers may study the experiential practices and writings of Zen Buddhism, Kashmir Shaivism, Kundalini Yoga, Abhidharma, and shamanism, for example, or they may undertake one of these practices themselves in order to understand the contours of consciousness. Ken Wilber has proposed a unified theory of consciousness by integrating various spiritual practices and scientific findings together. Psychiatrists such as John Nelson (1994) have written that Wilber's model can be used as a diagnostic guide for various psychiatric symptoms.

In another vein, Stanislav Grof (1996) has proposed three categories of spiritual experiences that can occur spontaneously or under certain circumstances. I have constructed the following table based on Grof's categorizations:

Stanislav Grof's Categories of Spiritual Experience	
Momentary But Intense Transcendence of Spatial Barriers May Evoke a Genuine Sense of →	1. merging with another person in a state of "dual unity" 2. empathetic assumption of the identity of another person 3. identifying with the consciousness of entire group of people 4. extension of consciousness in a way that seems to encompass all of humanity 5. identification with animals, plants, or inorganic bodies 6. identification with the biosphere, the planet, or the material universe
Transcendence of Temporal Boundaries May Evoke a Genuine Sense of →	1. vividly reliving past experiences 2. vividly reliving fetal or neonatal memories 3. vividly recalling past events from earlier historical epochs (in a way that may suggest past-life experiences)
Archetypal or Mythological Experiences May Involve→	1. encounters with deities or demons of various cultures 2. deep perceptions of archetypal symbols (the cross, yin/yang, etc.) 3. encounter with the Universal Mind – (variously felt as God, the Cosmic Christ, Buddha, Tao, Allah, the Great Spirit, etc.)

Transpersonal psychologists have written extensively about the varieties of transcendence of space and time and of mystical union with archetypes that Grof explores. They have claimed that that by investigating such possibly transcendental experiences—whether understanding them as ontologically real or as metaphorically representative—investigators may add to our understanding of the psyche, of the sources and possibilities of collective memory, and of human connections with the physical world and each other. Transpersonal psychiatrist Roger Walsh (1993, 1996, 1999), for instance, has explored various altered states of consciousness in which participants have reported experiences such as soul journey, identity expansion, and out-of-body experiences (1993) to construct a map of consciousness and to distinguish between higher, lower and

schizophrenic states. He has shown how various practices contribute to emotional development, personal insight and psychiatric healing.

A second variation of transpersonal research includes parapsychology research. It is the most insistently "scientific" of the branches of transpersonal psychology, in the sense that rigorous controls, experimental method, and predictive capacity form the basis of parapsychological work. Charles Tart defines parapsychology as, "the study of things that shouldn't happen *if* the scientistic attitude that we know everything important about the world and the whole world is nothing but the interplay of physical objects and forces is true" (1997: 23). It includes laboratory experiments to test the existence of telepathy, clairvoyance, precognition, psychokinesis, and out-of-body experiences (OOB). Tart deliberately uses the religious term "heresy" (25) to describe how the "scientistic" view regards reports of these parapsychological phenomena, despite Tart's claim that "there are hundreds of really well-controlled experiments" (175) verifying their existence. But if science dismisses parapsychology, many advocates of spirituality respond likewise. Parapsychologist Karlis Osis writes, "The spiritual and the psychic have often been pictured as enemies," (1997: 170). But in the transpersonal approach, spirituality and parapsychology are frequently integrated.

A third branch of transpersonal psychology involves the use of hallucinogenic substances to induce purportedly spiritual, transcendent, or parapsychological experiences under certain conditions. In fact, transpersonal psychology would likely not have coalesced as a subfield had it not been for the impact of hallucinogenic drugs on the field of psychiatry beginning in the mid-1950s. Research subjects frequently interpreted their drug experiences in religious terms, and noted philosophers, artists, and literary

figures began to describe their own usage of such substances as mescaline, psilocybin and LSD in terminology borrowed from various mystical traditions. Legal restrictions currently confine researchers in most cases to retrospective analysis or to work in other national contexts, although some work is carried out by psychologists, psychiatrists and psychotherapists who travel to Brazil, Peru and other regions where hallucinogens are used in religious contexts. Nonetheless, the literature on the connections between hallucinogens and purported spiritual experiences is currently burgeoning. Because of the complexities involved in work with hallucinogens, the following chapter (chapter four) explores it as a special case.

CERTAINTIES, ILLUSIONS AND POSSIBILITIES

Spirituality is of course a malleable term, and those who employ it often have difficulty defining it with verbal clarity. Transpersonal psychologists grapple with ways of addressing spirituality that would at least partly satisfy empirical standards of evidence. But they also suggest that spirit lies beyond language, beyond most empirical measurements and requires participatory practices such as meditation to be perceived directly. Thus their objective is not necessarily to measure and define a "thing" called spirituality, but a process. Their objective is to explore the spiritual by illustrating what they perceive to be the limits of spirituality's antithesis—materialist science.

Though he was not a transpersonal psychologist, citations of psychoanalyst Ernest Becker's work occur frequently in the transpersonal literature. He warrants a brief discussion in this exploration of spiritual and material dynamics because his discussion of the cultural impact of science goes to the heart of what this dissertation is meant to explore. Religion for Becker is an illusion, as are all grand theories that attempt to

explain human existence. For the transpersonal psychologists, materialist science, when it reduces all phenomena to that which is observable and measurable through the five senses, is equally such an illusion. Faced with the impossibility of knowing reality with certainty and having to choose one's illusion, Becker devised, in the words of David Toolan, "a new legitimacy test for necessary illusions" (1987: 49). "Human beings," Toolan continues, summarizing Becker's position, "require grandeur and perfection with which to be nourished, mystery, power, and majesty to expand in. It's the condition of our freedom. How much freedom, dignity, and hope, then, does a given illusion provide?"

Transpersonal psychologists may take issue with the label "illusion," but Becker's larger point parallels exactly their objections to scientific materialism and the question of disenchantment. With perhaps a small amount of intended exaggeration, Toolan writes that a typical graduate education in psychology portrays humans as "nothing but stimulus-response organisms destined to rot" (23). Transpersonal psychologists suggest that since there remain unresolved—and possibly unresolvable—questions about the nature of the physical, biological and mental worlds, a rigid materialism that precludes grander possibilities amounts to an ideological choice rather than hard-headed science. In the terminology of transpersonal methodologists Rosemarie Anderson and William Braud (1998), science can choose to "honor" the range of human experience or it can view consciousness as a mere epiphenomenon of matter. The stimulus-response organism, according to the transpersonal vision, is capable of an enormous range of depth and experience that standard psychology arbitrarily eliminates from its purview.

Science as Deep Awareness

Transpersonal psychologists are not romantic opponents of science. They differ from the postmodern deconstructionists who see no possibility of independently confirmed truths but rather see only infinite numbers of perspectives. The transpersonal perspective also contrasts with the anti-psychiatry stances popularized by R.D. Laing and Thomas Szasz. Transpersonal psychologists do not refute the biological bases of major mental illnesses, but they do take issue with the position that the brain is the ultimate source of human consciousness. Though they do propose an image of the universe as potentially alive with subjective possibilities, they differ sharply from versions of "intelligent design theory" that categorize Darwinian evolution as "just another theory." They do not propose spiritual alternatives to undermine well-tested scientific theories of the biological and social worlds. Rather, they propose that science is a product of deep human inquiry which is most effective when it observes its limits.

When properly understood, many transpersonal psychologists maintain, "faith" is a concept not at all antithetical to science. Science and religion both reflect the same spiritual drive to know and to understand. Confusion results when "faith" is conflated with the quite radically different term "belief," which implies some form of commitment to a mythological religion. Fenton Johnson quotes the philosopher Alan Watts as writing that: "Belief . . .is the insistence that the truth is what one would 'lief' or wish it to be...Faith...is an unreserved opening of the mind to the truth, whatever it may turn out to be. Faith has no preconceptions; it is a plunge into the unknown. Belief clings, faith lets go . . faith is the essential virtue of science, and likewise of any religion that is not self-deception" (1998, 40).

Charles Tart produced one of the first collected works of transpersonal psychology (1975) wherein he outlined and discussed 79 unconfirmed assumptions that he believes western science has incorporated into its practices. As one of the world's leading parapsychologists, Tart considers himself deeply committed to the scientific method and has a long history of writing for a broad range of scientific journals. In his book, *Mind, Body, Spirit* (1997), he describes attending a conference on the world's religions in which each participant was asked to wear clothing that would symbolize in some way the faith system to which he or she belonged. Tart wore a white lab coat to suggest that science itself numbers among the world's religious traditions. Science's claims to objectivity, he writes in *Transpersonal Psychologies*, is belied by the 79 assumptions that are taken on faith (or belief) and for the most part have not been consciously examined.

Modern western science, Tart claims, has confused the *tool* of the scientific method with the *philosophy* of physicalism. Sciences rule out the possibility of a spiritual nature not on the basis of evidence, but because a philosophy disguised as a science has declared the spiritless world part of its belief system. Examples of the implicit assumptions that Tart insists underlie physicalism include the belief that the universe exists as a result of random happenstance without purpose; the universe itself is inanimate and that "life is only an infinitesimal, insignificant part of the universe" (66); physics is the "real science," because "what is real is what can be perceived by the senses or by a physical instrument" (68). This latter tenet leads the human sciences to attempt to emulate physics, and as a result they approach each human being as "isolated from all others, locked within [an individual] nervous system," and they posit that "psychological

energy is completely derived from physical energy" (74). The physical body is hence the only body and reasoning is the highest capacity that humans possess. For the physicalist, "emotions are electrical and chemical shifts within the nervous system" (95), and "have no place in scientific work (96).

These assumptions, Tart maintains, have considerable, but often unnoticed, consequences for how we "do" science, how we treat people, and for what aspects of reality we emphasize, overemphasize, deny, disregard or treat as pathological. The sciences also assume that they "have a rather good understanding of the history of man" (72) and are capable of "understand(ing) the origin and evolution of man" (73). The very insistence that history is understood undermines the complexity of human experience and the diversity of such experiences. Tart's central message is that western psychology has not understood or appreciated the fact that other cultures have developed extensive systems of psychological thought, many of which appear to make use of a scientific method. Examining these systems together, in an integrative and appreciate way, demonstrates both the relativity of knowledge of the psyche and the commonalities that run through all of them.

Contemporary Science and the Distrust of Subjectivity

For many transpersonal psychologists, subjectivity is nearly synonymous with spirit. Therefore, as nineteenth century positivism began to displace subjectivity it was also "disappearing" the consideration of spirituality from the domain of knowledge. "Observe the word *subjective* in the Oxford English Dictionary," writes David Toolan:

> At the dawn of the scientific revolution, it meant "penetrating to the essence of the reality of a thing: real, essential." By the early eighteenth century, the

> meaning had shrunk to "having its source in the mind." By the late eighteenth century, the climate of opinion in which Kant worked is evident: "pertaining to an individual subject or his mental operations...personal, individual." By the late nineteenth century, the retreat of the subject before triumphant mechanism is one of full flight; the term has come to mean exactly the reverse of what it meant earlier: "existing in the mind only, without anything real to correspond with it; illusory, fanciful.'"
>
> (Toolan, 1987: 44).

Postmodernism, feminism, and critical theory have subjected positivism to considerable critique and to some extent have managed to redirect attention toward the role of subjectivity in the production of scientific knowledge. However, the transpersonal psychologists claim, these critical approaches have made little allowance for the spiritual properties of subjectivity. Toolan quotes the philosopher Hans-Georg Gadamer that what is needed among the modern social sciences is a "hermeneutics of restoration" of the spiritual traditions.

BRIDGING THE CHASM?

Many transpersonal psychiatrists and psychologists see the transpersonal project as aimed at healing the rifts among diverse ways of thinking about reality. The first and most profound rift seems to be what a number of transpersonalists view as a nearly total separation of the culture of science from any serious consideration of the myriad spiritual traditions as a source of data, ideas and inspiration. Psychiatrist John E. Nelson, for instance, urges that this great separation be viewed in historical perspective to understand that the embargo on religious thought and practice is neither necessary nor productive. Nelson opens his book *Healing the Split* (1994) with the details of Galileo's ordeal before the Inquisition, noting that official church persecution has become the dominant science

narrative regarding the role of religion. Religion in this narrative is ignorant, reactionary and oppressive.

Because western science faced a monolithic church which at times clung violently to demonstrably false theories about the physical world, science became almost by definition a heroic struggle against the Dark Ages of religious domination. According to Ken Wilber (1999), scientific rationalism has rightly embraced Voltaire's cry to "Remember the cruelties!" for which religion has been responsible, but has overstretched when it casts itself as sole guardian resisting the return to pre-scientific ignorance. To equate religion with the excesses of theocracy is comparable to reducing the achievements of science to its own worst excesses, from the capacity to annihilate Hiroshima to the traumatic birth defects caused by thalidomide. The split to which Nelson refers, he notes, has led to extremism on both sides. For psychology, it is a gulf that shapes, restricts and informs explanations of the mind and of non-ordinary states of consciousness.

Science, Spirituality and "Questionable Dogmas"

Many transpersonal psychologists propose a conception of spirituality that builds on philosopher David Evans's work, *Spirituality and Human Nature* (1993). Evans concedes that he cannot "prove" the reality of "spirit," "soul" or other non-material phenomena that he explores in his book, but he contends that rigorous empirical verification is not a particularly constructive requirement for exploring the more subtle realms of human experience. Scientism, he charges, employs a form of "skeptical certainty [that] depends on blind acceptable of 'questionable dogmas' concerning how reality claims can be substantiated" (viii). He takes issue with three deeply-rooted and

self-contradictory aspects of scientific culture, each of which he believes has genuine value but is usually extended beyond its epistemological limits to foreclose all discussion of spiritual issues. These "dogmas" are impersonalism, perspectivalism, and positivism:

1. Impersonalism: Evans critiques the appeal to "pure reason," which insists that the truth must be knowable impersonally and is accessible to anyone with sufficient tools of observation. Some dimensions of reality, Evans writes, may require "a difficult process of personal change" (119), such as an intense and long-term meditative practice, in order to be perceived and experienced as real. "Genuine spiritual experiences," he elaborates, "occur only when a person is consciously committed to a process of personal transformation which involves a deepening receptivity" (147). The doctrine of impersonalism hampers dialogue with other types of reason, including impassioned reason, inspired reason, and radical-political reason, which also have contribute to and deepen human knowledge under certain conditions.

2. Perspectivalism: Evans calls perspectivalism "the exaggeration of a genuine insight to the point of absurdity" (113). Perspectivalism insists that reality itself cannot be known directly, because no observer can know anything apart from the various perspectives through which they filter and inevitably distort reality. A moderate, pragmatic version of perspectivalism grants that there are certain beliefs that can be considered true, but this pragmatic approach nearly always seeks and offers nonspiritual explanations for spiritual beliefs. A more strident form of perspectivalism explains away spiritual claims without ever permitting that there could possibly be any truth to them. He proposes reasoned dialogue among and between perspectives as the "best prospect for achieving *some* intersubjective agreement among most human beings" (120).

3. Positivism: Evans claims that the positivist ethos, which maintains that the scientific method is the only valid recourse to understanding reality, endures despite consistent challenges to it from many directions. While Evans credits the scientific method with the capacity to reveal certain aspects of the physiological and biological realms, he sees it "as the least appropriate of all the perspectives we have considered in dealing with metaphysical issues" (165). The requirements of the method—isolation of causal factors, repeatability, and theoretical plausibility—"constrict our access to reality" when applied to the exclusion of all other knowledge potentials. He offers behavioristic psychology as the most apt example of how "remote" from human reality that an exclusively scientistic approach can become.

To develop a working definition of spirituality, Evans contrasts it with narcissism, defining both qualities as fundamental and opposing poles of human consciousness. Spirituality for Evans represents a process of shedding narcissistic motives and behaviors and becoming more open and empathic to other people, to nature and to the Source of existence. To the extent that psychology and psychiatry have proposed that they can measure degrees of narcissism, they can also conceivably measure degrees of spiritualism by examining the extent to which an individual has discarded the narrow, closed consciousness that characterizes narcissism. Evans believes that spiritual transformation is to some extent possible through depth psychology, but that deeper movement is more likely to be facilitated through various meditative and other specifically spiritual practices.

Evans defines the soul as that which comprises the full self, including the body, emotions, mind and spirit. To treat any of these four components separately, or to eliminate one or more of them from examination, impoverishes the understanding of the human being. He acknowledges that his "humanistic mysticism" is a deviant approach within contemporary philosophy because it more closely resembles the premodern conception of philosophy as a "comprehensive synthesis" rather than the characteristically modern approach of "increasingly detailed investigation of some particular facet of human nature" (ix). The optimal approach, he argues, is one that combines the capacity for close focus with openness to the "big questions." He also refutes postmodern claims that reality cannot be directly perceived and offers methods for the direct perception of reality that combine western empiricism with the eastern yogic and other mystical traditions.

Transpersonal psychiatrist Allen Chinen (1996) also emphasizes the theme of bridging chasms. He provides a broad historical outline of what he describes as the development of a chasm between skepticism, materialism and empiricism on one side, and rationalism, fideism, idealism and spiritualism on the other. He draws from analytical philosophy, the progenitor of logical positivism, as an unexpected source for reconciling the division.

Analytical philosophy, Chinen explains, recognizes five concepts of truth. He draws an analogy between these five modes and the five senses, implying that all modes are necessary for a full understanding of the world. Each mode can be applied to the same concept, and each requires a different type of testing. Science relies on the "correspondence" (or representational) concept of truth, which requires that experience must be verifiable by others. The "coherence" model of truth is a means of testing subjective claims, as in the hermeneutic tradition. "Pragmatic" truth, as expounded by William James and others, holds that, in Chinen's words, "an experience is true if it helps a person master a situation or solve a problem" (222). "Metaphoric" truths are "imperfect characterization(s) of a far more complex, and perhaps ineffable, reality" (223). Metaphoric truths can be judged by the "fit" that they produce, the "sense that the symbol 'fits' the mysterious reality in question and reveals something new about the situation" (223). In the case of "presentational" concepts of truth, an experience "is accepted just as it is, without reference to anything beyond it" (223).

Science, in the correspondence mode, generally restricts its considerations of truth claims to one side of the "chasm," the one comprised of skepticism, empiricism, and materialism. But skepticism, Chinen notes in his historical overview, has always

coexisted, if uncomfortably, with the tradition of absolutism, which includes Plato's rationalism, Augustine's and Aquinas's fideism (in which faith provides absolute knowledge), and Descartes's rationalism. The skeptical tradition's misgivings arise partly from the long tradition of religious suppression of skepticism, beginning with the trial and death of Socrates. But the transpersonalists propose that while a healthy distrust of the religious tradition is warranted, the total exclusion of the absolutist tradition leads to a restricted tradition of knowledge.

Likewise, the empiricist emphasis on direct experience, which begins with Aristotle, suffered under the dominance of Christianity during most of the Common Era, until reemerging with Locke and Bacon. But with the transformation of empiricism into logical positivism, Chinen maintains, empiricism became an ideology based on the claim that, in his words, "to have any meaning a statement must refer to sensory observation" (216). The Romantic movement, and later the emergence of existentialism, countered with the attention to emotions and toward the importance of the irrational, respectively. The phenomenologists have subsequently insisted that introspection can also provide an important source of evidence.

A third component of the dominant scientific outlook, materialism, in Chinen's words holds that "the same processes that govern inanimate objects govern all other phenomena in the world" (217). After being driven underground by the Christian tradition, materialism reemerged and has been extended in one way or another by Hobbes (mental activities are mechanical products of atomic activity), Darwin, Feurbach, Marx, and E.O. Wilson (who maintains that religion is a biological adaptation).

Chinen proposes that the "real question" is not whether transpersonal experiences, or transpersonal models, are "true" or not, but in what sense they are true. Transpersonal psychologists generally hold that a broadened version of "empirical" evidence be seen as capable of providing valid tests of truth claims. To logical positivism's "narrow" insistence on sensory observation as the only source of meaning, they respond that there must be room for the Romantic tradition's attention to emotions, intuition and mystery; the existentialists' attention to irrationality as playing a central role in human experience; and to the phenomenologists' argument that introspection can provide a valid knowledge source.

MIND AND BRAIN

Transpersonal psychologists and psychiatrists have attempted to reconcile spiritual interpretations of consciousness with developments in brain science. Without taking brain science lightly, they question prevalent assumptions that the material brain and its organic structures are the sole source of behavior and that consciousness is a mere epiphenomenon. After exploring what research on neurotransmitters, psychiatric drug effects and brain injuries reveal about the relationship between the brain and consciousness, John E. Nelson (1996) concludes that it is impossible to say either the mind or the brain is primary. Clearly, physical injuries to the brain produce noticeable and decisive changes in consciousness and various emotional states are associated with changes in neurotransmitter levels. Nonetheless, more and more research also demonstrates that subjective experiences—"a loving tone of voice, a gentle touch, and an admiring gaze" (129-130)—can alter the microstructures of the brain itself. "We may say," he concludes, "that when a person experiences anxiety, certain chemicals active

lower-brain centers. But it does not follow that these chemicals cause the subjective experience of anxiety, any more than anxiety causes the chemicals to accumulate. Both are aspects of a unitary process in which changes in one are reflected in changes in the other. To put it another way, the brain's role is to mold the consciousness of the [Spiritual] Ground into human form, into a cohesive self-in-the world" (100).

Nelson integrates western psychiatry with the use of the archetypal Hindu chakra system to produce a diagnostic and heuristic model. "Using this expansive model of the psyche," he explains, "refines our ability to categorize psychotic altered states of consciousness in ways that surpass those currently employed in the Western world. Studying the way consciousness takes form at each chakra reveals stage-specific models of thinking, feeling and behaving, as well as values, logic, ethics, defenses, and ways of relating self to Ground" (162).

Stanislav Grof relies on the experiences that patients have recounted during LSD-therapy sessions or during psychotropic breathing sessions[6] to understand the connection between consciousness and the material mind. Participants' exceptionally vivid encounters with prenatal and neonatal experiences, with spiritual archetypes, and with other times and places convinced him that consciousness extends beyond the biological brain. He details and interprets such encounters, complete with extensive drawings by participants in *Beyond the Brain* (1985). Whereas many psychiatrists and other scientists conclude that the brain produces consciousness because in the event of brain injury or brain death, consciousness subsides, Grof responds by noting that damage to the receiver

[6] Stanislav Grof conducted approximately 2,000 LSD therapy sessions in Europe and in the United States before 1965, when the use of LSD by psychiatrists in research was both legal and frequent. Once LSD research was prohibited, he developed "psychotropic breathwork" as a means of approximating the alterations in consciousness that were induced by LSD.

in a television will also inhibit a television's ability to display a picture or sound. Nonetheless, no one concludes that the broadcast program displayed by a well-working television is actually produced by the television itself.

TRANSPERSONAL PSYCHOLOGY AND METHODS

William Braud and Rosemarie Anderson (1998) produced the first full-length volume on transpersonal research methods, suggesting that it be used as a complement in methods courses along with texts devoted to more conventional methods. Their book contains contributions by authors detailing several expanded methods, as well as sections devoted to "alternative ways of knowing," "alternative ways of working with data," and "alternative ways of presenting results," and concludes with sections related to questions of validity and ethics. Transpersonal methods, they explain, can be fruitfully applied to a range of human experiences but are particularly useful to extraordinary experiences that "have been systematically excluded from conventional research" (3).

I believe it is important to note that Braud and Anderson came to their interest and dedication to the expanded transpersonal modes of inquiry not as opponents of traditional scientific approaches but as psychologists who had been rigorously trained in the most rigorous and positivistic of experimental methods and epistemologies. William Braud's doctoral work in behavioral psychology involved immersion in the hypothetico-deductive approaches of learning theory. He studied the philosophy of science under Gustav Bergmann, who was a member of the Vienna circle of logical positivists. During subsequent positions at universities and medical centers, he reports, he gradually began to supplement behavioral methods with clinical and pharmacological approaches. Expanding still further he began to undertake studies in biofeedback, altered states of

consciousness and psychoneuroimmunology. He has become one of the most prominent parapsychology researchers in the United States. Rosemarie Anderson writes that she simultaneously treasures her previous training in Skinnerian behavioral methods while also feeling strongly that "internal states of spiritual experiences rarely lend themselves to the Procrustean bed of external observation" (xiv).

In one of the concluding chapters, William Braud addresses questions of validity, of how researchers are to know which conclusions, which observations, which results can be said to be true or real. Whereas natural science defines as "real" only that which can be measured and independently verified, human beings regard their inner experiences—which are not likely to be observable, measurable or precisely described—as "real." Thus conventional science operates with an unnecessarily narrow application of the term "validity" as solely a property of analysis, as a product of intellect in its narrowest sense. "[I]n the strange manner we moderns have of turning original word meanings on their heads," he writes, "we use the term intellect primarily as a descriptor of rational, analytical, discursive thinking. To the early Greeks, however, intellect (nous) had a much broader meaning. It denoted the largest manifestation of mind, and, used in much the way that we the term *heart* today, it encompassed the deepest core one's being..." (224). Thus, there are instances wherein researchers ought to consider "bodily wisdom" by tuning into body reactions for a sense of whether certain statements are valid or misleading. Likewise, emotional reactions "should be assessed carefully and their contributions given apporopriate weightings in any validity assessment" (219). Aesthetics and intuition are also to be honored as part of *nous*.

Specific methods included in the volume edited by Braud and Anderson include "integral inquiry," "intuitive inquiry," "transpersonal awareness in phenomenological inquiry," and "organic research." Integral inquiry is so called, Braud writes, "because its aim is to be as whole and inclusive as possible" (58). The emphasis is on depth and intensity, and combines close attention to the life stories of participants, emphasis on a range of voices, as well as the tacit knowledge and experiences of the researcher. Braud quotes Barbara McClintock, Jonas Salk and Albert Eistein regarding the personal transformation through immersion that one must undertake to fully understand even physical objects of study. The biologist June Goodfield, for instance, has explained that to understand an object like a tumor one must become so absorbed in the study of the tumor that one actually becomes the tumor. To achieve such intimate identification, Braud advisors, "the integral inquirer uses a pluralistic epistemology throughout the research effort—polling all facets of herself or himself (bodily reactions, imagery, emotions and feelings, intuitions, and aesthetic sensibilities, as well as cognitions) to learn about the research topic from as many perspectives as possible" (64). He describes a student who used integral inquiry while writing her dissertation at the Institute of Transpersonal Psychology. "[S]he listened to her tape-recorded in-depth interviews while in a meditative state. She also allowed nonverbal production to arise, creatively expressing her participants' stories in the form of dance, drawings, sculptures crying, and singing" (50).

Rosemarie Anderson writes about the use of "sympathetic resonance" in intuitive inquiry. "To know persons," she advises, "we must love them first and look at the world from their perspective. To know anything, we must love it and become its friend" (81).

Intuitive inquiry stresses the uniqueness of an individual or a situation and relies on the researcher's capacity to undertake deep preparation to facilitate such preparation. They may enter altered states of consciousness, undergo mystical vision and use active dreaming as an aid. Specific techniques of intuitive inquiry might include reflective listening, indwelling, trickstering—which Anderson explains involving the use of "contradictory stories and examples [to move] us deeper into the intricacies of the topic of inquiry" (85)—and varying the focal depth (i.e., the range of distance from which one is observing).

Other contributors to the Anderson and Braud volume describe ways in which transpersonal methods might be integrated with phenomenological inquiry, feminist approaches, and various forms of humanistic psychology. Ron Valle and Mary Mohs describe a process and cite several studies whereby the "separateneness of the perceiver and that which is perceived has dissolved" (102). They focus on moments in which there is a "greatly-diminished, and on occasion absent, sense of 'I'...and the normal sense of space seems transformed" (100-101). Jennifer Clements, Dorothy Ettling, Dianne Jennett, and Lisa Shields discuss the ways in which feminist methodology generally neglects any concept of sacredness. "[Our] approach," they write, "is grounded in responsibility, reverence, and awe for the earth and all her inhabitants as well as for the mysteries of creativity. Doing this work requires honoring ourselves, our collaborators, our readers, and the context in which we work, as well as consciously keeping ourselves open to the gifts of the unconscious and the divine" (117). They focus on symbolic and nonverbal ways of gathering data and of identifying with their research participants.

Rhea White's contribution to the volume focuses on transpersonal research by making use of Max Weber's writings on science as a vocational calling. She notes the ways in which such a calling is sometimes "experienced as if coming from beyond the conscious mind" (136). When asking researchers to understand their calling to their professions, they have sometimes indicated that it seems to come from sources such as "the personal unconscious, in the interest of self-integration; Gaia, the soul of Earth, in response to her need to be saved from the ravages of greed, need, or supertechnology; or even the universe itself, calling out to move the process of evolution forward" (137-138). White believes that to honor and explore such a source of the scientific calling may aid in the forwarding the work of the science itself.

This chapter represents a brief account of the emergence of transpersonal psychology, of its earliest origins, and of the ways in which it both integrates and critiques mainstream natural and social-scientific practice. The following chapter pursues in depth one of the currents of transpersonal psychology—that which involves the use of hallucinogenic substances to explore the contours of the human self.

CHAPTER FIVE
SCIENCE AND HALLUCINOGENS

An examination of the fraught history of hallucinogenic drugs in the United States draws together nearly every societal problematic regarding the intersection of science and spirituality. By the mid-twentieth century, psychiatrists and psychologists divided sharply amongst themselves over how to interpret the various religious and mystical experiences that subjects reported after taking LSD (lysergic acid diethylamide), psilocybin (the active ingredient in hallucinogenic mushrooms), and mescaline (also known as peyote). They could not agree on appropriate scientific use, with some believing that hallucinogens induced temporary psychosis while others grew increasingly convinced that they were tools of applied mysticism. In the 1960s, sensationalized news accounts, legislative concern, and the intervention of drug enforcement agencies generated controversy so intense that it increasingly overwhelmed the possibility of reasoned dialogue or dispassionate analysis. Ultimately, the U.S. government banned all research involving hallucinogens and confiscated supplies from hospitals, universities, and other psychological or psychiatric settings.

In no small part, widespread casual use of LSD, the strongest hallucinogen, ignited the government's war on drugs, which for all hallucinogens has also amounted to a war on research with drugs. A research ban on hallucinogens has remained in place for thirty-eight years and mainstream American psychiatry shows little interest in revisiting the issue. Nonetheless, a not inconsequential minority of psychiatrists and psychologists, many of them from the transpersonal sub-field, continues to actively debate the merits of these substances. Given the present ban, they must largely confine their work to poring over past research in order to understand what was learned, or to relying on self-reports

by volunteers who have used various drugs illegally. In recent years, the government has granted permission to a small number of psychiatrists to conduct experiments in hospital settings (Strassman, 2001), but has excluded most of the major hallucinogens from this possibility. New research in Europe and South America has also provided fresh data for American psychiatrists.

In the decades following the imposition of the ban, American psychiatry reached a consensus that hallucinogenic drugs offer no possible treatment benefits, or in some cases that potential hazards outweigh any conceivable benefits. Those in the vocal minority allege that dominant psychiatric attitudes towards psychedelics result more from the need to protect the profession and institutions from backlash than from genuine scientific considerations. Moreover, they insist that paradigmatic commitments in psychiatry led to so many misinterpretations and such discomfort over the spiritual and religious phenomena reported by research subjects that many psychiatrists welcomed the ban rather address these issues. Others have pointed to the influence of pharmaceutical companies, which they believe have contributed to continued restrictions on hallucinogenic drugs in favor of more accepted and profitable psychiatric drugs.

The following sections address all of the above issues, beginning with disputes over basic questions such as the labeling of hallucinogens and how such labeling may affect scientific considerations. This chapter then addresses critiques of the dominant research model and allegations that it restricts social knowledge production. More than any other social institution, the state has come to exert the dominant influence over how psychiatrists approach hallucinogenic drugs and this chapter explores the impact of state

agencies. Multiple issues related to the uncertain connection between science and spirituality inform the final chapter sections.

SCIENCE, LABELS AND CLASSIFICATION

Classification of the disparate substances that have "hallucinogenic" effects—a total of about 150 plants and chemicals (Grob, 2002)—has not been a neutral process. The Drug Enforcement Agency (DEA) uses the term "hallucinogen" to denote drugs which produce noticeable changes in conscious perception with strong visual impact, and the American Psychiatric Association (APA) has followed suit. Those who view these drugs more sympathetically object that the label misleadingly implies an unreal, illusory, or delusional experience. They insist that at least in some cases and under the right conditions these drugs have prompted genuine psychological insight and even, in rarer cases, spiritual transformation or momentary mystical states. Transpersonal psychologists have tended to prefer the equally imprecise term "psychedelic," meaning "mind-manifesting," or "mind-revealing." Others, such as transpersonal psychologist Ralph Metzner, have suggested that "hallucinogen" need not necessarily carry a negative connotation if the Latin interpretation of *allucinar*, "to wander in the mind" (1999: 15) is understood. Having adopted Meztner's approach, transpersonal psychiatrist Charles Grob has titled his new book of collected works on the subject *Hallucinogens: A Reader* (2002).

Labeling any of these difficult to understand substances may shape the expectations of the scientific investigator and the individuals who consume them, as well as those who read about them in professional journals or popular media. Psychiatrists who conducted research on LSD after its synthesis in 1943 adopted the term

"psychotomimetic," meaning "to mimic psychosis." Such an approach, transpersonal psychiatrist Rick Strassman reports, followed from "psychiatry's mandate to understand and treat serious psychopathology" (49). They suspected that the major alterations in consciousness induced by LSD could shed light on the nature of psychosis by provoking a temporary schizophrenic-like state. Comparisons to schizophrenia were ultimately decisively negated, but the psychotomimetic model still holds and has generally led to the interpretation of every unusual sensation or experience under the influence of hallucinogens as products of momentary psychosis. The emphasis on psychotic symptoms, Strassman maintains, leads psychiatrists away from the opportunity to "probe deeper into the mysteries of consciousness" (49)

Sandoz Pharmaceutical, which held the patent for LSD, suggested that if high doses could provoke a psychotic reaction then a low dose could be used in psychotherapy as a "psycholytic," or "mind-loosener." Many psychiatrists in the 1940s and 1950s did adopt this approach and treated reported phenomena as the emergence of repressed material from the unconscious. Grinspoon and Bakalar (1997) have noted that the term "entactogen," translated as "to touch within," offers a more encompassing categorization because it would include drugs like MDMA (ecstasy) that produce strong feelings but few or no visual effects. Others have suggested that ecstasy, in particular, is an "empathogen," leading an individual to greater understanding of and care for other living things around him or her. Science writer John Horgan skeptically notes that some have adopted the label "entheogen," as in "God-containing" (2003: 20).

Grinspoon and Bakalar (1997) write that critics of terms like "psychedelic," or other labels that cast the drug experience in a positive light, object that it becomes "a

means of self-congratulation for drug users, that it overrates the drugs' significance, that it is the central idea of an absurd and offensive intellectual system and worldview" (8). They note, however, that experimental subjects routinely reject the term "hallucination" when asked to report the effects of drugs such as LSD. They insist on the emotional and even physical realness of the experience. For consistency, and following Ralph Metzner and Charles Grob, this chapter adopts the term "hallucinogen" throughout, without an implied judgment of the drug experience.

Grinspoon, a psychiatrist at Harvard Medical School, and Bakalar, a lecturer in law at Harvard Medical School, decisively claim: "Many of the most powerful and sought-after effects can be called hallucinations or illusions only be stretching definitions to the breaking point or imposing a questionable social judgment. It is inaccurate to describe in this way experiences like intense emotional reaction to slight gestures, enhanced empathy, deep introspective reflection, reliving of old memories or participation in symbolic dramas, loss of the unity of body and self, quasi-religious exaltation, or ecstatic union with other people or the cosmos" (7). They conclude that ultimately no label could possibly apply to the range of hallucinogen effects, but agree that psychedelic will serve as a default. Language itself, they suggest, fails to adequately capture the profundity that many people claim to have experienced under the influence of LSD and other hallucinogens such as DMT (N, N, dimethyltriptamine), ketamine, mescaline, and psilocybin.

The conflict over labeling suggests another matter of critical scientific importance related to hallucinogens: the subject of set and setting. Those who have written on the subject have widely noted the impact of "mindset" and environmental "setting" on the

type of experience that one will likely encounter under the influence of hallucinogens. A negative label, such as "psychotomimetic," or a positive label such as "psychedelic," crates a mindset in which one may expect either to endure insanity or experience potential mystical revelation. Adopting the psychotomimetic model leads the doctor to gravely warn the subject of the unpleasant aspects of madness that he may briefly encounter, and to assure him of their temporary nature. A psychedelic model prompts the doctor to suggest the capacity for a potentially life-transforming experience.

The mindset can also affect the "setting," as the "psychotomimetic" model more or less requires a hospital setting and generally necessitates against any "spiritual" trappings. A psychedelic model may occur in an outdoor "healing circle," in a private home, or in a ritual shamanic context. Even if conducted in a hospital room, a psychedelic session may include prayer, chanting, music, breath preparation, or meditation. Advocates of the latter approach insist that if these items and practices sound unscientific, such judgment amounts to a cultural dismissal and not the appropriate adoption of a scientific method.

QUESTIONING THE FUNDAMENTS OF THE RESEARCH MODEL

These considerations led psychiatrist Rick Strassman, who has worked widely with the hallucinogenic drugs DMT (dimethyltriptamine) and psilocybin, to question the very basis of the scientific research model. The biomedical model, as with all analytical science, he asserts, requires "taking it apart and seeing how it works" (2001: 332) or "mechanism-of-action studies" (334), which may actually detract from the usefulness that hallucinogens can provide to human civilization. He expresses a strong conviction that for work with hallucinogens to serve a helpful knowledge purpose, "kindness, wisdom

and compassion" (332) should outweigh the imperative to gain technical understanding. Along these lines, he offers a number of research program suggestions that he believes to be in principle compatible with modern medicine but are no doubt unacceptable to the culture of science at this time.

One primary recommendation Strassman makes involves moving beyond hospital studies. Some of the natural, outdoor environments he proffers sound virtually inconceivable given the contexts of current medical testing models. Strassman suggests that the accepted pharmaceutical approach may serve the status concerns of the psychiatric profession, but at the expense of socially-useful understanding. Another possibility involves the consumption of hallucinogens by researchers themselves so that they can intimately and compassionately understand the effects that they may have on other human beings. This has been a commonly accepted part of the psychedelic model, but it conflicts with the requirement that researchers adopt an objective stance toward a subject or patient. It also undermines professional claims to exclusive jurisdiction over medicine, as the psychedelic model often combines the use of literature, poetry, art, and religious texts with the administration of drugs. Another fundament of modern medicine includes the treatment of disease, pathology, or symptoms, which virtually precludes transpersonal and psychedelic claims of extraordinary growth beyond normal social adjustment.

When he applied to the Food and Drug Administration for permission to conduct the DMT study, Strassman found it necessary to adopt a brain chemistry model in order to secure approval. Such a model required him to search for biological causes and effects—blood pressure, elevated or reduced heartbeat, shifts in neurotransmitter levels—

related to the administration of the quick-acting drug. Though he would have preferred to, he could not design psychotherapeutic or spiritual considerations into the study. In fact, he credits his ability to secure Food and Drug Administration (FDA) approval to the support of Dr. Daniel X. Freedman, "arguably the most powerful individual in American medicine at the time" (92). But Freedman promised to help on the condition that Strassman confined the study to psychopharmacological parameters and did not stray into psychotherapy.

Though Strassman had high initial expectations for what he might find in his five-year study of sixty subjects, the long-term results ultimately disappointed him. Many reported intense emotional reactions during the sessions, often insisting that they had encountered direct mystical union with the cosmos, experienced their own deaths and rebirths, or witnessed the creation of the universe. Strassman expected that at least some of the subjects might report long-lasting changes in behavior, including decisions to begin psychotherapy or to adopt a spiritual practice. Long-term follow-up studies revealed that not a single subject reported such changes, a fact that Strassman attributes to the limitations of the research model.

Likewise, Karl Jansen, a British psychiatrist and member of the Royal College of Psychiatrists widely recognized as the world's leading expert on the hallucinogenic drug, ketamine, argues that, "Most of modern medicine is still based upon the machine model of Newton, with a reluctant nod to complimentary medicine forced upon it by the latter's popularity with patients" (2001: 149-150). He believes the Newtonian model continues to lead to many medical advances, but simultaneously deprives psychiatry of the holistic meaning that many patients need. Jansen attributes the public's increased incorporation

of holistic treatments, either within the boundaries of modern science or beyond them, to the fact that these "meaning-enhancing" approaches are "ancient and fundamental" (150).

Strassman suggests that there may be better ways for human beings to use hallucinogens than in the context of modern science. They could be used, as they once were, in explicitly psychotherapeutic contexts, or in expressly spiritual and religious environments. Like Charles Derber [referred to in the theory section], he believes that expert knowledge is only one kind of valid knowledge. In the case of hallucinogens, however, state intervention since 1965 prohibits any other legal means for humans to encounter them.[7] Robert Masters (2000), co-author of the classic *Varieties of Psychedelic Experience*, also notes that even if the state altered laws prohibiting hallucinogenic research, the accepted biomedical model would grant psychiatry a monopoly over it. He believes that such a monopoly would lead to a squandering of knowledge potential, as "philosophers, theologians, anthropologists, artists, scientists, (and) engineers" (vii) could also benefit from the creative potential they engender.

One such non-medical context would involve "healing circles," modeled after shamanic uses of various plant hallucinogens. Transpersonal psychologist Ralph Metzner (1999) writes that he has been a participant-observer in at least 100 such circles in North America. He leaves it unsaid that most of these circles could not have received legal sanction, unless some were conducted as Native American religious ceremonies. Metzner's argument is that shamanic cultures possess a great deal of practical knowledge regarding the use of plant substances. He suggests that such traditions should be treated as essentially "scientific" in that the knowledge accrued through experimental method.

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[7] The Religious Freedom Act of 1985 granted the Native American Church the right to use peyote if strictly confined to religious rituals (Grob, 2002).

He also draws attention to the fact that the experienced shamanic guides treat the plant substances as "teachers" capable of evoking spirits or spiritual essences, a belief "completely at variance with the accepted model focused on isolating and purifying the molecular compound" (32).

Metzner reports that ayahuasca, a combination of several plant substances, has elicited major psychological and physical benefits in shamanic ceremonies. It has demonstrated an effectiveness in treating even the most severe cases of alcohol and drug addiction, resolving relationship difficulties, and enabling individuals a greater sense of adjustment in the world. He includes in his edited volume on the subject twenty-four self-reports by western professionals—including psychiatrists, psychologists, physicians, therapists, writers, and teachers—who have taken ayahuasca. The authors of these case studies frequently insist that they met "conscious intelligent beings or spirits" (46) and most of them claim receiving long-term psychological and spiritual benefit. It is significant that most of these self-reports had to be published anonymously.

Ayahuasca in recent years has made such a cultural impact on the west that transpersonal psychiatrist Charles Grob (1999) indicates his belief that western science and medicine will have to come to terms with it somehow. Thousands of westerners have traveled to Brazil, where it is legal in certain contexts, and to other parts of South America to sit in healing circles. Many well-known celebrities have spoken about such experiences publicly, and lesser-known professionals have written about them at length. Three Brazilian church denominations have been built on the ayahuasca experience, and two of them have created satellite churches in Europe and North America. Though any future formal studies could follow a biomedical or psychotomimetic model, Grob insists

that “for the mainstream fields of psychiatry and psychology, it is time to reopen the question of the value of shamanic ritual experience, and to explore the ceremonial structures and technologies within which these phenomena are embedded” (216).

Ralph Metzner advocates William James’s “radical empiricism” as one potential principle to guide hallucinogen research. Such a methodological approach would involve recording as phenomenologically valid whatever experiences that competent hallucinogen users describe. These accounts can then be “subject to verification, comparison, and replication by anyone else who chooses to avail themselves of these perception-enhancing tools” (281). He cites anthropologist Jeremy Narby as making a “breakthrough contribution” (33) by traveling to the Peruvian Amazon to apply a direct experimental method to ayahuasca in a shamanic context, using himself as a subject. Narby reported encountering intimate knowledge of the DNA structure while under the influence of ayahuasca, and suggested that frequently reported ayahuasca visions involving serpents, rope, vines, and ladders might be an actual encounters between the ayahuasca subject and DNA.

Metzner lauds Narby’s approach as a potential basis for a reconciliation between shamanism and science. Narby himself (2002) seems to adopt a more cautious attitude. In one essay, he reports traveling with three molecular biologists to the Peruvian Amazon and recording their ayahuasca experiences. They reported encountering DNA molecules, and one “said she saw a chromosome from the perspective of a protein flying above a long strand of DNA” (160). Another, who had been researching reproductive biology, indicated hearing a voice to which he could literally direct complex questions regarding his research and which supplied direct answers. Two of the scientists agreed

that they had met "independent entities" that they called "plant teachers," and the third scientist felt that ayahuasca had put him in touch with what was already in his own mind. Nonetheless, none of them felt they had received major revelations and they felt that their encounters were not reproducible. Narby writes, "They all said that ayahuasca shamanism was a harder path to knowledge than science" (162).

Strassman concludes his book on DMT with a plea for dialogue among advocates for various approaches to hallucinogens—a dialogue that he does not feel has yet sufficiently begun. Certainly the dialogue occurs in the pages of the steady stream of books about various hallucinogens written by psychologists and psychiatrists over the past decades, but few people are sanguine about the prospect of any changes to the dominant research model. In any case, all roads to official hallucinogenic research now lead through the state. The government and its various agencies strongly affect the willingness of various professions and institutions to conduct such research, and shape the terms under which they might be permitted to conduct it.

THE ROLE OF THE STATE

Robert Masters and Jean Huston wrote their now-classic *Varieties of Psychedelic Experience* in 1965, as the first major state interventions involving hallucinogenic research were occurring. At the time, they claimed that their research involving "first-hand observation of 206 sessions and...interviews with 214 other volunteers" (2000: 5) had demonstrated that "psychedelic drugs afford the best access yet to the contents and processes of the human mind" (314). Thirty-five years later, the book was reissued with a new preface by Robert Masters looking back over the years during which such research was criminalized. In it he reaffirms the authors' earlier conviction that "there is an

enormous (emphasis in original) range of valuable applications of psychedelics which has not been explored" including "psychotherapy; creative process and problem-solving; neural and sensory reeducation; nature and regulation of pain;...and expanded awareness of self and world" (vii). He worries that most researchers who had had any direct experience with psychedelic experiments "would die of old age" before the laws might be changed and that "very few understand the magnitude of that loss" (vii).

When Grinspoon and Bakalar wrote their well-known book *Psychedelic Drugs Reconsidered* in the late 1970s, they expressed confidence that the emotions and controversy generated by LSD and other hallucinogens in the 1960s were diminishing to the point that research would soon be allowed to continue. In that edition, their introduction opened with the claim that, "Researchers in psychology and psychiatry are showing no interest at all, or are being allowed to show none in practice" (xxiii). When the Lindesmith Center reissued their book in 1997, it contained a new introduction by the authors expressing regret that a continued ban has more or less hampered any new understanding.

Direct government involvement in hallucinogenic research began when the Bureau of Narcotics launched an investigation in 1962 of the Harvard Psilocybin Project led by psychologist Timothy Leary. Up to that point, researchers of all types had been fairly free to order supplies of LSD or psilocybin from Sandoz Pharmaceutical and design research protocols as they chose (Stevens, 1987). Leary, his assistants, and his research subjects had begun loudly and publicly trumpeting the advantageous psychological and spiritual effects of psychedelic mushrooms (the natural source of psilocybin) and liberally providing Harvard students with supplies. The Harvard psychology department was

disinclined to support him in the face of government inquiry because he had strayed far from accepted research models and had rankled many of the other faculty with his claims that mushrooms produced spiritual and religious experience. Department chair David McClelland took Leary to task for romanticizing eastern mysticism, and dismissed the increased interest in religion among Leary's subjects as "'undergraduate navel-gazing'" (Stevens, 1987: 160). As these debates occurred at Harvard, Congress passed a law to take effect in 1963 giving the FDA control over all new drugs. Harvard dismissed Timothy Leary that same year, and he and his assistants Richard Alpert and Ralph Metzner relocated to Mexico to begin work with their new obsession: LSD.

Historian Jay Stevens describes the mounting controversy surrounding LSD from 1963 on as characterized by exaggeration and misinformation. Leary's dismissal from Harvard had garnered enormous public attention and aroused suspicion. Psychiatrists and psychologists expressed dozens of conflicting opinions as to whether LSD might be useful, beneficial, or harmful. Psychologist Sidney Cohen had studied 5,000 people who had taken LSD a combined total of 25,000 times and "concluded, 'LSD is an enormously safe drug'" (173). But reports of psychotic breaks and of unwelcome flashbacks generated sensational news stories. *Time* magazine reported that LSD-induced psychosis was driving people into hospital emergency rooms in droves, though apparently no such hard data existed and the research community estimated that 2 percent of those who took LSD ever visited a hospital and only 1/3 of them experienced genuine psychosis. Newspapers began to write of "rape, assault, murder, suicide and self-mutiliation" caused by LSD, although Stevens's review of these accounts revealed "discrepancies...that support a moderate amount of skepticism" (275). Congressional hearings on the subject

generated what Stevens believes to be hysterical overestimations of the number of LSD users.

In mid-1966, amidst panic at the growing casual use amongst the public, the *New England Journal of Medicine* declared there was no reason to believe that any more experimentation with LSD would prove useful and called for an end to all research. At the time, the National Institute of Mental Health (NIMH) was still funding thirty-eight LSD-related research projects. In June, Sandoz Pharmaceutical announced that it would stop making LSD and would cancel remaining research contracts, prompting the NIMH to order mental health professionals to return all supplies to the company. The NIMH began halting LSD projects in July 1966. By October of that year, possession of LSD would be made illegal in all fifty states and at the national level. For psychiatry, Rick Strassman writes, hallucinogens "began as 'wonder drugs,' turned into 'horror drugs,' then became nothing" (28).

The passage of the Controlled Substance Act of 1970 clarified legal matters and doomed hallucinogen research for the long-term. Under this act, the Drug Enforcement Agency placed all hallucinogens in the most restricted category, "Schedule I," declaring that they had no medical merit and were unsafe even under medical supervision. Marijuana also rated a Schedule I designation. Placement in Schedule I prohibits research involving humans under almost all circumstances. The act granted the DEA the authority to determine the right to possess drugs, and the FDA the power to determine their level of safety.

In 1990, the government granted psychiatrist Rick Strassman the first exception to the Schedule I prohibition on hallucinogen research. The circumstances of his approval

illustrate the continued difficulty, and the rarity, of securing research approval, as well the narrow circumstances under which it must be conducted. The substance he chose for investigation was DMT (N,N dimethyltriptamine), which exists naturally and without hallucinogenic effect in all mammals, fish, grasses, some amphibians, certain fungi, and some flowers and roots. It has been used in various forms with psychedelic effects[8] in several South American indigenous rituals for centuries and was first synthesized in a laboratory in 1955. Only one previous report on psychiatric use of DMT had been published, involving experiments in the late 1950s. In contrast to Strassman's work, which used only psychologically healthy volunteers, the previous study was conducted on schizophrenia patients. The drug's obscurity relative to LSD helped Strassman secure legal permission.

Strassman reports choosing DMT after years of speculating about the connection between the pineal gland and spiritual experiences. He had grown increasingly convinced while in medical school that the pineal gland might not only be the source of DMT—a proposition that has not yet been confirmed—but might also be the source of human spiritual experience. He writes that he instinctively knew to proceed with extreme caution about this subject with colleagues and supervisors. No one in medicine had yet looked for DMT in the pineal gland. The first time he broached the subject of the psychedelic capacities of the pineal gland with an instructor, the professor "stopped in his tracks and turned on his heels. His brow furrowed and he peered at me intently through his glasses. A palpable menace glinted from his eyes... 'Let me tell you this, Rick,' he said very slowly and firmly. *'The pineal gland has nothing to do with psychedelic drugs'*

[8] Despite its existence in the human body, DMT alters consciousness only when it crosses the blood-brain barrier. To accomplish this, South American shamanic circles drank it as a brew. Strassman used both intramuscular and intravenous administration in his experiments. It can also be smoked.

(emphasis in original)." That, he writes, "was the last time that year I said the words *pineal* and *psychedelic* in the same breath to anyone" (68).

Only years later, as a tenured associate professor of psychiatry at the University of New Mexico Medical School, would he attempt applying for government approval of a formal DMT study. Beforehand, he spoke to various "chairmen, directors, and heads of university divisions" (85) at his medical school. They all advised him that he would be taking uncertain professional risks, but ultimately agreed to support him if he chose to go ahead. It would take two years before he received official permission to launch the study, and at every step along the way he encountered daunting roadblocks.

He sent his proposal simultaneously to the FDA, the DEA, the Human Research Ethics Committee at the University of New Mexico and to the University of New Mexico Hospital's General Clinical Research Center. With the Ethics Committee, he had to work out an unusually complicated and delicate confidentiality/anonymity agreement for his research subjects. Because he wanted to recruit only volunteers who had had previous DMT experience, in order to minimize unexpected complications, all volunteers would implicitly admit to a criminal offense. Because many of his recruits were also health professionals, they took the risk of putting their careers in danger. In the case of the Clinical Research Center, where the experiments would take place, he had to satisfy demands DEA that all employees who would handle DMT undergo security checks. He also had to buy a freezer that would be locked in the hospital's narcotics vault. The Ethics Committee and the Research Center granted permission within thirty days, but the FDA and DEA prove more reticent.

The FDA would not grant permission to use DMT until he Strassman possessed it, but the DEA would not grant permission to possess it until he had FDA approval to use it. As if this circular bureaucratic challenge were not daunting enough, he had to find a pharmaceutical company willing to make human-grade DMT. The first two labs he approached refused, not wishing to be associated with hallucinogens. A third, Sigma Laboratories in St. Louis, agreed provided he could find out what paperwork would be necessary for the FDA. The FDA representative supplied incorrect information, prompting Strassman to use the Freedom of Information Act to secure a list of all current and previous investigational drug permits. None existed for DMT. After a year and a half of unsuccessful attempts to secure the FDA's permission for Sigma, that company decided to rescind its offer and Strassman had to search for another supplier.

Strassman approached the National Institute of Drug Abuse (NIDA), which provided several names of laboratories but none of them indicated an ability to make human-grade DMT. He finally a chemist at Perdue University who indicated an ability and a willingness, but the DEA required that he qualify as a manufacturer. While waiting for approval for this chemist as a manufacturer, Perdue's lawyers cautioned the against making DMT. Strassman managed to convince him that any potential lawsuits would be directed at the University of New Mexico and at Strassman personally, and not towards the manufacturer. In early 1990, the DEA granted the chemist permission to make DMT.

The DEA also granted Strassman a Schedule I permit at that time, but then an internal unit known as "Diversion Control" blocked the permit. After many telephone calls, the united lifted the block. The FDA then required that he send the manufactured DMT out to local laboratories for testing, but the first two he contacted refused to handle

a Schedule I drug. After he found a third laboratory, in July 1990, the drug was in his hands, tested, and ready to be used. He waited until late November for final FDA approval, and he injected the first volunteer in late 1990. The study would last five years and then close due to a variety of complications.

Very few hallucinogen studies since then have received regulatory approval, although Strassman himself did subsequently secure permission for a study of the therapeutic effects of psilocybin on terminally ill patients. Strassman reports that the government has approved other research projects involving mescaline, psilocybin, ketamine, and MDMA (ecstasy), but that all of these projects have been conducted under the terms of the psychotomimetic model. They focus strictly on pharmacology and brain physiology. Worldwide, two projects using a psychotherapeutic model have been undertaken, one using ibogaine in the treatment of substance abuse in the Caribbean, and one using ketamine for psychotherapy in St. Petersburg, Russia.

THE INTERSECTION OF BUDDHISM AND SCIENCE

If controversy and criminal penalties make hallucinogens an uncomfortable topic for psychiatrists, most Buddhist organizations in the U.S. would also prefer to avoid discussing the role that drugs played in their establishment and growth. But accounts of hallucinogen experiences, especially LSD, sparked much of the popularization of Buddhist concepts and terminology in the 1950s and 1960s, and seem to be the point where American Buddhism and western science encountered each other most dramatically. The first known medical accounts of hallucinogen use appeared in issues of the *Therapeutic Gazette* and the *British Medical Journal* in the 1890s, and their use of religious terminology such as “paradise,” “heaven,” and “inferno” to describe mescaline

use would spark the interest of the physician Havelock Ellis and psychologist William James (Stevens, 1985: 6). James would draw attention to Indian mysticism, and his interpretations would later inspire many psychedelic researchers. The trend of incorporating religious symbolism would continue over the next several decades and reach its apex in the 1960s just as other developments brought Americans into contact with various Asian religious groups, leaders, and practices.

When psychologists began looking for ways to make sense of intense psilocybin and LSD experiences in the 1950s, some of them alighted on comparisons with eastern spiritual concepts such as satori (a flash of sudden awareness), samadhi (meditative absorption) and enlightenment (the ultimate goal of the mystical path). This practice can be traced in part to 1953, when psychiatrist Humphrey Osmond gave mescaline to Aldous Huxley. Huxley had already started meditating and chanting in the Buddhist tradition in the 1920s, had begun studying Vedantic Hinduism in 1937, and had written *The Perennial Philosophy* in the late 1930s. Historian Jay Stevens quotes him as describing mescaline after his session with Osmond as "'the most extraordinary and significant experience available to human beings this side of the Beatific Vision'" (47). That same year Huxley would write the most popular single volume ever written in the psychedelic tradition, *The Doors of Perception*, in which he related his mescaline-induced visions of Buddha and speculate about a psychological science of the world beyond the doors of the unconscious. In 1956, Huxley would be the only non-doctor invited to speak to the American Psychoanalytic Association's annual convention.

From Huxley and his companion Gerald Heard, Timothy Leary would borrow the approach of using the *Bardo Thödol* (Tibetan Book of the Dead) to guide people through

the LSD experience. The *Bardo Thödol* had attracted increasing attention amidst a Tibetan migration to the United States the Chinese invasion in 1959. In Leary's *The Psychedelic Experience* (1964), he wrote that "The potent chemical key (LSD) is of little value without the guidance and the teaching" (30) of the *Bardo Thödol*. By that time, Leary had already been fired by Harvard and had begun proselytizing to the public at large to discover LSD for themselves. Leary derided psychology as engaged in a retreat into "specialization and parochial narrowness" (19), and advocated techniques such as yoga, meditation and other eastern approaches as eminently more scientific. Decades later, many prominent Buddhist teachers would continue the tradition of claiming the mantle of science for Buddhism.

By the tens of thousands, people did indeed take Leary's advice both to consume LSD and to take up the Buddhist path, although there were certainly more takers for the former recommendation. Historian Rick Fields (1992) documents that liberal amounts of LSD and psilocybin could be found at East and West Coast Zen centers by the late-1960s, and quotes one Zen teacher as writing at that time that most of the young people seeking out Zen practice had been led to do so through encounters with hallucinogens.

Many developments seemed to be drawing aspects of Buddhism and science together at this point. Quiet accounts of LSD research by psychiatrists such as Myron Stolaroff led other researchers to adopt a psychedelic model of investigation, using openly spiritual terms. The more confrontational Timothy Leary would accelerate this process, promoting himself as a high priest of the dawning of a new religious era. Tibetan lamas in the United States after the Chinese invasion in 1959 widely accepted invitations of psychedelic investigators to try LSD and psilocybin. Chogyam Trungpa,

perhaps the most directly influential of the Tibetan arrivals, publicly recounted his many drug experiences and compared them to various stages of enlightenment. Many Buddhist teachers began more and more comparing their religion to a science, most prominently the Dalai Lama. The Dalai Lama has urged a synthesis between science and Buddhism, and has urged Buddhists to preserve those parts of their practices that correspond with science and to reject those that science has directly and decisively disproved.

Alan Hunt Badiner and Alex Grey (2002) invited a variety of commentators, many of then transpersonal psychiatrists and psychologists, to explore the connections between Buddhism and hallucinogens in the United States. The result was *Zig, Zag, Zen: Buddhism and Psychedelics,* which documents widespread usage of LSD and psilocybin by many of westerners who are now Buddhist priests and meditation instructors. Religious scholar Huston Smith writes in the volume that the connection can no longer "be swept under the rug" (15). Smith himself had conducted psilocybin laboratory seminars for his students at MIT in the 1960s (Fields, 2002). John Horgan (2004) cites a survey conducted by a leading American Buddhist magazine indicating that 83 percent of its readers indicating using hallucinogens at least once, and that 24 percent admitted still using them. Nonetheless, when Rick Strassman, who himself was ordained as a Zen Buddhist, began conducting his DMT experiments, he was severely chastised by several leading Buddhists. The teachers of his own Buddhist community, who had had previously LSD experiences themselves, wrote to him ordering him to cease the experiments as they would distract from the true Buddhist path. Nonetheless, Strassman writes (2001) that every aspect of his controlled studies was infused by his own commitments to Zen practice.

BENEFICENCE AND HARM

The assessment of whether any hallucinogen produces useful benefits or causes great harm—or both or neither—cannot be disentangled from historical expectations, from institutional practices, or from professional norms. For instance, reports of profound union with the cosmos may be viewed by a spiritually-inclined professional as a genuine mystical experience. A more conventionally-inclined professional, who has never encountered talk of a spiritual experience in an academic environment, may suspect ego inflation, a brief psychosis, or some other break with reality. Rick Strassman writes that even many scientists who "possess an abiding faith in the spiritual" encounter "a profound conflict between their personal and professional beliefs" (186).

Psychiatrist Stanislav Grof, one of the founders of transpersonal psychology, has written widely of the potential psychotherapeutic benefit of hallucinogens in books such as *LSD Psychotherapy* (1980) and *Realms of the Human Unconscious* (1994). He personally conducted approximately 3,000 drug sessions as a researcher in Czechoslovakia before leaving for the United States in 1967. In *Beyond the Brain* (1985) he provides a dramatic account of his encounter with professional norms in both countries:

> "When, in the early days of my psychedelic research, I approached new friends and immediate colleagues to share the new exciting observations, I learned an important lesson. It became painfully obvious that an honest and uncensored presentation of what I have seen would meet deep disbelief and suspicion and would entail a serious risk of professional disqualification and ridicule. From then on, the task has not been to find the best way of articulating and communicating the new realities in their totality, but to decide from one situation to another how much it was possible and reasonable to report, what metaphors and language to use, and how to relate the reported facts to the existing body of knowledge accepted by the scientific community" (xv).

Grof served as assistant professor of psychiatry at Johns Hopkins University School of Medicine and, later, chief of psychiatric research at the Maryland Psychiatric Research Center. Ultimately, he became so frustrated at what he describes as a intellectual openness in psychiatry that he would leave mainstream psychiatry altogether to become scholar-in-residence at the spiritually-oriented Esalen Institute.

Distinguishing between beneficence and harm sometimes involves counterintuitive criteria. Every researcher mentioned in this chapter acknowledges that psychedelic drugs can cause painful psychological harm when used carelessly or without adequate preparation. Nonetheless, sometimes those experiences that appear harmful may be the most psychologically beneficial. Grof describes experiences quite immediately traumatic for subjects reported under the influence of LSD, but notes that such experiences represented encounters with deeply repressed unconscious emotional material from the earliest moments of life. Often such momentarily painful experiences, he feels, can enable the subject to constructively work through acquired neurotic traits. In fact, one of LSD's greatest benefits, he maintains, is that it facilitates breaking through the walls of the unconscious in a way that psychotherapy cannot. A pleasurable experience with LSD may represent a misplaced opportunity for important psychological reconstruction.

Karl Jansen (2001) compiled dozens of first-person reports of ketamine experiences—in both therapeutic and non-therapeutic contexts—and classified them into two general types. Some users reported dissociation and feelings of psychotic breaks, while a second group found insight and revelation. He refers to one doctor who

conducted psychedelic therapy sessions with ketamine and reported that many people who had never given any thought to spirituality found themselves in the midst of deep spiritual experiences or even in direct "contact with God" (78). The point, he argues, is to avoid the prevailing tendency of letting one set of experiences completely nullify the other. Nightmarish experiences should not define the drug, and neither should reports of spiritual attainment of some kind. The question of benefit or harm, he asserts, involves the complex interaction of the drug, its dose, the subject's mindset, the environmental setting, the past history of the subject, and the attitude of the researcher or other persons in the room.

Jansen relates the results of one controlled study in St. Petersburg, Russia. Researchers administered ketamine to two groups of chronic volunteers with severe alcoholism. They informed one group that ketamine would enable them to explore the deepest roots of their problems and to understand the sources of their values and self-concepts, while the control group received no such instructions. After one year, 66 percent of the group provided with spiritual counseling reported that they had maintained their cessation of alcohol drinking, compared to only 24 percent in the control group (282). Respondents in the experimental group reported a range of transpersonal experiences, including contact with "God" or a "higher power," and "out-of-body experiences." Versions of the study were later repeated with heroin addicts, with those receiving high doses of ketamine also showing high levels of success in overcoming addiction after intense spiritual experiences during treatment with the drug.

Every one of the contributors of self-reports to Ralph Metzner's edited volume on ayahuasca (1999) reported something akin to moments of "both personal terror and

visions of collective horror" (64). Some reported the distinct and terrifying sense of being mauled by tigers or consumed by snakes. Nonetheless, each of them affirms the overall long-term psychological benefits that ayahuasca afforded them. Masters and Houston adopt a far more cautious tone, suggesting that most subjects who claim to have attained great religious insight or psychological benefit may be misleading themselves. Though they believe that genuine mystical experiences can occur with LSD in rare instances, many subjects become deeply narcissistic while believing they have enlightened. "[T]he subsequent spiritual hubris can be horrendous," they write, with "the subject announcing to whoever will listen that all mystic themes, all religious concepts, all meaning, all mysteries now are accessible and explainable by virtue of his 'cosmic revelation'" (259).

The only formal psychiatric study on ayahuasca occurred in Brazil in 1993 in cooperation with the União do Vegetal (UDV). Members of the experimental group included only those who had been members of the UDV for at least ten years and used ayahuasca in religious rituals at least twice per month. Those in the control group had never used ayahuasca. The UDV members "reveal(ed) high levels of function compared to normal controls, including healthier personality measures (and) superior neuropsychological function" (Grob, 1999: 242.) In psychological testing the experimental members scored higher on scaled measures for relaxation, optimism, cheerfulness, and overconfidence. These results are qualitatively significant given that in life story accounts, experimental members described their lives before affiliation with the UDV church as "impulsive, disrespectful, angry, aggressive, oppositional, rebellious, irresponsible, alienated and unsuccessful" (240). The ayahuasca-related church had

given them a "sense of purpose, meaning and coherence" (241). Grob describes these findings as preliminary but warranting further investigation.

One particularly striking account provides testimony of the benefits potentially lost by outlawing LSD research. In the 1960s, as a psychologist at UCLA Medical School, Gary Fisher was asked by the head of the Department of Psychiatry if he would conduct an LSD session involving a man with a long history of untreatable psychiatric disorders. This patient, the son of a successful businessman, had been hospitalized at different times for a total of eleven years, had been given a number of non-psychedelic drugs, and had received electroshock therapy all with no success. He was unable to finish high school, to work, or to build friendships. For years after being discharged from the hospital for the last time, he was confined to a dark bedroom at home under the constant supervision of a psychiatric nurse. He had been alternately diagnosed with chronic schoziphrenia and "severe narcissistic disorder" and "his presenting symptoms included being phobic about most things in the world, in a constant state of anxiety and fear, and unable to sleep (having night terrors if he slept) and experiencing a constant range of distressing bodily sensations and recurring feelings of loss of reality" (Fisher, 2002: 105).

Fisher writes that after consulting with him, "I assessed him as 'the most untreatable psychiatric patient in the world" (106). After much preparation, Fisher administered a full dose of LSD in a specially-arranged hospital room and waited, along with two "sitters" that he brought with him, for ten hours during which the patient registered multiple symptoms of physical distress but insisted that nothing was happening. Fisher judged the session a failure and sent the patient home, but arranged to

have the experiment repeated at a hospital in the Netherlands. In the meantime, the client unexpectedly managed to walk outside for the first time in several years. Within months, he was living in his own apartment, had secured a part-time job, and met a girlfriend.

Fisher attributes this surprising success to the transcendence LSD can provide in an appropriate setting. He quotes a 1962 article from the *Journal of Neuropsychiatry* by Sherwood, Stolaroff and Harmon as stating that LSD can evoke a healing process by allowing a subject access to a perception that all things are united as one infinite and eternal whole. The quote reads, in part:

> "The individual's conviction that he is, in essence, an imperishable self, rather than a destructible ego, brings about the most profound reorientation at the deeper levels of personality. He perceives illimitable worth in this essential self, and it becomes easier to accept the previously known self as a reflection of this. The many conflicts which are rooted in lack of self-acceptance are cut off at the source, and the associated neurotic behavior patterns die away" (107).

Fisher makes the case in strong terms that psychedelic drugs can act as powerful tools for individuals to access the deepest levels of meaning. He says nothing of the laws which today prevent such treatment, but seems to let his essay speak as a strong implicit statement against them.

NEW SCIENTIFIC PARADIGMS?

Many psychiatrists and psychologists who have written in favor of resuming psychedelic research, particularly within a transpersonal context, proffer the argument that a reconciliation of the psychedelic model with accepted scientific practice requires necessary and warranted shifts in prevailing scientific thought. They generally build the case that most of the human sciences, including psychology, psychiatry, and medicine,

have failed to keep up with twentieth century advances in physics and thus remain mired in late nineteenth century approaches to reality. A brief review of some of some of the transpersonal claims challenging scientific paradigms follows. This discussion makes no judgment on the validity of any claims, but serves only to demonstrate ways in which transpersonal psychologists and psychiatrists situate their thinking within the context of overall science.

Stanislav Grof, for instance, places most of his hallucinogen research published over the course of three decades in the broad context of an overall history of science. He opens *Beyond the Brain* (1985) with an extensive ninety-page review of theories of scientific development in order to build the case that dominant the dominant paradigm lacks the tools to adequately evaluate transpersonal research. He begins with Thomas Kuhn's conceptualization of paradigms, which Grof defines as "a constellation of beliefs, values, and techniques shared by the members of a given scientific community" (3). Kuhn demonstrated, he writes, that reality can never be apprehended in its entirety, and paradigms permit a workable but inevitably belief-laden model for approaching the study of particular aspects of reality. In the early development of any branch of science, a chaotic jumble of competing approaches exists until the field gradually produces general agreement on practices and conceptual approaches. Paradigms facilitate routine science in any given field but impede the development of revolutionary approaches. They also lead to scientific hubris when scientists mistake their paradigms, which may constitute a valid map of some aspects of reality, for reality itself.

Paradigm shifts occur after accepted paradigmatic practices begin to produce anomalies, which lead first to sustained uncertainty, then crisis, and ultimately, under the

right circumstances, new understanding. New paradigms, which always encounter great resistance, generate questions and information that are either incomprehensible under the terms of the old paradigm, or require considerable translation.

Kuhn's 1962 book, *The Structure of Scientific Revolution*, was followed twelve years later by Philipp Frank's *Philosophy of Science*, which, according to Grof, illustrated that scientific theories are never derived from observable facts but from intuition—from imagination. To make his point, Grof also relies on Paul Feyerabend's *Against Method*, which he believes in 1978 demonstrated that scientific advance occurs only under conditions that violate the scientific method.

Grof then explores what he terms the Newtonian-Cartesian paradigm, predicated on the assumption of an objective three-dimensional universe made of solid atomic building blocks, which he believes has formed the basis for all physical, biological, and social sciences since the 18th century. While its mechanistic framework was the revolutionary force that drove modern science, he asserts, continued adherence to it in the face of new developments has proven an obstacle to advancement. He believes that revolutionary developments in physics—relativity theory, the uncertainty principle, and quantum theory—have drastically altered physicists' understanding of reality but not have yet been incorporated into other branches of science.

Though Newton and Descartes both held firm religious convictions and, in the case of Newton, mystical views, those who followed in their wake adopted an equally strong scientific materialism in which, according to Grof, in which "cosmic evolution was allegedly governed solely by blind mechanical forces" and "life originated...as a result of random chemical reactions" (20). As a result, biological materialists view

consciousness as a mere epiphenomenon of the central nervous system. Freud applied the Newtonian-Cartesian paradigm to individual consciousness and guided much of psychiatry toward the view that psychological development depends on external conditions that occur after birth. All approaches that stray from the mechanistic model risk the brand of "bad science." Especially relevant to hallucinogenic research, all nonordinary states of consciousness other than sleep and inebriation generally earn the classification of mental pathology or psychosis. It is difficult for this paradigm to conceive that hallucinogens could provide useful awareness or knowledge of anything other than insanity.

Based on the 3,000 LSD sessions that he conducted, along with the 2,000 records of sessions from colleagues, Grof writes, "I have concluded that the data from LSD research indicate an urgent need for a drastic revision of the existing paradigms for psychology, psychiatry, medicine, and possibly science in general. There is at present little doubt in my mind that our current understanding of the universe, or the nature of reality, and particularly of human beings, is superficial, incorrect, and incomplete" (31). Among his claims are that LSD states challenge dominant conceptions of time, space, and motion. They can break down the distinction between microcosm and macrocosm, between individual ego and cosmos, and enable temporary unions of consciousness with other individuals, animals, and even non-living things. They can also provide access to archetypal visions and images from the collective consciousness. Paranormal phenomena sometimes occur as a result of LSD states, he claims, including clairvoyance, telepathy, and out-of-body experience. LSD has also induced memories related to "events that

historically precede the origin of the solar system, of planet Earth, of living organisms, of the nervous system, and of Homo sapiens" (44).

Grof reports that he encountered all of the above experiences in research subjects and in himself with great doubt and shock, until he continued to hear it repeatedly from subjects who insisted on the realness, vividness, and great detail of their LSD-induced states. He argues that anyone trained with Newtonian-Cartesian expectations would likely register similar astonishment, but that in the light of twentieth-century physics these reports may not seem so incomprehensible or absurd. The theory of relativity and new atomic theory, he writes, "undermined all the basic concepts of Newtonian physics: the existence of absolute time and space, the solid material nature of the universe, the definition of physical forces, the strictly deterministic system of explanation, and the ideal of objective description of phenomena without including the observer" (53). He adds that the general theory of relativity has not yet been confirmed conclusively. Quantum theory also stands in sharp contrast to the Newtonian view, as at the atomic level "matter does not exist with certainty at definite places, but rather shows 'tendencies to exist,' and atomic events do not occur with certainty at definite times and in definite ways, but rather 'show tendencies to occur'" (55). These components of new physics can potentially lay the groundwork for understanding not only the nature of LSD-induced states, but perhaps provide a key for new interpretations of the human psyche. In fact, Grof offers the thesis that various developments are leading toward a "paradigm shift of enormous proportion, one that will change our concepts of reality and of human nature, bridge the gap between ancient wisdom and modern science, and reconcile the difference between Eastern spirituality and Western pragmatism" (16).

Karl Jansen (2001) echoes much of Grof's contentions about hallucinogens and the new physics, dwelling not on LSD but on ketamine which he argues in recent years has produced even stranger reports. He believes that quantum physics demonstrates that at the subatomic level matter exists simultaneously in the form of particles and waves—two distinctly different forms—dependent on the role of the observer. When not observed, subatomic units take the form of waves and under observation they become particles. Jansen takes this as evidence refuting both the Newtonian claim of a universe of solid matter with independently existing building blocks, and Cartesian dualism which maintains that the "soul resides in the pineal gland and all else about the human body is merely a robotic shell," (41). He reviews Michael Farraday's work on electromagnetic fields, Albert Einstein's gravitational fields, and Steven Hawking's expanding universe, all of which suggest "that the individual human being is connected to the cosmos in ways that most scientists, social scientists, and others are scarcely able to understand at this point" (148).

Jansen faults psychiatry, psychology, and neuroscience for failing to comprehend the extent to which the new physics challenges their most fundamental precepts and warrants a reevaluation of fundamental interconnectedness of mind, body, subject and object. In light of the new physics, he believes, the human ketamine experiences that he and others have observed—including non-local communication, the sense of traveling through time, and the sense of union with plants, animals, the earth, or the universe—can potentially be interpreted as making physical sense. In fact, ketamine research and the new physics may partly corroborate each other. He compares the established human sciences with the Catholic Church of the Middle Ages, which suppressed new scientific

theory and refused to look through Galileo's telescope. Because psychedelic drugs induce phenomena that so well fit the paradigm of quantum physics, Jansen argues that both are victims of a "house arrest" (144) that ultimately cannot last, due to the volume of data accumulating. At the same time, he urges a cautious approach and chides New Age spiritualists for presenting only the pleasant and supposedly constructive side of hallucinogens while suppressing the nightmarish side of them. He acknowledges that some of the most fringe theories of science "are in a very primitive stage and easy to misapply" (139).

Rick Strassman (2001) cautiously proposes that hallucinogen experiences might be applied to the most radical recent theories of physics. He mentions these only in passing, but in the spirit of Jamesian radical empiricism does not wish to foreclose on any possibility without at first considering it. Physicist David Deutch, for instance, has written of parallel universes in his 1997 book *The Fabric of Reality*. Strassman corresponded with him to ask whether he thought certain DMT phenomena might actually indicate contact with such universes. Deutsch responded that if DMT does "chang(e) the brains physical properties in such a way that quantum computing may occur at body temperature," then he "did not think glimpsing parallel universes would be particularly strange" (317). Another possible explanation for some of the DMT effects includes "dark matter," which comprises 95 percent of the mass of the universe but which cannot be seen. Its existence is known only as a result of its gravitational impact. Strassman speculates that one effect of DMT may be to alter brain chemistry in a way that enables a human being to see dark matter, which would account for why so many subjects report visualizing information about the universe. Likewise, Ralph Metzner

(1999) compares ayahuasca in a shamanic context to "growing edge theories of postmodern science," including chaos theory, nonlinear dynamics, Edward Wilson's "biophilia hypothesis" and Robert Sheldrake's theory of morphic resonance (281).

Masters and Houston (2000) adopt a different approach, generally avoiding discussions related to new theories in physics. Their methodology deserves some attention because they attempt what is highly unusual in a scientific context: a rigorous phenomenological assessment of a rigorous phenomenological assessment and classification of spiritual, religious, and mystical phenomena. It should be noted that their book, *The Varieties of Psychedelic Experience*, parallels William James's *Varieties of Religious Experience*. They insist that subjective accounts from LSD sessions do not suffice as satisfactory measures on their own, because they cannot be verified. Masters, an anthropologist, and Houston, a psychologist, place all reports of envisioned religious imagery without corresponding long-term beneficent behavioral changes in the category of "symbolic analogues." Their classification for genuine religious LSD experiences included only those that involve an integral encounter with "a Presence variously described as God, Spirit, Ground of Being, Mysterium, Noumenon, Essence, and Ultimate or Fundamental Reality" (266); a long-term transformation of the self; and a "process of phenomenological progression through the sensory recollective-analytic and symbolic levels before passing into the integral" (267).

Regarding this Presence, they write, "it should be clearly understood that we make no judgment as to whether confrontation or union with a literal God has occurred" (314), but only that such encounters meet their criteria for phenomenological authenticity. Transformation of the self includes changes in formerly destructive, or

unwanted, behavior patterns; positive behavioral changes towards work, family, and other people; and an altered sense of one's relationship to nature and to reality. Only a fraction of their 206 subjects met all three criteria. A much larger category experienced what Masters and Huston label "cosmological mysticism," which is not a genuine mysticism but a "way station along the Mystic Path" (303). It involves a sense of acquiring deep insight, including detailed and verifiably accurate knowledge about biological and physical processes.

They conclude that LSD provides access to previously inaccessible regions of the mind. They also affirm that LSD experiences can parallel mystical states as rigorously described by others who have not used hallucinogens. Nonetheless, they caution that most subjects who report religious symbolism are simply inflating common alterations in sensory perception, and few demonstrate long-term life adjustments. Feelings of religious experience while under the influence of hallucinogens lead to self-absorption. Even when the quality of the experience seems particularly deep, the drugs can prove to be mere distractions from actual religious experience if the subject pursues future drug experiences rather than religious or mystical commitments. Negative or less than transformative results, however, seem dependent on the mindset of the subject and the setting in which the session takes place and therefore would not seem to preclude the value of further research.

As mentioned above, Robert Masters continues to affirm Masters and Houston's initial claims of thirty-nine years ago that psychedelics may be the most potent tools for exploring human consciousness. According to science writer John Horgan (2003), who conducted an interview with her, Jean Houston now adopts a much more skeptical

approach. Drugs states can prove so alluring and so entertaining for some subjects that they elevate the drug condition above all other experiences. "'I haven't seen too much evidence,'" she told Horgan, "that psychedelics promote a healthy spirituality. 'Some might say it is a shortcut to reality. But the fact is, it doesn't seem to sustain that reality,'" (226).

SPIRITUALITY AND SCIENCE

We now turn to criticisms of the application of theoretical physics to corroborate religious experiences purportedly induced by hallucinogens. John Horgan conducted extensive interviews with many hallucinogen advocates and researchers who adopt a broad spectrum of approaches, as well as critics from a number of scientific disciplines. A former senior writer for *Scientific American* who has gone to write a series of books on the implications of modern science, Horgan describes himself as having a "skeptical, conservative perspective" (2003: 182). In *Rational Mysticism: Dispatches from the Border Between Science and Spirituality*, he applies his skepticism equally to all sides of the debate, largely reserving judgment. His "conservative" nature, however, did not prevent him from undertaking an ayahuasca session with well-known drug researchers Alexander and Ann Shulgin. On the other hand, perhaps such "radical empiricism," which requires direct personal experience prior to speaking with authority, constitutes the most conservative approach.

Horgan reports that at least some of the new fringe theories in physics, such as superstring theory and artificial intelligence, are "grossly oversold" (183). Theories relating to parallel universes, or multiverses, such as those Rick Strassman refers to briefly, "are little more than science fiction in mathematical form" (175) because they

cannot be tested. He notes that psychologist Susan Blackmore has demonstrated that the condition of sleep paralysis—the generation of dreams at the point of awakening—often generates visions similar to those of the type Strassman heard described by his subjects. Likewise, the neuroscientist Heinrich Kluver had written as early as the 1920s, after taking mescaline himself, that most common visual effects associated with psychedelics—"lattices, spirals, tunnels, and cobwebs," which Kluver labeled "form constants" (157)—can also be caused by migraines and oxygen deprivation. The mathematical biologist Jack Cowan has recently picked up on Kluver's research and proposed that hallucinogens affect neurons in the visual cortex and thus most hallucinations can be explained in neurophysiological—and decidedly unspiritual—terms. Horgan reports that Stanislav Grof has dismissed Blackmore's, Kluver's, and Cowan's explanations of hallucinogens as "ultramaterialist" (158).

Horgan also interviewed Franz Vollenweider, a psychiatrist at the University of Zurich Medical School who has published widely on hallucinogen research in scientific journals. Horgan attributes Vollenweider's success in getting his work published to the fact that he is "resolutely unpsychedelic" (151). Vollenweider has used PET scans to document the physiological specifics of various types of altered states. He does admit, however, that PET scans cannot track changes deep within the brain and therefore advises caution in interpreting results. He makes a practice of taking hallucinogenic drugs himself before giving them to research subjects, and admits that visions can "appear so real, superreal" (153). Unlike other skeptics, he does feel that hallucinogens could serve useful purposes in psychotherapy, but he rejects spiritual and transpersonal interpretations. "He had visions," Horgan writes, "in which he turned into animals,

including a fish swimming in the sea, and once felt as though he were reliving the evolution of life...During one trip, he had a heavenly experience in which he felt love and bliss suffusing himself and the entire universe" (154). Nonetheless, "with the cool eye of the scientist," in Horgan's words, Vollenweider dismissed these experiences as no more than anthropomorphism and wishful thinking. Horgan also records Vollenweider as judging that transpersonal psychiatrist Stanislav Grof is "trapped within his own metaphysical system" (168).

Some objections to spiritual interpretations of hallucinogen experiences come from a somewhat different perspective. For example, Horgan notes that the Nobel prize winning physicist Steven Weinberg has derided psychedelic advocates who believe that both hallucinogens and the new physics are revealing the existence of a divine plan. But it is interesting to note that Weinberg bases his sharply worded criticisms not on a particularly scientific basis but on his observation that the world is rife with suffering. Weinberg refers to cancer, Alzheimer's disease, and the Holocaust as evidence against any kind of loving force in the universe. In such a world, nature—or God—could not possibly care about the fate of human beings, and thus experiences of loving presences or demonic forces or some sort of divine universe reported by hallucinogen users could not be anything more than illusions. Along these lines, Horgan relays the saying of philosopher Steven Katz: "When we take a drug, we don't discover reality, we just discover a drug" (212).

It would seem that neither side of the hallucinogen debate can "prove" or "disprove" their claims in a scientifically conclusive way, even if individual researchers feel that they have done so. One side can always insist that spiritual or transpersonal

phenomena result from nothing more than shifts in brain chemistry, and are therefore more or less illusory. Even when clear associations between mystical states and brain chemistry can be demonstrated by scientific instruments, such as PET scans, the other side can always respond that any activity in the brain is the result of the spiritual experience rather than their cause. If many of the psychedelic researchers are more enthusiastic than they are scientific, Horgan seems to suggest that many of the avowed skeptics show the same ratio of enthusiasm to science for support of their claims. The biologist Richard Dawkins dismisses all religious claims, insisting that evolutionary science has settled the mysteries of life. Horgan responds that "life is as mysterious as ever, in spite of all the insights provided by evolutionary theory and more recent biological paradigms, such as genetics and molecular biology. Neither Darwinism nor any other scientific theory tells us why life appeared on earth in the first place" (219). Similarly, he chides the chemist Peter Atkins form claiming that science stands on the verge of fundamental knowledge of everything, and therefore will soon dispel all sense of mystery and awe. To this, Horgan counterposes sociobiologist Edward O. Wilson's comment: "Our sense of wonder grows exponentially: the greater the knowledge, the deeper the mystery" (221).

SHAMANISM, SPIRITUALITY AND THE CRITIQUE OF IMPERIALISM

Many researchers interested in the purported spiritual aspects of hallucinogenic drugs make the case that mind-altering substances have been an integral part of almost all cultures, but that modern industrial societies destroyed both the knowledge of such legacies as well as most associated practices. Modern science, a product of Protestant cultures that have always been suspicious of sensation, likewise ignored, discounted, or

remained ignorant of altered states of consciousness and hallucinogenic traditions. Thus, the surge in hallucinogen use in the twentieth century represents to them a return to a long-established human tradition. With the decline of European empires, more knowledge began to emerge of the role hallucinogens played in constructing religious symbolism. Likewise, these hallucinogen researchers see in the end of colonialism and the increase in global exchange of information a chance that the Euro-American sciences might also incorporate some of the knowledge that other societies and traditions had gained related to mind-altering plant substances.

Grinspoon and Bakalar (1997) have assembled anthropological evidence indicating that hallucinogens have been used in religious rituals for thousands of years, and were thought to provide encounters with spirits, gods, or divine nature. Shamans used them for what they considered to be soul travel, physical and mental healing, and spells. Grinspoon and Bakalar suggest that hallucinogens were analogous to medicines and shamans were comparable to physicians in pre-agricultural societies. They note that some researchers, including Terrance McKenna, have even provided extensive evidence that hallucinogens may have contributed to the establishment of many of aspects of the world's major existing religious systems. Transpersonal psychiatrist Roger Walsh (2002) refers to a study by anthropologist Erika Bourguignon who surveyed hundreds of traditional cultures and found that 90 percent of them used hallucinogenic substances in some form, and that all of them interpreted such usage in spiritual terms.

Grinspoon and Bakalar establish that amanita muscaria, a psychedelic mushroom, formed the basis of Siberian shamanic medicine. They refer to Gordon Wasson's work which hypothesizes that the same mushroom was probably the substance that the earliest

Hindu text, the *Rig-Veda*, refers to as "soma." They speculate that amanita muscaria may also have been the foundation on which the pre-Hellenic Greeks based the Eleusinian mystery rites involving the worship of the Demeter, the earth mother. Another possibility is that the forbidden "Tree of Knowledge" from the Judeo-Christian tradition may have been a reference to birch trees under which such mushrooms tend to grow.

Australian indigenous peoples used leaves called *pituri* for ritualistic purposes. The Chinese used datura for divination. The ancient Greeks used mandrake for magic and prophesy, and the Christian Bible mentions the same substance as a medicinal treatment. Early Europeans used belladonna, henbane, datura, and mandrake in various ritualistic ceremonies. These same substances were implicated in the persecution and execution of "witches" during the Middle Ages (Metzner, 1999). Ibogaine has been used in West and Central Africa in a variety of religious traditions, and today forms the sacramental basis for the Bwiti religion which combines both traditional and Catholic elements (Pinchbeck, 2002).

A great variety of hallucinogenic plant substances—at least ninety known varieties—grow in the western hemisphere, and Grinspoon and Bakalar (1997) document their usage in many Native American cultures during pre and post-Columbian times. Rituals involving belladonna, jimson weed, and datura date back to at least 100 B.C.E. Enormous statues of the amanita muscaria mushrooms dating to 8,000 B.C.E. have been found in present-day El Salvador and Guatemala. South American native cultures used datura in a drink called *natema,* and mescaline in a drink called *cimora* for encounters with the divine. The geographic region now known has Mexico has the largest number of hallucinogenic varieties, and pre-agricultural Mexican cultures used DMT, ayahuasca,

salvia divinorum, mescaline, and amanita muscaria widely. The Aztecs suppressed much of widespread hallucinogen use and reserved datura, mescaline, amanita muscaria, and morning glory seeds only for the elites. Aztec priests used datura for divination purposes, and mushrooms (known as *teonanacatl*) for the coronation of Montezuma in 1502.

The arrival of Spanish conquistadores and to the New World brought widespread suppression of all hallucinogenic rituals. Spanish missionaries condemned divination ceremonies as devilish and tried to eradicate all usage. They were largely successful, but the traditions remained in more remote rural areas. Various hallucinogenic religious traditions were best preserved in Oaxaca, among the Zapatec, Mazatec, and Mixtec Indian cultures. Villages in Oaxaca became pilgrimage sites in the 1960s for Americans interested in mushroom rituals. The northern Amazonian cultures also preserved hallucinogen-based traditions, mostly involving ayahuasca. The twentieth century would witness a revival of the tradition in a new form, the ayahuasca-based UDV church.

North American Indians of the Southwest and the plains used various hallucinogenic substances. The tradition of peyote use (mescaline) never died out, and became a basis for a pan-Native sacrament in the 19th and 20th centuries in the face of white suppression of Indian cultures. The Huichols in the Sierra Madra use peyote in desert rituals as a return to paradise, before humans and God became separate. The Native American Church, which now has 200,000 members, uses peyote for introspection, to promote brotherly love, and to infuse believers with the Holy Spirit (the church combines many Christian elements with traditional beliefs).

Ralph Metzner (1999) and others have proposed that western science can benefit from a more global perspective by sensitively learning from other cultures. Psychiatry and psychology, he proposes, might become true sciences of the mind rather than merely *western* sciences of the mind if they take note of knowledge traditions that have been heretofore unknown to them. He documents that this process has already begun in the form of western psychologists and others who have traveled to Brazil in large numbers to participate or to observe ayahuasca rituals. Charles Tart (2002) believes that western science has confined itself to exploring a very limited range of consciousness to its own detriment. Removing the Eurocentric blinders, he argues, may provide western scientists access to a far greater spectrum of knowledge. Metzner and others have cautioned, however, that exploration of other cultures must proceed with great sensitivity and reciprocity. He notes that so far the process of learning from South American societies has been a one-way transfer of knowledge benefits *to* the modern West. Indigenous cultures have shown great willingness to share their practices, but as the process of exploration has increased they have begun to express alarm that whites are once again taking without giving.

CONCLUSION

Bernard Barber, in *Science and the Social Order* (1952), reminds us that for any activity to qualify as a science, it must involve both rationality and empirical observation. Rationality, he writes, has existed in some form in all societies at all times, but only when rationality acquires discipline and empirical verification does it qualify as a science. Nonetheless, "empirical ends are defined differently from society to society" (10). Modern western society, Barber notes, has varied in its treatment of mental health, in

some cases defining it in terms of measurable and quantifiable variables and in some cases treating it more subjectively.

The above discussion demonstrates empirical verification in the human science can be a difficult process often involving judgment and belief more than straight-forward measurement. Though individual researchers may be convinced that they have conclusively demonstrated the existence or non-existence of certain phenomena, the social arena of science remains a contested terrain regarding spirituality, mental health, beneficence and harm, the relevance of subjective claims, appropriate tools for observation, and even how to interpret seemingly straightforward physiological data.

Transpersonal psychologists advocate and defend an integration of science with global spiritual tradition based on their convictions that such traditions represent an accumulation of social knowledge—some of it valid, some not so valid—of which western science has not availed itself. Western science, they suggest, contributed to a form of western cultural imperialism and then was imprisoned by it.[9] To be truly scientific, they claim, requires a more open encounter with indigenous, shamanic, and religious practices. To this end, hallucinogens bring the laboratory, medicine, and religion together in a particularly way.

Empirical verification of hallucinogen experiences, however, proves to be complicated by a number of factors. Does one take subjective reports as evidence of anything? If so, are they proof that chemical alterations in consciousness provoke psychotic states or pathological brain processes? Or do they represent, at least in some

[9] I do not wish to overstate the case they are making. Transpersonal psychologists routinely praise the contributions that western empirical science made not only to technology but also to debunking superstition, prejudice, and empirically demonstrable theoretical errors. They do not reject science, but call for new understandings in science.

cases, encounters with the deep unconscious, the spiritual ground, or God? It would seem that there is no adequate way to determine the relative validity of subject accounts. Conclusions of the researchers above—both the psychedelic advocates and their critics—seem to depend ultimately on feeling, conviction, and belief as much as on the evidence. One scientific approach calls for relying on physiological evidence to the exclusion of all subjective reports, but how much knowledge can science provide about human experience if it ignored subjectivity?

In any case, hallucinogens left a deep imprint on twentieth century American society and developments related to them continue to affect scientific thought. Conflict continues as to characterize discussions about their value, but the enormous resurgence on scientific writing about hallucinogens since the 1990s demonstrates the existence of a lively debate which shows no signs of weakening. If hallucinogens and Buddhism parted ways after the imposition of criminal penalties on hallucinogen use in 1966, Buddhism carved for itself a permanent position in American society. Meditation and yoga are virtually uncontroversial today, and many psychologists and psychiatrists trumpet them as advantageous to physical and mental health. Professional psychologists and psychiatrists, along with biologists, botanists, and chemists have been traveling to South America to study hallucinogen use among humans. The same process seems to be increasing in North America, but more clandestinely.

Ultimately, the state will determine much of the future of hallucinogen research. UCLA psychiatrist Charles Grob (2002) seems convinced that greater legal access to hallucinogens for researchers is inevitable. Others are not so sure. Roger Walsh has written that social prejudices dating from the media coverage of LSD use in the 1960s

continue to affect legislative considerations. Any proposal to allow LSD research to go forward will inevitably provoke the media to revisit all of the most alarmist claims made decades ago. Though Rick Strassman was granted permission to conduct a long-term DMT study, few researchers will dare to attempt the same with LSD.

Strassman (2001) calls for a scientific dialogue regarding all of the facets of hallucinogen research, particularly their potential spiritual value. Currently, there may be much debate but most of it takes the form of highly-charged polemics. The sociologist can only track the debate and whether and how it affects social institutions. As far as the spiritual connection to hallucinogens, perhaps the way to close is with this quote from science writer John Horgan (2003): "The perennial philosophy, postmodernism, negative theology, transpersonal psychology, neurotheology, gnosticism, and neo-shamanism all insist in their own ways that there is an irreducible mystery at the heart of things. So does science." (218).

CHAPTER SIX
PSYCHOLOGY: SCIENCE AND THE SELF IN THE MAINSTREAM

Previous chapters examined the relationship between science and spirituality largely from an inclusive standpoint, one which noted ways in which these two areas of inquiry overlapped or were integrated, as in transpersonal psychology itself. This chapter turns its attention to mainstream psychology, which largely eschews spiritual and religious topics. Chapter seven will likewise examine mainstream psychiatry. Under what terms did these two human sciences dispense with spiritual questions that were once in their purview as "sciences of the soul"? Do contemporary psychologists view themselves as relying exclusively on science to address questions about consciousness and behavior? Do psychologists approach science as a set of methods that they may use, or as a worldview that both delineates appropriate questions and prescribes techniques for investigating them? If psychologists regard religion as irrational, soft, superstitious, or primitive, to what extent do they believe that science has provided clarity, progress and thoroughness?

To understand how the discipline of psychology grapples with the questions of how to define science and how to apply science to the study of human beings, I undertook a thorough content analysis of the forty-three written contributions to *A Century of Psychology as Science* (1985, 1992). This volume (hereafter referred to as CPS for brevity) grew out of a symposium aimed at assessing the state of psychology in the one hundred years since it took on a fully scientific cast with the founding of Wilhelm Wundt's laboratory in Leipzig in 1879. It was republished with an update by the American Psychological Association (APA) to commemorate its own centennial in 1992.

The organizers invited forty "preeminent researchers in the field and in such related fields as biology, philosophy, and the humanities" (xiii) to reflect openly, critically and systematically on the multifarious aspects and implications of science as applied to psychology and how various positions and approaches emerged during the course of a century.

From this volume it is possible to construct a genealogy of how academic psychologists made choices over the course of an extended time period regarding which aspects of mental life and behavior to treat seriously and which to disregard (i.e., which to treat as "real" versus which to exclude as "not real"). Psychology, of course, is a field so vast in scope, so segmented and varied, that the editors of this volume, Sigmund Koch and David Leary, admit the impossibility of comprehensiveness. "All we can claim," they state, "is that a sufficient range of historically significant fields and interests were sifted through a sufficient diversity of authoritative sensibilities to provide a telling fix on the state of psychology on the threshold of its second century" (2).

In that spirit, I approach this volume not as a comprehensive representation of psychology but as one that is valuable because it includes articles representing the major systems of psychological thought (behaviorism, cognitive psychology, gestalt and psychoanalaysis); the major fields of psychology (sensory processes and perception; learning; motivation, emotion and value; cognition; development; personality and social psychology); and observations about the intersections of psychology with philosophy, mathematics, the neurosciences, evolutionary biology, linguistics, and aesthetics. It also includes a section reflecting on psychology and the public good, and finally a section that includes essays by non-psychologist humanists who reflect on the practices of

psychology as a science. The volume is also important because it is clearly not constructed as an apologia, or an attempt to give an official history of psychology as a science, but rather seems to offer a genuine window into the concerns of psychologists as they approach the historical and contemporary challenges of their discipline. Thus, the essays lean toward the critical side.

The question of the border between religion and science lies hidden in the chapters, as the authors almost never mention religious or spiritual issues explicitly. Transpersonal psychology is never referenced by name and none of its major proponents, save a few brief references to Abraham Maslow, are discussed. Thus, my content analysis proceeds in three steps. First, I examine how the contributors define psychology's object of study. Is it the "psyche," and if so does "psyche" refer to "mind" exclusively or does it carry any associations with its earlier meaning, "soul"? If most academic psychologists no longer find "psyche" a useful concept, what substitutes do they propose and why? What relative weight does the field give to objectively observable behavior as opposed to subjective entities such as consciousness, emotion, memory and repression, and what consequences for scientific knowledge result from such choices?

Second, I examine the ways in which the contributors define the term "science" and how they weigh the challenges in applying science to human psychology. Do psychologists consider science to be the *exclusive* arbiter of legitimate knowledge about the human mind, human behavior, or human nature? What limits do they observe for science and how do they integrate other forms of knowledge—philosophical, literary, artistic, theological—as they analyze and describe psychology? What *ends* do they view

as appropriate for the science of psychology? In other words, is a science of psychology meant to understand, to measure, to predict, to control, to alter, to improve, to foster growth, to relieve psychic pain, to heal?

Finally, I note the instances in which "spiritual" terminology occurs in the entries to this volume and consider the contexts in which the authors use it. Such terms include "soul," "spirit," "transcendence" and "God." These terms occur infrequently, but they are scattered throughout the volume. More subtle is the debate over "metaphysics," a term which is not without spiritual and religious implications. How do the psychologists in this volume define the relationship between science and metaphysics? What consequences result when psychologists view metaphysics as inseparable from psychology and what consequences result when they view metaphysical thought as distinct or illegitimate?

Throughout this content analysis, I avoid constructing one-dimensional portrayals of the field as "scientistic," or "positivist," or "empiricist." Howard Kendler's essay on behaviorism in CPS warns that many critics of behaviorism cite only the extreme views of John Watson or B.F. Skinner, despite the fact that most behaviorists have since rejected their atheoretical approaches and proposed more nuanced frameworks. Thus, I try to avoid building a caricature of any approach or of the prospect of a genuine, objective science of psychology. That said, many of the contributors to *A Century of Psychology as Science* offer criticisms that are as sharp and penetrating as any that the transpersonal psychologists have proffered. Sigmund Koch, the senior editor, questions virtually every precept that scientific psychology has generated in the past century and,

like the transpersonal psychologists, is particularly reproachful of the field for its exclusion of metaphysics.

WHAT IS PSYCHOLOGY?

The meaning of the term "psychology" is particularly puzzling due to misgivings in the field regarding the root word "psyche." Thus, there is considerable lack of clarity about the object of psychology. Sigmund Koch explains in his introduction to *A Century of Psychology and Science* that the term "psychology" acquired a single, stable meaning in 1879 after several centuries of ambiguity when Wilhelm Wundt established his laboratory at Leipzig University. "Henceforward," Koch writes, "the core meaning of 'psychology' would be dominated by the adjectives *scientific* and *experimental* . . . all prior meanings of the word were rendered contemptible or, at the very least, embarrassing" (8). This choice to limit psychology to the scientific and experimental carries a number of implications. One such unresolved question is whether psychology then claims to offer a comprehensive, and therefore exclusive, view of the self, or rather psychology is a study that is precise but limited.

What were the prior meanings that aroused such contempt or embarrassment? Koch quotes at length the French psychologist Theodule Armand Ribot, who wrote during the same year that Wundt founded the laboratory: "The old psychology is doomed...in the first place, it is possessed of the metaphysical spirit; it is the 'science of the soul'; internal observation, analysis, and reasoning are its favorite processes of investigation...we will see, more and more clearly, that psychology and metaphysics, formerly confounded under the same title, presuppose intellectual aptitudes that are opposite and exclusive" (14). Reasoning, analysis, internal observation, the articulation

of a relationship between "soul" and "psychology" and the pursuit of metaphysics merited dismissal as "old psychology," or as "feeble" in Ribot's words. So too would the "new" psychology scorn history as irrelevant, Koch writes, and as of no concern to a properly independent science. Koch criticizes psychology's antagonism to history as virtually "autistic" (16).

Koch observes the emergence of a "strange dialectic between 'old' and 'new' such that the psychology of each generation was seen as bearing the counter-scientific stigmata of the 'old' by the next generation—whose depraved deviations from scientific purity were dismissed as the 'old' psychology by the still next" (935). By the turn of the nineteenth century, psychologists would reinterpret human consciousness along functionalist and evolutionary lines, as no more and no less than an instrument of adaptation. From that consensus, Koch writes, "it was but a short step to Watsonian behaviorism (about 1912) in that the position can be defined as functionalism sans the methodologically inconvenient baggage of consciousness or mind" (25).

Koch argues that Wundt never intended to contribute to this "massive semantic change" that would divorce psychology from philosophy, history and metaphysics, and that he would have "perceived as grotesque and unacceptable (and, during his lifetime, did so perceive) many of the aspects of the reconception of psychology set in motion by the symbolism of its 'first' laboratory" (11). Wundt, and many of his contemporaries, felt that the controlled experimental methods of physics were appropriate for understanding basic human mental functions but that "higher mental functions" had to be understood on their own terms. According to Koch, Wundt first posited that psychology ought to occupy an immediate position between the natural sciences

(*Naturwissenchaften*) and the human sciences (*Geisteswissenschaften*), but later in life viewed it "unequivocally" as the foundation of the *Geisteswissenschaften*[10].

Nonetheless, the laboratory became such a powerful symbol that subsequent generations of psychologists viewed it as the exclusive site of legitimate psychological research. "The ancient tradition of ardent and disciplined speculation about man's nature and conduct," Koch elaborates, would be swept aside as no more than "armchair psychology" and "the vast reservoirs of psychological knowledge embedded in the history of the humanities, in literature, even within the categories of natural language and the sensibilities of language users...were transported beyond the pale" (8). In forging this new identity for psychology, Wundt was both following the general intellectual shift of western culture and contributing to the future trajectory of the culture of science.

Koch notes with irony that psychology pronounced its strong allegiance to Newtonian principles just as doubt was growing in the natural sciences abut the Newtonian world view. "It might be added," he writes, "that if psychology at any point after 1905 had sought methodological guidance from the lessons of relativity physics, rather than preserving its simplistic Newtonian mold, it might have developed in a very different direction over most of the present century" (19). He shares this criticism of mainstream psychology with many of the transpersonal psychologists. He does not elaborate about what might have been learned from relativity physics, but as noted in chapter three in this dissertation many transpersonalists have placed quantum mechanics and relativity physics at the heart of their critique.

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[10] No exact English definition exists for *Geisteswissenschaften*. The term can be loosely translated as "moral sciences," "cultural sciences," or "social sciences." The root word, *Geist*, of course means "ghost" or "spirit," and the term can be generally understood as the knowledge or study of human mental creations such as culture, art, religion, and law.

PSYCHOLOGY AND THE ELEMENTS OF SCIENCE

Before turning to a broad content analysis of the submissions to the volume, I turn to one chapter in particular which highlights the genealogy of "scientific psychology," and the consequences that various scientific traditions have had for defining the object matter of psychology. Gregory Kimble's essay on "Conditioning and Learning" opens by "setting the methodological stage" for how scientists have grappled with establishing a means for scientifically identifying and analyzing aspects of human psychology. "By the end of the nineteenth century," he writes, "dominant decisions had been made about human nature and how to know it" (284). Those decisions included specifying a framework for understanding psychological processes that involved four "isms," in Kimble's words: empiricism, elementism, associationism, and materialism.

Kimble defines empiricism as the claim that science must base itself on observation alone. Empiricism actively excludes other possibilities, such as allowing that intuition may be a means for gaining knowledge. Elementism holds that mental life must consist of smallest identifiable elements. Guided by this principle, turn of the century psychologists sought to establish a "periodic table" of psychological elements. Associationism led psychologists to attempt to establish laws of association among the elements, including laws to establish the impact of contiguous experience, similarity or contrast of elements, and frequency of occurrence. Kimble explains that while the field gradually dropped the usage of the term "law," the "conceptions have survived and appear in discussions of learning and memory today" (285). Biological materialism influenced psychologists to look for physical causes of psychological processes, and the early 19th century discovery of the segregation of sensory and motor functions in the

spinal cord provided strong impetus for the psychologists to stress the stimulus-response form of associationism. The growing influence of Darwin's theory of evolution would lead to a further development of materialism in psychology—the practice of viewing all mental processes in terms of adaptation and species survival.

After examining the early influences that led to the construction of scientific psychology, Kimble turns his attention to developments in the twentieth century U.S. and the influence of structuralism and functionalism. At the beginning of the twentieth century, it was still possible to be an empiricist and to view the mind as the subject matter of psychology and introspection as a preferred method. Edward Titchener, for instance, advocated introspection as a way to analyze consciousness so as to identify its basic contents. Titchener believed that the elements of consciousness were the basic structures of mind, and therefore is associated with the structuralist tradition of American psychology. William James, among others, critiqued the structuralist position as untenable, for consciousness flows like a stream; to attempt to stop it, to introspect upon an individual element of it, is to inspect what does not exist—a moment of consciousness distinct from the broader stream. But in contrast to James's intent, his critiques would add currency to the rise of psychological functionalism, which would view human mental activity as a function of adaptation and survival and as having no importance in its own right. It was functionalism, Kimble explains, that "laid the foundation for a new view of psychology which took *behavior* rather than the mind to be the basic subject matter of the field" (290).

This foundation set the stage for the arrival of Watsonian and Skinnerian behaviorism, which would dominate much of the field during the mid-twentieth century.

John Watson set out to eliminate from psychological study all concepts with any appearance of subjectivity. Watson, writes Kimble, "created [an] unpsychological psychology by reducing the basic subject matter to stimuli and responses defined in a very narrow way. Stimuli were such things as rays of light of different wave lengths, sound waves of different amplitude, length, phase and combinations, and gaseous particles of such small diameters that they affect the membrane of the nose. Responses were such things as muscle contractions and glandular secretions" (295). Subsequently, B.F. Skinner conducted experimental work primarily with rats, but insisted that psychologists should have no difficulty in drawing conclusions about human behavior by observing the responses of rats to induced stimuli. In one of his well-known books, *Beyond Freedom and Dignity*, Skinner "took the position that everything we do and everything we are is controlled by our history of rewards and punishments. Even what we say we do 'on purpose' or 'through an act of personal will' is actually an expression of what we have been rewarded or punished for doing or not doing in the past" (311).

Kimble judges that strict operationism—the proposal that every scientific term must be identified with a testing operation that establishes its viability—dominated psychology from about 1940 to 1960. The constructive role it played was to provide psychology with the objectivism that it badly lacked during its earlier history. Nonetheless, Kimble's tone is one of measured but occasionally harsh criticism of elementism, associationism, structuralism, functionalism and certainly of Watsonian behaviorism. It is notable that in his concluding paragraph he judges that "by 1980 or so, one of psychology's major accomplishments had been a liberalization of operationism so that such topics as consciousness, imagery, and even volition had become acceptable

subjects for study" (318). During the mid-twentieth century "it would have cost a career to publish on mind, consciousness, volition, or even imagery" (316).

Kimble's account of a century of scientific psychology bears reiterating in the context of the barrier between science and religion and of transpersonal psychology. Robert Bellah suggests that the sciences continuously construct and reconstruct their borders with religion, even if only implicitly. Kimble's genealogy sheds some light on how psychology has sought to reinforce this border in decisions it made about how to study human nature. Like chemistry it sought to isolate the smallest elements of mental life and to construct laws which would explain how these elements associate with each other—until mental life would itself become too subjective, too unscientific a term to be accepted by many psychologists. Like biology it sought to locate the material, organic processes that would explain behavior, and to understand most behaviors in the context of adaptation and survival. A world without subjectivity, without consciousness, devoid of mind, where only the smallest units are worthy of examination, where only testable concepts are legitimate, where stimuli and response give the full account of human nature is indeed a world barred from most religious or spiritual thinking. But what kind of world does this approach actually study or illustrate? Does it produce an account of human behavior or human nature substantially more "real," or more accurate, more truthful than any account which would grant some validity to spiritual knowledge? If scientific psychology has now "liberalized" such that a psychologist can discuss "mind" without ruining his or her career, how has the narrative of human psychology changed?

PSYCHOLOGY: A SCIENCE OF...?

If psychology acquired a stable identity—that it is scientific and experimental—with the founding of Wundt's laboratory in 1879, the ambiguity of the prefix "psyche" has never been resolved. In his essay on the possibility of psychology as a coherent discipline, the psychologist and phenomenologist Amadeo Giorgio[11] notes that psychologists largely abandoned the psyche as a suitable object of study because they could derive no satisfactory understanding of how to perceive the psyche as an entity or reach agreement about how to conceive of its boundaries. The decision to abandon the psyche, he elaborates, left consciousness, experience and behavior as three possible objects of analysis, all of which have found defenders and detractors in the field (48). Beyond the semantic issue of psychology lies considerable division about whether psychology is a biological or social science. "Those opposite approaches," writes George A. Miller, who is credited as one of the founders of cognitive psychology, "create a tension that has persistently frustrated scholars who try to define psychology as a unified discipline. When some biotropic advance occurs, it is seen as either trivial or irrelevant to the sociotropic enterprise; when some sociotropic advance occurs, biotropes can accept it only as description, not as explanation" (41). Psychologists also face the question as to whether to treat human consciousness and behavior as qualitatively distinct from that of other animals.

Koch and Leary open the first major section of *A Century of Psychology as Science* with a selection of four essays devoted to delineating the constitutive problem of psychology. The first two authors, George Miller and Amadeo Giorgi, are the most sanguine about the field's scientific status, while the remaining two scholars, Daniel

[11] Chapter 2, "Toward the Articulation of Psychology as a Coherent Discipline."

Robinson and Sigmund Koch (one of the co-editors), take far more critical and pessimistic positions.

Ironically, Miller bases his optimism—a wistful optimism—about psychology on faith that the field will one day experience a breakthrough discovery: "Obviously, no standard method or technique integrates the field. Nor does there seem to be any fundamental scientific principle comparable to Newton's laws of motion or Darwin's theory of evolution. There is not even any universally accepted criterion of explanation. What is the binding force? When reason fails, one resorts to faith . . . I believe that the common denominator is a faith that somehow, someday, someone will create a science of immediate experience" (42). Such faith is warranted, he explains, because "of the stubborn fact of consciousness itself," which he argues is a "natural phenomenon," the study of which complements and could encompass all aspects of psychology from the unconscious, to behavioral processes, to social patterns.

"I was educated to believe that psychology is a biological science," Miller reports (40), but he nonetheless sees consciousness as the central province of psychology, the factor that distinguishes psychology from biology. Miller then offers an account of what a true science of consciousness would look like. One possible goal would be to be able to construct an explanation of consciousness that is so exact that it could be relayed in a way that a "nonhuman, nonconscious intelligence" could fully comprehend it. "I suspect we would have to develop some formal notation with precise and unambiguous definitions of all but a handful of primitive terms, something much like the notations in which scientific theories are expressed" (43). He concludes, "Much of what is best in psychology already contributes to such an explanation, but it is obvious how far we still have to go before we

will have constructed such a science" (44). For a sociologist, what is most interesting about this goal is not whether such an exact formula is possible but to note the target goal that Miller believes would be the best possible outcome for psychology. What would such a precise formula be able to tell us—rather than a nonhuman other—about consciousness?

Amadeo Giorgi concedes that psychology continues to search in vain for its precise subject matter, but he remains guardedly optimistic that such a unified subject matter—and therefore the possibility of a genuine science of psychology—exists. He opens his essay by comparing two commentaries on the scientific status of the discipline, one written in 1879 and one in 1979, both of which argue that psychology *should* struggle to establish itself as a natural science and conclude that it had so far failed to do so. Despite the lack of progress over the course of a century, Giorgi finds inspiration from the definition of science supplied by the author of the 1879 article, G.H. Lewes. "A genuine science," Giorgi writes, paraphrasing Lewes, "can circumscribe a class of phenomena, articulate the object of its study, and specify a method of search based upon the characteristics of the object" (48).

He notes that the psyche has been abandoned as a fit "object of study" because psychologists arrived at the conclusion that they could derive no satisfactory understanding of how to "perceive" the psyche. The absence of psyche as a viable term left consciousness, experience and behavior as three possible objects of study—all of which Giorgio notes predate both natural sciences and philosophy and therefore are not apt to be interpreted as things (as in the natural sciences) or in terms of ideas (as in philosophy). Therefore, psychology must take on the task of understanding the *essence*

of both behavior and experience—a task that he acknowledges remains unresolved. But he proposes the concept of "expressivity" to encompass all three aspects of psychological inquiry—consciousness, behavior and experience. The study of expressivity, he believes, would be sufficiently narrow and yet fully encompassing of human psychological phenomena to provide a scientific basis for study. Expressivity entails, in his words, "the coherent subjective patterning of an objective situation by an individual person or organism" (56).

Daniel Robinson takes far harsher stock of psychology's relationship to science. He notes that by the early twentieth century "great and grave doubts" (60) about whether a science of psychology was possible gave way to great confidence. But unlike other historic shifts in scientific thinking—such as those heralded by Galileo's physics or Mendelian genetics—such confidence did not result from a major discovery. "What has happened," Robinson judges, "is that psychologists have jettisoned the very problems and issues that had traditionally excluded psychology from the pantheon of sciences, while at the same time embracing a different class of problems suited to the methods of the developed sciences" (62).

Like Miller, Robinson charges that modern scientific psychology misinterpreted a number of its principle architects. Scientific psychologists took the lead of Ernest Mach, for instance, who sought to "rid science once and for all of every trace of 'metaphysics'" (65). Mach argued that the proper objective of science is observation, and that scientific theory should not attempt to do more than provide a systematic description of what has been observed. Mach assumed also that physics and psychology differed only insofar as the former involves direct observation of the external, material world while the latter

measures sensations. "The positivism defended by Mach and his disciples was one that took the facts of nature as revealed by observation and then legislated the manner in which science was to deal with them," Robinson writes. "This, however, is quite different from a program or orientation that embraces a particular philosophy of science as a way of avoiding or denying or depreciating any class of facts inaccessible to a chosen method of observation. For Mach especially, any program or orientation that would thus ignore the facts of *mental* life—including thought, feeling, and volition—must be taken as preposterous on its face" (67). Such disregard is precisely what Robinson insists psychology engaged in systematically, in the name of constructing a rigorous science.

Robinson insists also that psychology's desire to express analyses of human behavior in scientific terms—as narrowly physiological processes—explains little and leads to substantial problems. In many instances, he argues, "psychology" and "science" are antonyms. The more that the field seeks to describe the causes of human behavior in terms of "neuronal discharge," the more that it ignores the actual causes of behaviors that are unique to individuals. A biochemical explanation for why an individual decides to befriend someone, for instance, may sound more scientific than explanations that take account of an individual's reason and volition; to the extent that scientific psychology appeals to the former and excludes the latter, the less it can be said to deal with actual psychology. But of even greater injury to the field, in Robinson's judgment, is the tendency to explain behavior in Darwinist terms. "In reifying the notions of *function* and *adaptation*, the discipline has been incapable of addressing phenomena that do not lend

themselves to functionalistic and survivalistic narrative. On these and similar construals, the organism (or person) is part of a herd, itself driven by a single impulse" (70).

Only once in his chapter does Robinson assess that psychology has made concrete progress since the founding of Wundt's laboratory. He judges that it has indeed "added an immense amount to the world's store of factual knowledge," (72) when it has confined itself to empirical classification of behavior. But when it has sought to explain rather than merely classify, Robinson believes it faced two choices: to constrict itself to scientific concepts and therefore fail to devise truly psychological explanations, or risk "tried and true nonscientific methods" that the field dismisses as "armchair" or "folk" psychology and in so doing return to the possibility of genuine psychological explanation. His final words: "In evading the very phenomena that so engage the attention of real people, modern psychology renders itself irrelevant in the most damaging sense of the term and fails in the historic mission facing all serious scholarship—the correction of common errors and the elimination of common prejudice" (74).

Sigmund Koch's contribution, "The Nature and Limits of Psychological Knowledge" offers the harshest assessment of psychology's first scientific century. He writes that psychology presents itself as an "independent" discipline, but the field contradicts this claim of independence by turning to the authority of the natural sciences for "every definition of a 'proper' subject matter, every procedural and metatheoretical proposal, every substantive conceptual net" (75-76). Such non-independence, he judges, has resulted in distortions of psychological knowledge so wide and so deep that he labels them "epistopathies" and, tongue in cheek, urges the field—and all of the social

sciences—to undergo an "epistopathectomy." The most egregious epistemological problems result when the social science of psychology asserts its ability to solve all mysteries through scientific means, and in so doing ends up "fixing upon totally fictional domains as its objects of study (i.e., on arbitrary and schematic models of the person, or even the organism, rather than on the actual entities)" (89). A second, deeply-rooted epistemological tendency is to accord the rules of methodological investigation a worth higher than the process of discovery itself, and to regard the object of investigation as nearly irrelevant.

Whereas Kant wrote that there is a class of meaningful questions that humans must ask but cannot answer, Koch writes wryly, "the twentieth century has been far wiser than Kant" (88) and thinking itself so has dismissed unanswerable questions altogether. Likewise has it rejected the warnings of Bertrand Russell, whom Koch quotes as writing, "'Science tells us what we can know, but what we can know is little, and if we forget how much we cannot know we become insensitive to many things of very great importance" (84). In fact, Koch writes that the ambiguous, the mysterious, the anomalous aspects of human life far outweigh that which can be satisfactorily categorized and measured by science. What is required is not greater methodological sophistication but honesty and humility. "Psychology," he concludes, "has been flagrantly and vulgarly oversold. It will find its dignity only to the extent that it retracts the feckless promises, pseudoconceptualizations, and corrupt technologies it has flung out upon the world, and succeeds in reestablishing authentic continuity with the Western scholarly tradition" (95).

It would seem as if Koch is himself quite ambivalent about some of the religious implications of the questions associated with Kant, or with the spiritual aspects of the

terms he does raise: such as eternity, destiny, purpose and origin. He chides twentieth century psychology for avoiding the questions that have been most meaningful to human beings, but appears to tread very delicately around drawing certain connections. In one passage, he notes that psychology has never been independent of philosophy: "Most of our ideas have come from the twenty-six centuries of philosophy preceding the birth of our partition myth and, of course, to some extent, from physics, mathematics, various biological sciences, medicine, the social studies, the nonphilosophical humanities and, yes, millennia of ordinary human experience" (90). This passage either deliberately or unconsciously omits theology, religious practice, and spiritual texts unless one assumes that they are component parts of "philosophy" or "ordinary human experience." On the other hand, he does grant that one of Kant's questions that humans must confront but cannot answer involves the existence of God. He also points out that Kant sought to "demonstrate the inadequacy of *dogmatic* metaphysics and theology" (83), as if to suggest that nondogmatic versions of such pursuits were never meant to be ruled out.

This section on the constitutive problematics of psychology suggests that much remains unsolved about even the most basic properties of the field. What is psychology able to tell us, after more than a century of scientific pursuit, about what it means to be human? More narrowly, what does it mean that human beings have a "psychology?" George Miller believes that the constitutive problem of psychology is consciousness, in contrast to the behaviorists who dominated much of the twentieth century. But he is only able to advise us that he has faith that one day someone, somehow will deduce a means to study consciousness—which he defines as immediate experience—exactly and scientifically. Amadeo Giorgi also notes the difficulties in determining the object of

psychological study. Is it conscious experience or externally observable behavior? Is psychology mental activity or materially constituted? The boundaries are porous, but he offers the concept of "expressivity"—the coherent subjective patterning of an objective situation by an individual person or organism—as a way of resolving them. Giorgi's solution may resolve some of the subject/object problems the field encounters, but it seemingly cannot broach what Koch describes as the unanswerable questions that must be as "the very phenomena that so engage the attention of real people" (74).

Thus, on the constitutive problem of psychology, it is simultaneously apparent yet difficult to grasp why transpersonal psychology would be viewed as marginal—invisible perhaps—to mainstream psychology. That is, transpersonal psychology in its broadest definition—a psychology that includes questions related to human origin, meaning, purpose, or the ultimate source of consciousness—could clearly not expect to find legitimacy in a scientific climate that, if Kimble is correct, would not until recently permit its researchers to acknowledge a concept such as "mind." On the other hand, from the four selections in this section it is difficult to discern what results scientific psychology has produced that would render other forms of psychological thinking irrelevant or definitively inadequate.

DOMINANT TWENTIETH-CENTURY SYSTEMS OF PSYCHOLOGY

Koch and Leary include four chapters in their discussion of the "dominant systems" of psychology, one on gestalt psychology, one on behaviorism, and two on psychoanalysis. It is not clear that the selection of these chapters is meant to imply a representative sample of the relative importance of various psychological systems of thought. In fact, the content of the rest of the volume would seem to imply that

behaviorism and cognitive psychology rank by far as dominant trends in psychological thought in the twentieth century, with Gestalt in the background and psychoanalysis as important primarily in extra-academic contexts. In fact, Freudian psychoanalysis receives virtually no mention outside of the two chapters included in this section. Nonetheless, what is offered here is incisive historical perspective as to how these systems of psychological thought sought to parse out their subject matters and approaches.

Gestalt Psychology

Mary Henle titles her chapter "Rediscovering Gestalt Psychology," and explains that many commentators assume that Gestalt passed its peak of influence in the mid-twentieth century. In many cases, "if [contemporary organization theorists or interaction theorists] mention Gestalt psychology at all, it is usually as an antique precursor, often incorrectly described" (106). But despite premature proclamations of the death of Gestalt, Henle believes that psychology in general still has much to learn from this area of inquiry. "Gestalt psychology," she states, "arose as a protest against a scientific world that had no room for problems of meaning and value, thus no room for the most urgent problems of human beings" (101). Specifically, the Gestalt psychologists disagreed with the prevailing behaviorist assumption that in human perception, every local stimulation corresponded to a local sensation—a proposition known as the "constancy hypothesis." Henle quotes Wolfgang Köhler, one of Gestalt's early proponents, as exclaiming that such a position gave rise to "hypotheses so bizarre...that they would never have occurred to anybody if they had not been considered necessary to support the constancy hypothesis" (101).

Henle explains that Gestalt rejects the dominant psychological mode of analysis whereby perception is "arbitrarily broken down" into elementary units of sensation. Instead, Gestalt psychologists purport to study phenomenological objects, or natural units, as human experience perceives them.

Henle then directs her attention to other efforts to overcome the atomistic approach. Cognitive psychologists, for instance, have done so through models which understand the human consciousness through the use of computer models. Henle partially credits the computer model as a major advance over atomism, noting that with computer models the cognitive psychologists "no longer think in terms of bits of information, but rather in terms of chunks of propositions, and other larger units" (116). Nonetheless, computer models lack both the dynamism of evolution and the weight of hereditary evidence. It is gestalt's emphasis on context and phenomenological meaning that Henle believes will enable the cognitive psychologists to "discard machine theory" (including computer models), and to look instead to the dynamics of cognitive processes.

Behaviorism

"Anyone who abides by the behavioristic traditions," Howard Kendler appraises, "tends to avoid getting enmeshed in fuzzy, and sometimes corrupted, issues" (131). Kendler does not necessarily dismiss the relevance of such "fuzzy" issues as "self-fulfillment" to human beings, but argues that "it is not the task of psychologists to tell society which human potentialities are desirable and which are not" (131). Where religions offer "an *image of man*, usually justified by a Supreme Being," he argues, "psychologists should resist the temptation to believe that their professional competence

qualifies them to occupy such a position" (132). Neither should psychologists purport to offer discernments about moral principles.

Though Kendler acknowledges the difficulty of clearly demarcating science from nonscience, he regards the distinction as both useful and important. One line of demarcation lies in the difference between scientific and nonscientific understanding. Arts, humanities, religion and literature all provide some type of understanding, but the scientific use of deductive logic makes it stand out from all other types of understanding. Science proceeds through the process of deduction, the understanding that a "system of propositions that are logically organized and *are coordinated to empirical events* [emphasis added] in such that legitimate deductions, predictions, or postdictions about phenomena can be made" (127). Moreoever, behaviorism has also commonly held that "one understands an event when one discovers the factors that control its occurrence" (127). It is possible to read Kendler's message as suggesting that deductive science generates a particular type of knowledge which in principle need not eliminate or diminish the other forms of knowledge. But with Robert Bellah's observations about higher education and barriers to certain types of knowledge, the relevant question is whether such limitations are observed in practice. In other words, what level of import is accorded to deductive science and what level to art, religion and humanities?

Psychoanalysis

Saul Rosenzweig contributes one of two chapters exploring the impact of psychoanalysis on scientific psychology. Most other chapters omit references to psychoanalysis, but Rosenzweig is given by far the greatest amount of space in the volume—his chapter is about three times longer than most others—for his detailed

reconstruction of Freud's understanding of science. In the 1930s, Rosenzweig had engaged in personal correspondence with Freud, and later attempted a series of experimental tests to validate Freud's theory of repression. In subsequent decades Rosenzweig devoted much of his career to defending the experimental validity of several of Freud's claims, critiquing the sources of Freud's errors in judgment, and finally to proposing "idiodynamics" as a psychological paradigm that corrects many of the shortcomings of psychoanalysis.

In contrast to Elio Frattaroli, a psychiatrist who defends Freudian psychoanalysis as a genuine science while simultaneously describing Freud's central interest as the "soul" in *Healing the Soul in the Age of the Brain* (see Chapter seven), Rosenzweig never uses that term. He does, however, offer the judgment that "The single, most remarkable mystery of life, attested to by competent biologists, is the fact that every human individual (indeed every animal organism) constitutes a unique and unreplicated unit. The particular combination of genes and ontogenetic experience is never repeated in nature" (189). Some might describe this as the very meaning of the word "soul," and propose that this uniqueness more than any other factor complicates the attempt to apply scientific methods or principles to human psychology. In place of the soul, Rosensweig offers the "idioverse," and as a means of accessing the idioverse he offers "idiodynamics."

On the application of science to unique and unrepeatable human being, Rosenzweig takes his cue from the well-known geneticist Theodosius Dobzhansky, who simultaneously challenged his own field's tendency to look for genetic "types" and criticized the tendency of others to argue that insights regarding human uniqueness can

be found in art, literature and empathy but not in science. Just as Dobzhansky chided geneticists' search for genetic types for obscuring human uniqueness, Rosenzweig charges that even those psychologists, such as Gordon Allport, who were sensitive to unique human developments dwelt on the search for types. The science of idiodynamics, Rosenzweig believes, is capable of explaining how events—"direct psychological experiences"—that occurred through the course of a person's lifespan lead to behaviors that distinguish one individual from all others.

Rosenzweig proposes that the emergence of idiodynamics is part of the evolution of psychology from the physiological emphasis of experimental psychology, with its search for universal laws; to Freudian psychodynamics, which centered on the individual and experiential rather than the physiological and nomothetic; to the experimental approach of idiodynamics which places the stress in research on the interaction between an individual and experimenter. It is the dynamics between experimenter and "experimentee" (his term) that allows scientists to uncover the idioverse. Rosenzweig argues that Freud's early (pre-1911) approach to psychoanalysis involved an implicit idiodynamics, as his psychodynamic system was "based on the life experience of the individual" (145). But the "opportunity for psychoanalytic method to become more fully idiodynamic was temporarily lost" (162) when Freud opted to search for universal symbols of human psychodynamics under the corrupting influence of his one-time disciplines, Carl Jung and Wilhelm Stekel[12].

[12]Rosenzweig notes that Freud's approach to science underwent an evolution and that he held often contradictory views on what role it should play in psychoanalysis. He reports that Freud's scientific education began during the six years he attended Ernst Brücke's institute at the University of Vienna where he encountered the ideas of Hermann Helmholtz and Gustav Fechner. Those six years, from 1876 to 1882, overlap with the founding of Wundt's laboratory in 1879. Brücke was a physiologist and Helmholtz and Fechner were professors of physics and "indispensable pioneers of experimental psychology as exact science" (137). Brücke sought to develop for physiology the same level of precision as physics;

Psychoanalysis and Behavior Theory

Robert Sears was one of a group of several psychologists—which included Saul Rosenzweig—who began trying to verify psychoanalytic theory with experimental methods during the mid-twentieth century. Sears reports that this group of psychologists was skeptical of the claims of the analysts who claimed to have replicated certain observations regarding sexual development, dream interpretation, and defense mechanisms, so they established test mechanisms and other "so-called 'objective' methods" (212, emphasis in original).

Sears notes that testing psychoanalytic premises using behaviorist methods ultimately left no effect on psychoanalysis but fundamentally changed behaviorism. The psychoanalysts, he reports, merely retreated into isolation and refused to absorb any

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Helmholtz's orientation in psychology was toward "mechanistic physicalism"; and Fechner developed "psychophysics as a mathematical-experimental solution of the mind-body dichotomy" (132). Though Freud was surrounded during these years by scientists who advocated modeling experimental psychology on physics, and his earliest papers were strongly based on drawing psychological inferences from studies of animal physiology, Freud gradually shifted his focus to self-analysis as a result of his brother's death.

After leaving Brücke's institute in 1882, Freud virtually never again engaged in experimental research himself, although, according to Rosenzweig, his early formulation of psychoanalysis followed experimental principles. He worked systematically at developing experimental methods to study psychoanalytic concepts. The difference between Freud and the other experimental psychologists of his time, according to Rosenzweig, was that he did not "[cling] to the physiological infrastructure" of psychology (146). He began to favor endopsychic experience over the prevailing attempt to "correlate psychological experience with physiology and neurology" (144).

Freud also contradicted himself regarding his status as a scientist. Rosenzweig quotes Freud in defense of psychoanalysis: "Only quite recently the physicians at an American university refused to allow that psychoanalysis was a science, on the ground that it admits of no experimental proof. They might have raised the same objection against astronomy; experimentation with the heavenly bodies is after all exceedingly difficult" (162). On the other hand, Freud wrote to Wilhelm Fliess in 1900 that "you habitually overestimate me...For I am actually not at all a man of science, not an observer, not an experimentalist, not a thinker. I am by temperament nothing but a conquistador, an adventurer" (176). He repeated the same sentiment to Marie Bonaparte in 1937.

"The reading of Freud's writing," Rosenzweig states at the outset of his chapter, "demands a special orientation that few psychologists or psychiatrists require. Freud was primarily a writer, not unlike Goethe the scientist; an artist, not unlike Leonardo da Vinci the engineer. His thought as scientist, teacher, philosopher, and even novelist went into literary production as he experienced it at the time" (136). Nonetheless, Rosenzweig holds forth the hope the psychoanalysis can form the basis for a truly experimental, confirmable science of idiodynamics. Note that Rosenzweig's article does not mention therapy or treatment. It seems instead to imply that the science of idiodynamics is to understand, to explore the idioverse, whereas Sears dwells more on individuals who have been hospitalized and his emphasis is on on curing patients with identifiable maladies.

critiques or premises for revision raised by the process. But behaviorism ultimately, if initially unintentionally, learned much from psychoanalytic interest in "toilet training, dependency, aggression, sex, adult role, and conscience" (217).

Transpersonal psychologists might point out what aspects of the human being are still missing from these new perspectives that behaviorism absorbed from psychoanalysis—such as the consideration of love, empathy, transformation and the prospect of higher states of unitive consciousness. But Sears laments that even those few psychoanalytic concepts introduced to psychology were wiped out by the "cognitive revolution" in psychology and anthropology.

THE SPECIAL FIELDS OF PSYCHOLOGY (SENSORY PROCESSES, LEARNING, MOTIVATION, COGNITION, DEVELOPMENT, PERSONALITY, SOCIAL PSYCHOLOGY)

This section in the volume is notable here for the perspective it provides on the construction of a scientific-psychological view of aspects of the human being over the course of the twentieth century. It also demonstrates the difficulty that psychologists faced when on attempting to identify processes—such as sense perception, learning and cognition—as discrete from other aspects of the self. It does reveal a certain amount of frustration among some psychologists that decades of industrious work in the discipline produced minimal results, while others denote areas of progress.

Sense Perception

James Gibson states that experimental psychology of sense perception set out over a century ago to inventory basic sensations and to understand the processes that the basic sensations combine to generate perception. "[T]he task," he judges, "was

misconceived from the outset" (226). Because psychologists were so motivated to authenticate themselves as scientists, who measure and quantify, Gibson argues, psychologists treated perceptions as discrete rather than as parts of systems. The very technique of measuring one aspect of the system in isolation from the rest simply impairs the entire system and prevents it from operating normally. "*Has anything been accomplished?,*" he asks (emphasis in original), and concludes, "In a hundred years psychologists have found out a great deal about input thresholds, about the impressions that correlate with intensity of stimulation, about methods for applying stimuli . . . But these curiosities seem to me irrelevant and incidental to the practical business of perception" (227).

Learning

Charles Catania reports that even when they are housed in the same psychology department, the two dominant approaches to learning—the psychological and philosophical—have pursued two distinct lines of inquiry. The philosophically-oriented approach pursued questions of language and memory and the physiologically-oriented approach studied animal behavior. The result has been "a tale of confusions and controversies" (322). In the field at large, textbooks usually focus on one approach at the expense of the other. The problem, Catania reports, has been especially marked in the United States, where Pavlov's work with animals was absorbed, but his interest in human language and learning was ignored.

Motivation, Emotion, and Value

Motivation, the Brain, and Psychology

Dalbir Bindra opens this section with a brief account of two millennia of thinking, from Hippocrates, to St. Thomas Aquinas, to Freud, Spencer, and Allport. He finds that the disparate terms obscures the fact that each of the aforementioned shared in common "the idea that thought and action are governed, at least in part, by certain changing but more or less enduring dispositions, moods, interests, temperaments, or what in modern psychology has come to be called 'the motivational state'" (338). He concludes that psychological understanding of behavioral and neural aspects of motivation have begun to pave the way for the eventual study of motivation, emotion and behavior "within a unified theoretical framework" (339).

Biological Necessity, Emotional Transformation, and Personal Value

Joseph de Rivera opens his entry by enjoining that, "Anyone who honestly surveys the past hundred years of work on the emotions must surely experience both humility and impatience" (364). Much has been learned, he notes, but the number of approaches have been so vast that, of necessity, psychologists must choose to read and understand certain lines of inquiry and to neglect others. De Rivera's own studies have been in the tradition of emotion as transformation, and he and his students have worked on identifying the structures of transformation. He postulates that each emotion involves four aspects—a situation, a transformation that occurs in a person's body due to the situation, an "instruction" for further behavior or transformation that results from the encounter, and an input on a person's values as a result of the encounter. "For every emotion we have studied to date," he reports, "we have had remarkable success in

specifying structures in a way that differentiates the particular emotion from others and makes clear its particular set of transformations" (375). For instance, his research team has been able to establish experimentally the differences between elation, gladness, and joy.

He urges the field to understand that the individual is not the fundamental unit of psychology. Emotions occur in an environment, in an exchange with persons and things in life-space, and thus transformation results from a relationship of community.

Cognition

Progress in Cognition

Allan Newell takes stock of the "cognitive revolution" that has taken hold of psychology since the 1950s. Indeed, he states, the prominence which has been accorded to cognition in recent decades represents the "return of the repressed," for cognition has been neglected during the decades of behaviorist hegemony. Newell's essay is notable for its attempts to understand what constitutes a human being or how a self can best be understood. "The human being," he states, "is a processor of *information:* he or she is not like a physical field; he or she is not like a libido-conservative energy system. Ground can be gained (and was gained) by working under the aegis of these other metaphors. However, they eventually come to hinder more than they help" (417).

Some Trends in the Study of Cognition

"When I agreed to write a chapter on what we have learned about cognition since Wilhelm Wundt," writes Henry Gleitman, "I thought my only problem would be one of selection. For after all, how could we *not* have gone beyond Wilhelm Wundt . . . I soon

discovered that this picture of our official founding father is simply false" (420). On deeper examination, however, he found that Wundt had indeed according importance to cognition and to knowledge. In fact, he discovered that the founders of psychology found the study of knowledge about knowledge (metacognition) to be critical, but that later psychology had little patience for such matters. Ultimately, he wonders whether cognitive psychology represents progress: "I do not know whether we have progressed that much beyond [Wundt]. Our techniques are more sophisticated, and there are many more of us, so we can inundate each other in a mass of facts. But much of what we now do and think was already implicit in Wundt, and in other nineteenth century figures?" (434).

Psyche and the Computer: Integrating the Shadow

"The computer," Frederick Crosson states, "is, many of us have come to believe, made in the image and likeness of man, at least of man's mind" (438). He believes the computer model presents the best and the most scientific alternative to behaviorism, although it will never be on its own a fully adequate model. "In any case computers are the best model we have now as an alternative to the model which behaviorism began from: namely, less complex animals. Like those animals, it appears to lend itself to objectivity" (440). The computer model allows psychologists to investigate complex problems of consciousness without appeals to introspection. The latter, Cross argues, is an inherently deceptive device for understanding human psychology.

Development

A Century of Character Development

Jane Loevinger here alleges that academic psychology until recently treated character development as "an embarrassing if not actually taboo topic," largely because the value questions implicit in such a topic were threatening to psychologists who were already "shaky about their standing as scientists" (454). Character development is the observation of the dialectical ways in which children infer what others think and feel "each time at a higher level of complexity" (455).

Whereas Watsonian behaviorism swept earlier work on the subject away, the field has taken tentative steps back in the direction of the study of the development of values. Nonetheless, she reports having an "uneasy feeling" (468) about where the field is headed. Even the foremost researchers in the area seem reticent to study values in any but the narrowest of circumstances.

Child Development Research

David Elkind appraises the state of child development research, an area of inquiry which began when "Darwin's work suggested that human behavior could be observed and studied in much the same way that physical phenomena could be explored" (473). One chief early outcome was the development of reliable intelligence tests. After surveying the field, Elkind concludes: "I am much impressed by the quality of work that I see in our field and by the many new talents that are emerging. At the same time, I am dismayed by the large amount of methodologically sophisticated but conceptually sterile research generated by bright and competent young people. Our training philosophy may

be to blame for this—together with the publish-or-perish mentality of the university structure" (486)

Personality

What have we learned about personality?

Nevitt Stanford is simultaneously critical and optimistic about the state of personality research. He appraises Gordon Allport's monumental book *Personality* for setting a tone by exploring extra-psychological interpretations of personality, incorporating theological, philosophical, legal and sociological meaning. He notes that personality had considerable difficulty in the twentieth century gaining a foothold in academic psychology. "The greatest trouble, I think, was the fear on the part of academic psychologists that the empirical science they had been building up for nearly fifty years would be damaged by or threatened by adopting problems areas that did not lend themselves well to attack by experimental or rigorously quantitative methods...The struggle to implant a dynamic psychology of personality firmly in the university was dramatic. Fierce loyalties and persistent enmities were generated; they were, as followers of Gregory Bateson would say, 'schizmogenic confrontations,'" (495). Only with the arrival of psychologists who fled Nazi Germany, and who brought a range of new ideas, did American psychology begin to incorporate personality theory.

Nonetheless, Stanford judges that by the 1950s the field had lost its dynamism again. The problem in this case was that research proceeded to "study variables instead of people" (505). Even more recently, personality theorists have ceded much of their territory to cognitive theorists. Most dramatically, Stanford recounts his work with graduate students who found that by putting their "comprehensive interview schedule"

aside and actually communicating with participants, a greater level of understanding emerged. Such an approach, he concludes, "increases our humanity and increases our love of humanity... If all graduate students in psychology were required to begin their work by doing such interviews and writing a case history, the whole face of psychology would be changed" (508).

Social Psychology

Kenneth Gergen's essay on social psychology offers a sweeping overview of the epistemological choices made by American psychologists over the past century. He begins by noting that American psychology absorbed from Wundt only his early experimental efforts to understand the biological sources of behavior, and disregarded his later work which examined the effects of social patterns on human psychology. Wundt spent the last twenty years of his life working on *Völkerpsychologie*, which sought not to emulate the natural sciences' search for general laws, but to understand the sources of behavior patterns as rooted in cultural history. Nonetheless, Gergen states, American psychologists in the main overlooked social patterns—here Gergen mentions "religious activity" (529) specifically—in favor of behaviors that could be attributed to the nervous system. For most experimental psychologists, the social world was nothing but external "patterns of light, sound, and so on" (533).

Toward Social Psychology's Second Decade

William J. McGuire's account of social psychology as a branch of knowledge is that it is inherently tragic, as is all knowledge. Knowledge is tragic because human beings seem possessed of a need to know, but do not possess the faculties to know well or

to know completely. All knowledge is oversimplified "because our cognitive limitations require such reductions as slicing the seamless web of reality rather arbitrarily into thought-sized chunks; abstracting a few features of reality while electing ignorance of others" (584). Nonetheless, knowledge is the greatest tool that humans possess so "the only thing more outrageous than using our faulty intellectual processes, including scientific inquiry, to arrive at a representation of reality is not to use them" (585).

McGuire notes that western thought regarding the production of knowledge has proceeded along a continuum of five successive views from the end of the Roman Empire to the present, from dogmatism (dominant to the end of the first millennia C.E.), to rationalism (1077 to the 17th century C.E.), positivism (17th century to 1930s), logical empiricism (1930s to 1970s), to contextualism (1970s to the present). He advocates contextualism as presenting the most promising advance and strongest epistemological future for social psychological knowledge. "Underlying logical empiricism is the notion that some theories are empirically valid and others are not, and that when two theories yield contradictory predictions, at least one must be wrong," he writes, "[Whereas] Contextualism asserts outrageously that all theories are true...That is, under the conditions that the speaker has in mind when asserting the hypothesis, or at least under some conditions that could be devised by a creative proponent of the hypothesis, the relationship probably does hold" (573-575). The contextualist position "pushes the researcher to consider alternative theories bearing on the relationship between the dependent and independent variables of interest" (576). Contextualism, he asserts, approaches empirical confrontation "not as a test but as a voyage of discovery," (576).

PSYCHOLOGY AND ITS INTERSECTING DISCIPLINES

Philosophy

The Cult of Empiricism and Beyond

Stephen Toulmin opens his essay, "The Cult of Empiricism in Psychology, and Beyond," by disentangling Wundt, the pioneering figure in psychology as science, from the "Wundtian heritage," which he argues has been much more intellectually constraining than Wundt ever intended. In attempting to establish itself as a science, he elaborates, psychology stands distinct from other fields such as physics in allowing the introduction of experimental methods to sever its "diplomatic relations with the larger philosophical debates out of which [its] newly defined 'empirical' questions had emerged" (595). Wundt posed that only a narrow range of mental activities could be subjected to experimental verification, and the "higher mental functions" should be studied by a nonexperimental, "historico-anthropological" method, or *Völkerpsychologie* ("cultural psychology") (596-597).

Nowhere did the spirit of experimental psychology so decisively obscure this historical or cultural psychology than in the United States. During the same year that Wundt wrote against the formal separation of philosophy from psychology departments, John Watson issues his behaviorist manifesto. Toulmin argues that Watson's manifesto must be seen in broad national context, including the practical tenor of U.S. politics and the broad anti-intellectualism of that culture. Preceding Watson by nearly two decades, pragmatically oriented psychologists called for "an objectivistic interpretation of sensation, perception, consciousness, cognition, behavior, purpose and so on" (600). Gradually, an "antiphilosophical rhetoric" developed in the field, and from this merged

the "cult of empiricism," whose chief influences included animal psychology, objectivistic biology, and Watson's interpretation of physics.

Toulmin emphasizes that classical behaviorism had faded by the 1930s and that the "orthodoxy that controlled American psychology from the 1930s until approximately the mid-1950s was not Watsonian but 'neobehaviorist'" (602). It was under the neobehaviorists the cult of empiricism grew to its greatest potency. Clark Hull became the most influential advocate of the application of logical positivism to psychology, insisting that all psychological theories must consist of statements about empirical phenomena which could be confirmed by experimental methods. Even if Hull's influence has faded, Toulmin alleges that "these conceptual straitjackets persist despite all the reaction, and all the developments, in the philosophy of science over the past decades" (606).

Toulmin does not suggest abandoning experimental psychology altogether. Rather, he proposes that an "honest marriage" (611) between cultural anthropology and experimental psychology would enable both fields to understand which human faculties are products of culture and which are universal features. He urges psychology to make room for empiricism as well as the "creative play of the scientific imagination" and for "thinking about the fundamental (including metaphysical) issues that underlie the field of psychology" (612).

The Logos of Psyche: Phenomenological Variations

Zaner alleges that the thrust of the scientific approach in the late nineteenth century, which resulted in relegating qualitative experience "to the dark dungeon of 'mere subjectivity'" (625) grew out of a misunderstanding of Descartes, Locke and

Hume. The latter, he claims, never held the study of mind, in and for itself, to be impossible as has often been alleged. This misunderstanding led psychologists to believe that only those aspects of subjective experience that can be objectified and counted ("mathematized") could possibly be subject to study. But "so long as 'mind'—that is, subjectivity—is regarded as either inaccessible to rational inquiry or accessible solely by means of reduction to and translation into terms other than its own," Zaner judges, "there follows the exclusion, or at a minimum the grievous distortion of the bulk of distinctively human life: feeling, symbols, concepts, fantasy, religion, speculation, personhood, morality, indeed science itself precisely inasmuch as it likewise is a specifically human activity involving all those characteristics and more" (627).

Mathematics

In "Mathematical Modeling of Perceptual, Learning and Cognitive Processes," R. Duncan Luce acknowledges the numerous problems related to combining mathematics with psychology. "Still," he concludes, "mathematics and computer stimulation are really the only games in town if you want to understand and to predict data" (671). He maintains that the problems begin because many published psychological studies that involve mathematical equations are not truly serious attempts to integrate mathematics and theory. The "level of abstraction is usually very high, comparable to that of advanced physical theories such as quantum mechanics or the general theory of relativity," but the psychologists are working "in areas which, unlike physics, have not yet seen detailed, low level, empirically testable theories from which to generalize and abstract" (669). Moreover, psychologists often employ mathematicians whose

"knowledge of psychology and whose empirical experience, even in the physical sciences, is very sketchy" (669).

Multivariate Statistics: When Will Experimental Psychology Catch Up?

Richard J. Harris notes a "gross underuse of multivariate statistics by experimental psychologists," in part because the experimental psychologists suspect that multivariate statistics are too "soft-nosed" (678). His survey of reports published during a six month period of the *Journal of Experimental Psychology* (the "hard-nosed" journal in psychology) found only 3 percent used multivariate statistics. Harris also agrees with Luce that psychologists too often rely on mathematical statisticians to assist in conducting their research, and in so doing allow "mathematical considerations to override sound research practice" (678). Harris does cites a few positive contributions, among them Cattell and Dielman's "application of factor analytic techniques to thirty-six different measures of rats' maze-running behavior 'under differing conditions of reward and deprivation for fear, gregariousness, and thirst in three separate mazes' and their resulting demonstration of a close correspondence between the basic dimensions of this maze-running behavior and components 'which have consistently emerged in human research'" (684).

Psychology and Neuroscience

Karl Pribram considers it an ironic turn that behaviorism, which should have been a resolution to the subjectivity/objectivity split that so has troubled philosophy ever since Descartes, became a force which ruled out the possibility of scientific access to seemingly "private" thoughts, feelings, and internal experiences. Subjective, "inner," or

"private" experience, Pribram argues, could be treated as publicly confirmable (i.e., objective), if individuals use language to communicate, to report and to validate their experiences. Many of the natural sciences approach their subjects indirectly [e.g., "we do not palpate the light emitted from the stars themselves; we study the tracks made on an oscilloscope" (700).] Thus behaviorism might have taken advantage of individual's ability to linguistically validate, confirm, and thus make "objective" their internal experiences. In fact, he argues that Wundt's "achievement [was] a well-rounded, experimentally based biological and social psychology" (706). But methodologically-based behaviorism forced a radical turn away from the well-roundedness of Wundt. Instead, behaviorists opted to avoid all forms of subjective language out of the fear that it might contaminate their efforts to produce fully scientific accounts of human behavior.

Pribram compares the chemical notation of H2O with the common moniker, water, noting the scientific distaste with such a common word. But water is arguably a more accurate descriptive, as it has radically different properties than hydrogen and oxygen do on their own. Likewise, if one substitutes the term "body" for hydrogen and "environment" for oxygen, one finds that the combination of the two creates properties that are different from each on their own. Pribram asks, rhetorically, "Is it all right to label some the combinations *vision*, others *attention*, others *love*, and *dignity,* and *freedom*, just as we labeled H2O *water*?...What is wrong with a psychology that holds that, for example, freedom makes spiritual life possible just as the wetness of water makes biological life possible?" (710). Pribram argues that the neurosciences are producing evidence that will restore the balance between logic and rationality. "A paradigm shift, to use Kuhn's well-worked phrase, is in the making. But, of course, the

shift will be, as revolutions so often are, a return to knowledge and wisdom established long, long ago in the prehistory of mankind" (717).

The Visceral Systems in Psychology

John Lacey concludes his assessment of the study of the visceral systems: "I feel that the theories and principles that have so far emerged are inadequate to the study of the 'brain as a whole, with all its organs,' and that a reformulation of the nature of the approach to this massive task is desirable...for it is clear that visceral systems do not exist as a distinct and separate entity merely tacked onto the central nervous system" (734)

Psychology and Evolutionary Biology

Some Thoughts on the Evolution of Comparative Psychology [*Animal Psychology*]

Stephen Glickman notes that from the beginning, Darwin and Alfred Russel Wallace split over the evolutionary approach to the human mind. Darwin believed that the human mind evolved from other organisms whereas Wallace, his "codiscoverer" of evolution, believed that an exception in models of evolution had to be made for the human mind. Ultimately, Thorndike's conclusions of the similarity in consciousness structures in all species, in Glickman's words, "led to the dominance of the white rat and the pigeon as subjects-of-choice as psychologists grappled with the formulation of general laws from Watson through Skinner" (740).

Genes, Consciousness, and Behavior Theory

"Before this decade no philosopher, no social or biological scientist—not Darwin or Freud or Marx or any of the rest—could have known that we people are, in terms of history, just complicated local gene environments—or genetic replicator vehicles, as

[Richard] Dawkins has put it" (788). Thus concludes Richard Alexander, with no ironic intention. Because we now have the understanding of genes that Darwin lacked, we must come to terms with the implications for issues like free will, self-awareness and conscience. All human activity, in other words, is at its roots activity directed towards maximizing the "inclusive-fitness-maximizing" of the gene pools (789). No advance in human knowledge during the twentieth century has been more important, Alexander writes, and "Anyone who cannot accept that must somehow deny or trivialize the proposition that what people are doing from hour to hour, day to day, lifetime to lifetime is carrying out activities that, not necessarily in current environments but in terms of our long-term history, represent inclusive-fitness-maximizing" (789). Once this knowledge is ultimately incorporated, he argues, all studies of human endeavors will be transformed into a new science based on the principles of evolutionary biology.

Psychology and Aesthetics

This section comes with an editorial note from Koch and Leary who draw the attention of psychologists to how much has been forgotten about Gustav Fechner's "unique blend of philosophical and mystical views" (855). Fechner is widely regarded as the "father" of experimental psychology.

Rudolph Arnheim notes that Fechner was very much an empiricist and a mathematician who aimed to apply exacting research methods and reliable testing to the problems of psychology. Thus, Arnheim judges, "It is all the more remarkable that the same man was a mystic visionary of compelling power and a playful satirist as well" (857). One of his treatises, "called by the Zoroastrian name *Zend-Avesta*, asserted that everything organic and inorganic in the universe possesses a soul, including the earth

itself and the other planets" (857). "The spirit of these and other similar works is inseparable from that of the *Elements of Psychophysics,*" Arnheim writes of Fechner's most well-known work. "The same deeply religious pantheist to whom we owe the most poetical ecology ever written collected the measurements of some 20,000 paintings from twenty-two art museums to study their proportions statistically" (857).

Arnheim continues that Fechner denounced the "nightview," in psychology, or "the scientific assertion that the beauty of light and color exist only for the conscious mind whereas the physical world in and by itself lies in ghastly darkness" (859). In contrast, "God's retina, he said in his late work on the dayview as against the nightview, consists in the surfaces of all existing things, including the retinae in the eyes of human beings and animals" (859)

PSYCHOLOGY IN RELATION TO SOCIETY

Psychology and the Public Good

Psychology in Cultural Context

Stephen Chorover notes that however much each of the human and social sciences may be internally divided by paradigmatic approaches, nearly all paradigms rely upon the principle of "analytic atomism," the view of the world as composed of basic parts that can be analyzed separately. Psychologists, he writes, "have traditionally been taught that analytic atomism is the best, indeed the only reasonable and scientific way to approach the problem of understanding the nature of a complex entity or process—be it a brain, a human being, or a social group" (874). Western science, as a whole, he continues, "has been almost exclusively predicated upon a fragmentary reductionist epistemology" (876),

with the result that knowledge in the contemporary context evokes "bewilderment, pessimism, and paralysis" (871).

To understand the consequences of analytic atomism in psychology, Chorover turns to three authors from outside of the discipline whose perspectives he takes to be particularly instructive—physicist David Bohm[13], political economist Harry Braverman, and metallurgist Cyril Stanley Smith. Bohm argues that analytic atomism has produced a "general confusion of the mind" (872) in which the illusion of a world of separately existing objects is taken as an objectively true state of reality. Braverman asserts that knowledge fragmentation is inextricably linked to the industrial mode of production and corporate economic order, and that the process of fragmentation and alienation has in recent decades extended from the factories into the scientific and professional disciplines. Smith maintains that fragmented knowledge is rooted in the historical conditions of western culture, that measurement in many cases may be neither sufficient nor possible for the comprehension of any system, and that a clear alternative to analytic atomism exists.

Chorover proposes that the solution lies neither in reductionism nor in holism, but in the ability to comprehend the ways in which phenomena occur at multiple levels in an interpenetrating, complex web of relations. Whether one is approaching a brain, a person or a social group, Chorover states, psychology must develop a framework that combines analysis with respect to its internal structure, but that is sensitive to the synchronous

[13] Chorover's chapter does not mention spirituality directly, other than in the form of an opening quote from the physicist Max Planck, which refers to a crisis that affects "every branch of our spiritual and material civilization" (870). However, by turning to David Bohm for guidance in resolving the fragmentation of knowledge, he turns to a physicist whom many—including a number of transpersonal psychologists—have seen as providing the basis for a spiritual interpretation of physical reality through his investigations of the non-local communication between subatomic particles. See, for instance, Michael Talbot's "Spirituality and Science: The Holographic Universe," http://www.ianlawton.com/spsc1.htm (accessed May 17, 2006).

aspects of the object in a spatio-temporal context, as well as the evolution of the object over time. Currently, the field is divided over false dichotomies, he argues, such as the debate over the relative influence of "nature" or "nature." Our tendency to insist on either/or prevents us from seeing the interaction of biology with the environment.

Psychology: Handmaiden to Society

Dorotohea Braginsky writes the only chapter in the volume devoted to psychotherapy, which is possibly a reflection of the low regard that most scientific psychologists hold for therapeutic practice. Braginsky says as much when she takes issue with research psychologists who widely criticize therapeutic efficacy. She concedes that therapy is indeed frequently ineffective, but counters that most laboratory psychology fails to meet the criteria of objective science and is impervious to real human conditions. "The point here is that clinical practitioners are alone among their colleagues in their efforts to grapple with human problems and to ameliorate the pain associated with them" (881). She chides the psychology journals for making it through the twentieth century without, for the most part, noting or reflecting upon the economic, social and political events that have shaped human lives.

If scientific psychology in the laboratory is merely irrelevant and harmless, Braginsky charges, it becomes injurious when it attempts to influence real world conditions. They often "disguise gross violations of human rights as scientifically sound therapeutic practices" (890). She cites a case study involving a mute catatonic schizophrenic patient who had been hospitalized for thirty-two years. The researcher, by the name of Kasorla, "successfully" used food deprivation—sometimes lasting for several days—to modify the patient's behavior (i.e., to make him speak, or at least to

utter certain syllabus). In another instance, a researcher, by the name of Kushner, reported successfully altering an adult male's "fetishistic" behavior through a series of 492 electric shocks over a three month period. Another one of Kushner's "successes" came when a severely retarded boy learned to stop biting himself after electrodes were attached to his inner thighs. "[T]he behaviorists," Braginsky writes, "take what is common knowledge, knowledge used by mankind's oppressors for centuries, and have made it their own 'scientific discovery.' History is replete with examples of coercive and torturous methods of behavioral control. The behaviorists' contribution to the public welfare has been to discover that these methods can be therapeutic and to lend them scientific respectability" (886).

CHAPTER SEVEN
PSYCHIATRY: SCIENCE AND THE SELF IN THE MAINSTREAM

As a branch of medicine, with a mandate to diagnose and treat human suffering, American psychiatry developed in many ways which diverge from the largely experimental focus of American academic psychology. Centered in laboratories, psychology could pursue a version of "pure," value-free, dispassionate knowledge of human cognition, learning, and behavior. But based in hospitals, clinics, and therapeutic consulting rooms, psychiatry sought to intervene, to heal, to change. Both disciplines share the ambiguous prefix "psyche," but over the course of a century of scientific hegemony (Goode, 2000), both have regarded the "psyche" with considerable ambivalence. This chapter examines the ways in which mainstream psychiatry has understood what it means to be scientific and how science should be deployed in the study of the human self and human suffering.

Building on the work of Charles Taylor regarding the relationship between secularity and modernity, the theoretical problem explored here involves the complex connections between secularity and science. The field of psychiatry raises particular questions about this relationship, given its historical attempts to define the contours of the human self and human madness. The sociologist of professions Andrew Abbott (1988) notes that modern psychiatry developed by extending its jurisdiction over personal problems in the latter half of the nineteenth century, a terrain previously claimed primarily by the clergy. Abbott explains that during this period of "sweeping social changes," including rapid industrialization, expanding government, and the explosive growth of cities, "nervous diseases...became a fixture of the American experience" (Abbott, 284). Neurologists were the first to compete with the clergy, as early as the

closing years of the Civil War, but the neurologists found that most symptoms for which patients sought help to be untreatable by conventional medicine. Psychiatrists, whose domain was the treatment of madness, found their jurisdiction expanding amidst rising complaints of "general unhappiness" (Abbott, 285). The clergy witnessed their authority over such problems diminish, as they had not succeeded in establishing a sufficient academic basis to assert professional jurisdiction.

Taylor challenges the once-prevalent tendency to view secularization as a gradual and straight-forward process of substituting rational, scientific accounts of natural phenomena for outdated religious narratives. Abbott's approach contributes to an extension of Taylor's challenge by locating the historical development of psychiatry as in part a professional competition with clergy, in which psychiatrists were able to exploit the clergy's strategic weakness in academia. The sociologist of science Charles Rosenberg (1997) provides a further challenge to a straightforward secularization hypothesis by noting the intricate historical relationships between science and religion, which he has characterized as "symbiotic." In a more recent article, Rosenberg explores the contradictory cultural pressures on psychiatry in its role as our "designated manager" of personal problems ranging from "depression to anxiety, from bereavement to dysfunctional marriage" (2006: 420). Even if some members of the population continue to turn to clergy as counselors of first resort, "[a]s a culture we are relentlessly reductionist in presuming somatic (and ultimately genetic) causation for behavior" (417). At the same time, he writes, "we have never been more aware of the arbitrary and constructed quality of psychiatric diagnosis" (417).

Rosenberg does not draw explicit connections between his broader hypothesis regarding the relationship between science and religion, on the one hand, and his examination of the "contested boundaries" in psychiatry on the other. To extend Rosenberg's hypothesis regarding the "symbiosis" of science and religion to the field of psychiatry, I have attempted to compare contrast mainstream psychiatric understandings of the appropriate uses science with the views of transpersonal psychiatrists who explicitly attempt to synthesize religion and science. Chapters three and four explored transpersonal critiques of psychiatry from within the discipline, including the ways in which transpersonal psychiatrists have reexamined questions of mental health and illness; ways in which transpersonal psychiatrists have extended varying models of human consciousness; and how transpersonal psychiatrists interrogate traditional understandings of the application of science and scientific technologies to personal problems. The present chapter attempts to test the claims of the transpersonal psychiatrists regarding the mainstream of their discipline.

The first question this chapter explores is whether, in a discipline with so many contrasting paradigms, it is possible to identify a clear mainstream. A second question is whether, to the extent that a mainstream of psychiatry can be discerned, it reflexively dismisses all serious discussion of religion or spirituality, as alleged by transpersonal psychiatrists such as Stanislav Grof (1985, 1986, 1997, 2000) and Arthur Deikman (1996, 1997). Finally, this chapter examines mainstream psychiatric understandings of the disciplinary root word "psyche," and how and why this understanding may have changed over time. What do psychiatrists understand by this term which can variously be

interpreted to mean "mind," "self," "soul," or "spirit"? What consequences result from variations in interpretation over time?

PSYCHIATRY AND THE "INVENTION" OF BODY, MIND AND SOUL

Sociologists, Erich Goode (2000) points out, are less concerned with drawing conclusions about the inherent truth of any given claim as they are in gaining insight from the *struggle* involved in attempts to establish given claims as true. The sociologist Nikolas Rose (1998) observes that what he labels the "psy" disciplines—psychiatry, psychology, and psychotherapy—do not study objective human reality as much as they actively invent it. The act of *seeing* the human self in any historical moment involves decisions about *how* to view the self. The invention of the self is an ongoing process of applying assumptions about the object to be studied, selecting techniques of observation, and deciding which ideas about the self are warranted and which are implausible or unacceptable.

For Rose, the questions that should occupy sociologists interested in the psy disciplines include the "emergence of practices, locales, and enunciative regimes that empower certain authorities to speak of our truth in the language of the psyche" (178). But Rose does not consider ways in which psychiatrists often resist the language of the psyche. Perhaps more than any other branch of medicine, psychiatry faces dissension among its practitioners about the proper diagnosis and treatment of symptoms and disorders. As an indication of the lack of consensus in the field, anthropologist Tanya Luhrmann titled her recent extensive study of psychiatry, *Of Two Minds* (2000). The central cleavage in psychiatry to which she refers is between what she labels "scientific" psychiatry, which locates psychiatric conditions in brain chemistry and bases its

treatments largely on pharmacological methods, and the psychodynamic approach which is primarily based on a dialogical encounter between a psychotherapist and a patient. Luhrmann has found that for many psychiatrists the language of psychodynamics and of mental states is becoming increasingly foreign and rather discomforting.

Rosenberg (2006) draws attention to the historical context in which psychiatric paradigms have continuously shifted. The psychiatric identification and categorization of human states and behaviors, he writes, "is a phenomenon that is always in process, always contested, and never completed" (420). He attributes the contention over psychiatric ideas about the mind and body—to say nothing of the soul—to the psychiatric profession's search for social legitimacy. By the nineteenth century, particularly by the latter half of that century, the medical field at large had reached consensus that all human emotional states had ultimately somatic causes. "Nineteenth-century physicians," he states, "repetitively and formulaically referred to the brain as the organ of mind and mental illness as a product of brain disorder" (414). It was in such a cultural context that when the neurologist George M. Beard applied the term "neurasthenia" in the 1860s to a vast range of psychiatric symptoms, he found it reasonable to attribute their source to the central nervous system. It mattered not whether any actual somatic conditions could be identified, their reflection of bodily conditions was taken for granted. "Beard," explains Rosenberg, "rationalized his discovery (of neurasthenia) in relentlessly material terms. He had no choice if it were to be taken seriously by his peers" (414).

Roy Porter (2003), a prominent historian of medicine, documents psychiatry's search to make sense of human mental states in the broader political, social, and scientific context of the last several centuries. Though neither Porter nor Rosenberg use Rose's

terminology of "inventing" the self, all three scholars demonstrate the ways in which psychiatry imposed its assumptions and professional objectives on the human conditions they encountered. Though it had different objectives at different times, by the late nineteenth century, Porter argues, "the priority lay, for many psychiatrists, upon establishing their discipline as a truly scientific enterprise, capable of taking its rightful place in the pantheon of the 'hard' biomedical sciences" (183). Such psychiatrists were heavily influenced by the increasing prevalence of scientific views which, Porter writes, "cast man essentially as a machine, and thus reduced the expressions and complaints of the disordered to secondary manifestations, the screeches and judderings of a faulty engine" (158). In the nineteenth century Emil Kraepelin, the psychiatrist who developed one of the first systematic classificatory systems in the profession, sought to shed psychiatry's focus on psychological features altogether. In a major shift away from psychological explanations of madness, Kraepelin "approached his patients as symptom-carriers" (184) who were a class apart from the general population.

Porter documents the ways in which twentieth century psychiatry has been shaped by internal and external politics. He characterizes the meteoric rise of psychoanalysis within some psychiatric circles and in the general population as at least partly a reaction to the somatic outlook the rest of the field. Psychoanalysis countered the "pessimism of asylum psychiatry and the dogmatism of the somatists" (187). Sigmund Freud wanted "to achieve a 'Copernican' revolution in his field" (184) and many were willing to follow him in this venture. Porter's history of psychiatry here closely parallels Rose's sociological account of psychiatry as making active choices about which aspects of "the

flesh, the body, the psyche, the mind, or the soul" they will emphasize, and for which reasons (Rose, 1999: 182).

Porter continues his history of psychiatric politics into the twentieth century. As psychoanalysis was reaching its status as "chief cultural myth-maker" in the first half of the twentieth century, various types of shock therapies began to prove effective—and to generate much criticism. At mid-century, during the zenith of psychoanalytic influence, many asylum psychiatrists began to hail psychosurgery—lobotomies—as a new treatment which would "turn no-hope asylums into true hospitals" (203-204). Whether various treatments constituted great advances or horror stories depended very much on contested cultural criteria of what it meant to successfully heal, or treat, or allay human mental suffering and other more pronounced maladies. Controversies over psychiatric medicine would become even more overtly politicized in the latter half of the twentieth century when the anti-psychiatry movement would challenge the field from the left in the 1960s and 1970s, and the anti-welfare state politicians would challenge the field from the right in the 1980s. At the dawn of the twenty-first century, "major ethical and political questions hang over recourse to pharmaceutical products to reshape personalities, especially when the development, manufacture, and marketing of such drugs lie in the hands of monopolistic multinationals" (207).

To understand how the human sciences make claims about human beings and human action, writes the eminent philosopher of science Stephen Toulmin, "We must look at three problems having more to do with the intellectual attitudes of scientists and humanists than with the World of Nature" (2001: 90). These three problems concern human scientists' worldviews about "the question of objectivity, the need for scientific

detachment, and the *postures* that set scientists apart from their fellows or colleagues in the lay public" (2001: 90). He documents the diligence with which the human sciences sought to replicate the methods of physics. If in practice such attempts were unsuccessful, Toulmin demonstrates that the *faith* that a singular method could successfully be applied to all physical, biological, and mental entities persisted and became itself the heart of the phrase "scientific method." Such fidelity to objective scientific methods—again in faith, but not necessarily in practice—had consequences for the ways in which the human sciences defined what it meant to be human. By the end of the nineteenth century, Isaac Newton's belief that all entities consist of particles had become nearly universal in scientific culture, as had the doctrine that particles are best studied dispassionately and objectively. The intellectual pressures upon psychiatrists to conform to the cultural values attached to scientific objectivity, Toulmin further elaborates, have long existed in tension with psychiatry's imperative to "treat patients with justice and love...and [to] apply humane standards" (198).

Physicists feel no such need to treat atomic particles with kindness, and human scientists of all stripes have been keenly aware of such differences between themselves and—by some scales—the most prestigious of the sciences. For psychiatrists, Toulmin shows, the desire to replicate the objectivity and detachment of the physicists presents itself when they must engage in dialogue with their patients. An added complication for psychiatrists regards how to respond to clients who claim to have had spiritual experiences, or whose lives are shaped by religious beliefs. The introductory chapter of this dissertation notes Charles Taylor's documentation of the development of the twentieth century scientific approach to any spiritual or religious belief as deeply suspect.

He paraphrases the dominant understanding among scientists in the early twentieth century that it was "the path of manliness, courage, and integrity to turn our backs on these facile [religious] comforts, and face the universe as it really is" (2002: 44). Max Weber's description in "Science as a Vocation" echoed these sentiments when he described the churches as compassionate resorts for those who could not bear the rationality of modern times "like a man" (1946: 155). Joel Kovel (1990) shows that such convictions also led to Freud's well-known formulation of religion as an illusion reflecting the infantile need for fatherly protection. According to transpersonal psychiatrists such as Bruce Scotton, psychiatry's working understanding of science leads it to disregard or to classify some of the most universally valued aspects of human life as illusory or pathological. Among the spiritual properties he includes are, "universal brother-and sisterhood, surpassing love, attachments to principles beyond self, life beyond death, the search for connection between human beings and the world, and moral and ethical virtue" (1996: 5). Stanislav Grof, one of the founders of transpersonal psychiatry, writes that his four decades of experience in psychiatry have convinced him that the "current psychiatric system of thought" implicitly associates mental health with "atheism, materialism, and the worldview of mechanistic science." This "scientific attitude," Grof continues, requires psychiatric professionals to "accept the postulate of human insignificance in the universe, the accidental and random origin of human life and consciousness, and the understanding that all living things are no more than biological organisms" (1985: 331).

Similarly, Arthur Deikman posits that much of the psychological suffering that psychiatrists are likely to encounter in patients stem from a deep sense of "anomie," due

to the widespread modern "assumption" that there is no meaning or purpose inherent in the universe. These patients, Deikman writes, are often "badly handicapped in their struggle to overcome neurotic problems because the conceptual context within which they view themselves provides neither meaning, direction, nor hope." By holding to an unnecessarily narrow definition of science, he asserts, most psychiatrists are unable to provide patients with the type of meaningful context that might assist them in achieving mental health. At issue for Deikman is that when patients face questions related to why they exist or why they survive, "We are told either that the question lies outside the scope of science or that the question is false because the human race has developed by chance in a random universe" (1996: 243).

The sociologically important question is not whether one interpretation of science, self, and psychiatry is more accurate than any other in some essential way. The important point is that a struggle over interpretations exists within the field, and these contested interpretations have deep historical roots that were constructed over several centuries of evolving ideas about the self in a secular age. What is necessary is a genealogy to show how and why varying ideas about the self and the limits of the self have been constructed. Geneaology writes Nikolas Rose, "attends to the 'marginal' and shows its centrality...(and) to that considered inessential to show how, through it, the essential has been fabricated" (1998, 80). Rose continues that "notions of personhood vary greatly from culture to culture," (151) and this recognition leads us to ask how various ideas about the capacities of the human self were accepted and rejected and under what conditions.

CHAPTER METHODOLOGY

To understand the mainstream of psychiatry in contrast to the transpersonal perspective I first examine the attempt by transpersonal psychiatrists to alter the *Diagnostic and Statistical Manual* (DSM), the primary manual used by psychiatrists to diagnose conditions and disorders. The transpersonal psychiatrists were ultimately successful, and the DSM-IV was issued in 1994 with an inclusion of a treatment category for several spiritual conditions which are not attributed to mental disorders. The differences between the DSM-IIIR and the DSM-IV illustrate just what is at stake for both the mainstream and the transpersonal subfield regarding questions of spirituality, religion, and mental health.

I follow the brief exploration of the DSM by examining the perspectives of noted observers of psychiatry who have paid close attention to the uses of science within the field. Tanya Lurhmann conducted an anthropological study of psychiatry by attending a broad range of psychiatric training lectures, participating in medical meetings around the country, observing dozens of therapeutic sessions between individual psychiatrists and their clients, immersing herself in several types of psychiatric hospital environments, and attending hundreds of psychiatric lectures. A close reading of her book *Of Two Minds: The Growing Disorder in American Psychiatry* (2000) provides a sense of what the psychiatrists are studying—i.e., how and under what terms they continue to invent the self—and whether and in what ways religious or spiritual issues arose during her research in various educational, hospital and therapeutic environments.

For historical observation, I contrast the work of Edward Shorter (1997), perhaps the best-known historian of psychiatry, with a critical history of the field by the journalist

Robert Whitaker (2002). Shorter offers the judgment that scientific understanding of the precise causes of and most appropriate treatments for mental illness has progressed most steadily when psychiatrists have focused on the biology of the human organism and dispensed with the "romantic" diversions of psychoanalysis. In contrast, Whitaker argues that psychiatry's drive to be scientific has impeded its ability to effectively treat human suffering. He contends that highly-effective historical alternatives to the "biomedical model" were rejected because the profession sought to demonstrate its scientific fortitude. Both Shorter and Whitaker present careful historical documentation, most of it drawn from professional psychiatric journals, to build their arguments about how science and the "scientific attitude" have been interpreted by the profession. That they would reach such different conclusions illustrates the ways in which ideas about the human self and the contours of mental illness are "contested," in Rosenberg's terminology (2006) or "invented" in Rose's (1998) lexicon.

After an examination of these historical and anthropological perspectives, I examine full-length works by well-established psychiatrists[14] who attempt to explicitly define and clarify the question of what science means within a psychiatric context. I asked six questions of each work: How does the author define science and the context in which science is to be used in the study of the psyche (or brain)? Does the author mention spirituality, religion, or any metaphysical questions and in what context? What does the author view as constituting valid evidence regarding psychiatric health and illness? What does the author view as the relationship between mind and brain? Does the author address criticisms from other psychiatric paradigms and on what terms?

[14] Though not a psychiatrist, Elliot Valenstein is included in this review because of his extensive work as a research psychologist who has spent his career in the laboratory study of psychiatric medication.

This is an exploratory chapter and thus is not meant to be either exhaustive or statistically representative of the field of psychiatry. The point is to note areas of consensus and dissensus regarding science, secularity and the psyche from varied points of view. Nancy Andreasen, the editor-in-chief of *The American Journal of Psychiatry,* presents the case in her book *Brave New Brain* (2001), that psychiatry is well on its way to mastering the biological bases of mental illnesses, and will almost certainly achieve victory sometime during this century. Alan Hobson, professor of psychiatry at Harvard Medical School and director of the Laboratory of Neurophysiology at the Massachusetts Medical Center makes the case in his book *Out of Its Mind: Psychiatry in Crisis* (2001), that the field of psychiatry faces grave internal disorder and must make certain reforms if it is to survive and to serve its patients well. In his book *Healing the Soul in the Age of the Brain* (2001), Ellio Frattaroli launches a defense of traditional Freudian psychoanalysis as a genuine science and claims that the increasing dominance of biomedical psychiatry presents the field with a far-reaching moral crisis. Peter Kramer, a professor of psychiatry at Brown University, makes the case in *Listening to Prozac* (1997) that the new generation anti-depressants may be reshaping individual personalities and making at least some patients "better than well." A trio of books by Joseph Glenmullin (2001), David Healy (2004) and Elliot Valenstein (2002) raise many questions about the role of pharmaceutical drugs in psychiatry.

PSYCHIATRY, RELIGION, AND THE DSM

As a result of research undertaken by transpersonal psychiatrists and others, the Diagnostic and Statistical Manual-IV (DSM-IV) included a category for "spiritual emergencies" when it was issued in 1994. This was a change from the DSM-IIIR, which

had been issued in 1986[15] and contained no references to religion or spirituality that were not connected to pathology. For perspective on the grounds on which transpersonal psychiatrists successfully lobbied for a change in the DSM-IV, I obtained a taped recording of a 1992 discussion panel involving several well-known transpersonal psychiatrists, entitled "Making a Place in the DSM-IV for Spiritual Emergency." The panel took place at the Association for Transpersonal Psychology (ATP) convention in Acilomar, California, but the speakers were careful to note that their efforts to lobby for changes in the DSM were done in their capacities as individuals and not on behalf of the association.

During the proceedings, David Lukoff noted that "all references to religion in the DSM-IIIR are negative, and framed in the context of psychopathology." The negative religious references, he continued, included entries for "catatonic posturing, delusion, incoherence, magical thinking, poverty of content of speech, and seven other entries." No other area of human experience was linked so frequently to human mental pathology. He described religion in the DSM-III as "a bit of a whipping boy," which he said was reflected in the approach of the field at large. He cited a study of four major psychiatric journals from 1982-1992 (the period leading up to the panel), which found that "only 59 of 2,300 articles included references to religious variables, mostly in the context of psychopathology." This paucity of reference "flies in the face of empirical research which shows that religion is important to patients' well-being and sense of satisfaction."

The DSM-IV ultimately included "spiritual emergencies" as a "V-Code," which in the DSM is a condition not deemed a major mental disorder (i.e., not an Axis I or Axis II diagnosis), but may be a "focus of clinical attention." The classification included in

[15] The publication of the DSM-V is planned for 2011.

the DSM-IV includes "psycho-religious, psycho-spiritual, or anomalous experiential problems." During the panel discussion to propose these changes, Francis Lu explained, "Examples of psycho-religious problems include loss or questioning of firmly-held faith of change in denominational membershi Examples of a psycho-spiritual problem include mystical experience and near-death experience. Examples of an anomalous experiential problem include parapsychological experience, or out-of-body experience."

Lukoff claimed that the need for V-Code inclusion is demonstrated by incidents in which psychiatrists or other mental health professionals have denigrated their clients' religious beliefs, often leading to instances of severe distress. He offered a number of examples, including the attempted suicide of a patient after a psychiatrist told him that his religious beliefs were "foolishly neurotic." Both major traditions in psychiatry, he stated, have generally excluded spiritual considerations for different reasons. "Freud was very adamant," Lukoff stated, in associating religious experience with neurosis. Meanwhile, non-analytic psychiatry has generally rejected "subjectivistic and mentalistic ideas" altogether, in favor of neurobiological diagnosis.

Robert Turner, the final speaker on the panel, explained that the initial research presented as evidence for a V-code inclusion focused on those conditions for which there was most documented evidence: anomalous-experience (out-of-body experience) and psycho-spiritual (near-death experience). In the case of both categories of experience, much psychiatric and psychological focus had already shifted from epidemiological study to phenomenological description. The panelists hoped that these more acceptable conditions would eventually serve as models for the inclusion of more "far-out conditions," such as Kundalini awakenings or shamanic initiations.

PSYCHIATRIC MODELS OF THE SELF - CONSTRASTING PERSPECTIVES

Historian Roy Porter documents a long view of psychiatry, showing that physicians concerned with madness were heavily influenced by philosophical models dominant during given time periods. Insanity, he shows, was in the Middle Ages mainly attributed to supernatural causes. By the time of the Renaissance, physicians began to look for natural causes, certain that symptoms could be traced to the body. Renaissance doctors were less likely than their predecessors to attribute features of personality to fluids—the "humors," such as "yellow blood" and "black bile"—and more likely to examine bodily organs and nerves. The impact of Rene Descartes' 17th century mind-body dualism was to rule out the possibility of "mental illness," for in the Cartesian framework only the body could carry disease. "[T]he soul," Porter writes, "became definitionally inviolable, and doctors instead referred insanity to lesions of the *body*" (124).

By the 18th century, John Locke's understanding of the mind as a "blank slate" began to replace Cartesian mind-body dualism. During that time, Porter states, William Cullen at Edinburgh University began to attribute insanity to overly excited cerebral activity. The effect was to begin shifting medical understandings of the cause of madness from purely somatic causes back to mental sources. Psychiatrists consequently began to focus their craft on systematic case histories. By the 19th century, the field was riven by "fierce theoretical controversies between rival organic and psychological camps" (139). Influenced by German romanticism and its emphasis on psychic depths, "alienists" combined role-playing therapies with the application of terror such as immersing patients into tubs full of eels in order to destroy the causes of madness. Phrenology also emerged

at this time, and though it was widely denounced by many for its materialistic focus, "it appealed to many alienists, since it posited a real biomedical basis for mental disturbance" (143).

At the end of the 19th century, a focus on hereditary degeneration arose among many European psychiatrists, including Richard von Krafft-Ebing, who attributed sexual disorders to degeneration. Paul Mobius focused his search for degeneration on women of abnormally high intelligence, assuming that such women must be "positively degenerate," as normal women were constitutionally incapable of advanced intellect. At the same time, Cesare Lombroso began to classify "degenerate throwbacks" by their facial features. In the United States, George Beard focused on the frenzied pace of the industrializing continent as a source of "neurasthenia," but a countertrend which stressed constitutional degeneration—a forerunner of the American eugenics movement—emerged in 1881 after the assassination of President Garfield. The assassin was said to have been a degenerate.

Tanya Luhrmann's anthropological study of American psychiatry at the close of the twentieth century illustrates the disagreements that have continued to characterize the field. Contemporary psychiatrists, she writes, have inherited the "Cartesian dualism that is so marked a feature of our spiritual and moral landscape" (2001: 6). Accordingly, she identifies two contrasting models—biomedical psychiatry and psychodynamic or psychoanalytic psychiatry—which are shaped by "profoundly different notions of what it is to be a person" (2001: 5). The biomedical psychiatrist views a mental illness as akin to any other physiological illness, while the psychoanalyst sees psychological thought and behavior as intimately entwined with an individual's past, personality, and conscious and

unconscious experiences. Ideally, Lurhmann states, contemporary psychiatrists are trained to be fluent in both "drug therapy," which is associated with the biomedical model, and with "talk therapy," an outgrowth of psychoanalysis. But she explains that in practice these models offer such different understandings and expectations of the human self that very few individual psychiatrists successfully integrate them. "Between those who think psychodynamically and those who do not," she states, "there is a gulf as wide and alienating as between those who think logically and those who do not" (57). In recent years, as is well-known, the introduction of managed care and its imperatives of medical efficiency and cost containment is "driving psychotherapy out of psychiatry" (23).

Ideas, Lurhmann shows, play an even more critical role in the science of psychiatry than in other medical fields because there are no physiological tests for mental illness. All psychiatric diagnoses rest on the observations of the psychiatrist herself. But the presumption of knowledge also rests on the ways in which science is symbolically managed in any given psychiatric context. For example, Lurhmann spent ten hours a week for two months at one particular psychiatric unit of a hospital that established a clear reputation for a "scientific orientation" (129). It was a locked ward with a number of patients who exhibited psychotic symptoms, all of which were understood by the staff as outcomes of biological brain dysfunctions. Like doctors in other units, psychiatrists in the ward wore white laboratory coats and the psychologists and nurses in the ward deferred to the doctors as the "real" practitioners of medicine (132). When doctors spoke amongst themselves about patients, they spoke of organic illnesses and in Luhrmann's words their explanations were never "muddied by complexity" (139).

Psychiatric psychotherapists, on the other hand, proceed with understandings that differ strikingly from the doctors in the ward. As recently as the 1960s, psychiatric psychotherapists were able to think of themselves as guided by science and relying on hard data. "These days," Lurhmann observes, "that protective fantasy is simply less available. A psychiatrist's psychotherapy is no longer conceived of as the encounter of a scientific and theoretically trained mind with a needy patient. It has become the naked emotional encounter of two souls" (110).

Lurhmann also notes a tendency among psychiatrists to gender-type the biomedical model as masculine and the psychodynamic model as feminine. The former model enables the practitioner to maintain a distance from clients and to administer curatives in the form of prescriptions. Many male psychotherapists told her that other people judged them as strange for being interested in feelings, and one resident confided in her that if a psychiatrist chooses the psychoanalytic route, "people think you're a wimp" (100). Another male told her that the psychoanalytic requirement that a doctor establish a close relationship with his patients would make him feel as if he were abandoning science by doing so. Biomedicine, on the other hand, enables a doctor to treat a disease, a condition, rather than a person, and thereby feel more scientific.

In principal most psychiatrists "would agree," Luhrmann speculates, "that the division between biomedicine and pschodynamics is a false dichotomy. "But it is the way that psychiatrists are taught," she explains (6). Psychiatric training separates two main skill sets, the first combining diagnosis and psychopharmacology, and the other combining psychodynamic theory and psychotherapy. Luhrmann contrasts the vastly different cultural perspectives of the psychodynamically-oriented American Psychiatric

Press's symposia which focus on clinical approaches, with the Society of Biological Psychiatry's meetings where "the word that marks these meetings is 'data'" (162).

Lurhmann judges both models to be correct and effective, although not always for the same person. She disputes Michel Foucault's romanticizing of madness and takes strong issue with R.D. Laing's casting of schizophrenics as individuals who are only labeled such because they are more insightful, creative and sensitive than our society allows. "Madness is real," she argues, and to treat it as no more than a product of social labeling is a "misplaced liberalism of appalling insensitivity" (12). Nonetheless, she concludes, "to say that mental illness is nothing but disease is like saying that an opera is nothing but musical notes. It impoverishes us. It impoverishes our sense of human possibility" (266). The direction that psychiatric ideas will take in coming years depends in great part upon larger political, cultural and economics decisions. Ultimately we face a "moral decision...whether to understand (the mentally ill) as the detritus of a broken brain or also as people whose suffering implicates us, whose struggles are resonant with our struggles...We are so tempted to see ourselves as fixable, perfectible brains. But the loss of our souls is a high price to pay" (293).

THE HISTORICAL EMERGENCE OF PSYCHIATRY AND THE "SCIENTIFIC ATTITUDE" – TWO CONTRASTING HISTORIES

Two recent histories of the role of science in the profession of psychiatry diverge nearly totally in perspective. In *A History of Psychiatry: From the Era of the Asylum to the Age of Prozac* (1997), Edward Shorter, a historian of medicine, takes the position that psychiatry has experienced consistent, if difficult and uneven, progress toward greater scientific mastery of major mental illnesses. His emphasis on schizophrenia and other

serious maladies stems from his contention that psychiatric forays into neurosis and personality disorders diluted the scientific focus in psychiatry and led to generations of confusion about the jurisdiction of the field. Thus, Shorter delivers scathing evaluations of Freudian psychoanalysis and other "romantic" diversions from the biological roots of mental illness. He opens his work by claiming confidently that, "If there is one central intellectual reality at the end of the twentieth century, it is that the biological approach to psychiatry—treating mental illness as a genetically influenced disorder of brain chemistry—has been a smashing success" (vii). This success was only possible when psychiatric practice turned away from focusing on disorders of the mind to recognizing the "primacy of the brain" (viii).

Robert Whitaker makes precisely the opposite claim in *Mad in America: Bad Science, Bad Medicine, and the Enduring Mistreatment of the Mentally Ill* (2002). He charges that outcomes for patients diagnosed with schizophrenia in the United States have worsened in the past twenty-five years; that treatments at the end of the twentieth century are not more efficacious than they were at the beginning; and that, according to the World Health Organization, patients with major mental illness in the developed world face considerably poorer odds of recovery than those in developing countries where the use of shamans is often more common than modern medicine and electroshock therapy. Whitaker argues that American psychiatry's early roots in "moral therapy" offered a promising beginning, but that the field took an inhumane and ultimately futile turn when it began to emphasize scientific detachment from the internal world of the patient. He paints an unremittingly grim history, and calls for reforms that would reintegrate some of

the “moral therapy” treatments adopted by the Quaker-run asylums in the nineteenth century.

That two histories which rely extensively on professional psychiatric journals for their accounts of the scientific treatment of madness could reach such opposite conclusions is of sociological significance. Not only is psychiatric knowledge always in process and always contested, as Rosenberg (2006) has illustrated, but the historical interpretations of past scientific judgment are also contested. The differences between Shorter’s and Whitaker’s histories of psychiatry are partly attributable to the major differences in perspectives of the human self that Luhrmann (2002) documents. Histories of psychiatry, states the sociologist Nikolas Rose, do not merely document the past of professions or serve as ideological justification. They also a play a “constitutive” role in the invention and reinvention of scientific and professional “truths” (1997: 43).

Shorter (1997) refers to himself as a “neoapologist” for psychiatry, and systematically refutes all forms of revisionist critiques from the anti-psychiatry perspectives of Thomas Szasz and R.D. Laing, to the symbolic interactionism of Erving Goffman, to the post-structuralism of Michel Foucault. He also takes exception to the “professionalization” approach in sociology, which he claims disproportionately perceives psychiatrists as serving their professional needs by claiming jurisdiction over forms of social behavior. All of these critiques, he argues, fail to grasp what has now been decisively demonstrated to be the biological nature of mental illness.

In the process of refuting Foucauldian and Marxist critiques of psychiatry, Shorter insists that it was neither capitalism nor the modern industrial state that led to the creation of psychiatry and to the invention of the asylum, but the dawning of Enlightenment

science which confidently projected that mental illnesses could be treated and potentially cured. Methods that were later judged brutal or inhuman represented the attempts of psychiatrists to try every possible means to assist patients in recovery or at least to afford them some potential of relief from debilitating symptoms. Shorter refutes Foucault's assertion that the rise of modern psychiatry led to large-scale confinement of the "mad," insisting that a close examination of the evidence demonstrates that nineteenth century asylum treatment represented a major humane advance over the confinement of the mentally ill in family basements and attics. He refers to new evidence which suggests that conditions at the notorious "Bedlam" (St. Mary of Bethlehem) were likely not as extreme as they have been portrayed.

From the beginning, Shorter explains, differences between the neuroscientific approach and the psychosocial approach divided psychiatry. If at times individual psychiatrists agreed with both approaches, and if today some profess to adhere to a "biopsychosocial approach," Shorter argues that in actuality the two approaches are "polar opposites...both cannot be true at the same time. Either one's depression is due to a biologically influenced imbalance in one's neurotransmitters, perhaps activated by stress, or it stems from some psychodynamic process in one's unconscious mind" (26-27).

Shorter acknowledges that as psychiatry progressed as a university science, it did make unfortunate forays into theories of degeneration that extended beyond the boundaries of reasonable science and unwittingly provided fodder for the eugenics movement. Most psychiatrists in the United States and elsewhere, he states, never accepted degeneration theories, although he does fault German academic medicine as a

whole for "[standing] waist-deep in the Nazi sewer" (99). The pendulum swung away from brain biology even before the rise of Nazism, as the psychosocial paradigm gathered strength, but the specter of the Holocaust would lead psychiatrists away from genetic theories for decades.

Significantly, he argues that Emil Kraepelin rather than Sigmund Freud should be regarded as the most central figure in psychiatry. It was Kraepelin's categories that later provided the basis for the psychiatric profession's Diagnostic and Statistical Manual (DSM). Freud, Shorter argues, based his psychoanalytic paradigm on "intuitive leaps of fancy" (100) while Kraepelin led psychiatry toward a genuine classification system of mental illnesses. Paradoxically, Shorter believes that Kraepelin actually brought the first wave of biological psychiatry to an end by refuting the importance of biological causes as the central matter of importance in psychiatry and shifting the focus instead toward outcomes. In other words, the symptoms of Kraepelin's diagnotistic category "dementia preacox" were grouped together not because they were thought to have a common cause but because together they had a common prognosis—continued deterioration.

Describing the late nineteenth century, Shorter posits that a number of factors led the field away from a genuinely scientific approach. In the first instance, the enormous overcrowding of the asylums due to an increase in certain psychiatric diseases (alcohol-induced psychosis, neurosyphilis, and schizophrenia) combined with a strain in state funding, demoralized psychiatrists and led many of them to search for a way out of the asylums. This dovetailed with the desperation of middle class families to escape the specter of inherited mental illness, and who were prepared to follow any path that would lead them away from the increasingly notorious asylums. Individual patients were

anxious to be told that their symptoms represented "nervous conditions" rather than organic diseases, and gratefully pursued neurological and psychiatric treatments such as hydrotherapy, spa treatments, and the "rest cure." The diagnosis of "neurasthenia" proved wildly popular in the early twentieth century, as it provided a "weasel word" (129) that would incorporate disparate symptoms with psychological features and allow patients to avoid the diagnosis of dementia preacox (the precursor of schizophrenia). What is important here is that biological psychiatrists who "lacked[ed] any understanding of the mind as the intervening link between brain and behavior" gradually alighted on the role of psychological factors in mental disorders. The effect of placebo cures—such as the all-milk diet—occasionally so transformed patients' lives that doctors came to realize that the act of "submission to a doctor's authority" had powerful curative effects. Thus even biologically-oriented psychiatrists turned to psychotherapeutic treatments[16].

While asylum psychiatry experienced the further erosion of its morale during the late nineteenth century, Freudian psychoanalysis emerged from the field of neurology to offer an alternative. Shorter describes the rise of psychoanalysis as partly comical, partly diabolical and always absurdly unscientific. In one of the most decisive passages in his book, he writes: "Psychoanalysis failed to survive because it was overtaken by science" (146).

Shorter faults psychoanalysis for the stagnation of science in psychiatry on two accounts, the first being that it convinced middle class patients that psychoanalytic treatment provided the conditions for general happiness. This focus on unhappiness rather than genuine biological conditions isolated psychoanalytic psychiatry from

[16] Shorter is clear that psychotherapy is a valued tool of both psychosocial and biological approaches. The former uses it to treat conditions of the mind, and the latter uses it because it complements biological treatments.

medicine. But far worse, from Shorter's point of view, many American psychoanalysts believed that they could treat genuinely psychotic patients with psychodynamic methods. Psychoanalysis steered psychiatrists away from a search for genuine biological conditions toward belief in the "schizophrenogenic mother" (177) as the source of schizophrenia. And in the most unscientific manner possible, psychoanalysis dismissed critics who referred to the effective of other theories as "neurotically disabled" (178).

Biological progress did continue throughout the twentieth century, but the popular attention focused on psychoanalysis obscured important advances. Even Shorter concedes that at first, early twentieth century attempts at medical treatments for psychoses "had an aura of desperateness about them" (190). If some of them—such as frontal lobotomies and electroconvulsive shock treatment—achieved notoriety in the public imagination, they represented the "restless experimentation within psychiatry to find a cure for the chronic psychoses," and not the sadistic motives that some commentators attributed to them. Many treatments that Whitaker describes as bizarre and cruel Shorter argues were exceptionally effective. Malarial fever treatment for neurosyphilis was in fact the "first successful physical therapy in psychiatry" (193). Electroconvulsive shock unquestionably worked—and continues to work—for many patients with major treatment. The antipsychiatry movement has dismissed many treatments on principle, such as the induction of comas with insulin, but Shorter argues that the alternative would have been "nihilistic hopelessness" (208). At a time when psychoanalysis continued to dazzle the public with its futile treatments, "insulin comas

were producing astonishing alleviations of symptoms" (210), even in patients who were previously considered beyond treatment[17].

The psychopharmacological revolution that began in the mid-twentieth century, Shorter explains, grew out of the relentless efforts of asylum psychiatrists to improve upon insulin shock and other treatments. It had become clear to biological psychiatrists by the mid-twentieth century that schizophrenia resulted from genetic causes, and psychiatrists explored a range of more-or-less ineffective treatments from sulfur injections to the injection of typhoid fever. These treatments did not work and were often exceptionally painful, but Shorter credits the researchers with acting on "the best of faith" (248). Ultimately, he credits drug companies rather than hospital researchers with the development of the first successful psychiatric drugs treatments. Pharmaceutical firms had discovered the tranquilizing effects of chlorpromazine (later marketed as Thorazine) by testing it on animals. In schizophrenic humans, it led to remission of symptoms without the occasional memory loss associated with electroconvulsive shock. Thorazine and the drugs that followed transformed "psychiatry from a branch of social work to a field that called for the most precise knowledge of...the effect of drugs on the body" (255).

Shorter concludes with some ambivalence. He expresses strong approval that the field has largely refuted psychoanalysis, although he does allow that it might be useful for individuals who have an interest in pursuing an "inner voyage" (310). He emphasizes the medical basis of psychiatric interaction with patients, arguing that patients benefit from knowing that doctors possess greater biological knowledge than social workers and

[17] Shorter concedes that insulin shock was a dangerous procedure with a mortality rate of about one percent. These odds had to be weighed against the alternative of debilitating, permanent psychotic depression.

psychologists. He also cautions that the tendency to emphasize the "uniqueness of the individual," (297) which dampens psychiatric progress by discouraging classification. On the other hand, he expresses some concern that "psychiatrists have an obvious self-interest in pathologizing human behavior and have been willing to draw the pathology line ever lower in their efforts to tear as much counseling as possible away from competing psychologists and social workers" (289). He worries that such a tendency has resulted in the treatment of 2.5 million American children with Ritalin each year, despite the lack of clear evidence that there is a biological basis for ADHD. He speculates that successful drugs have become so well-publicized that patients predetermine their own prescription needs and seek out psychiatrists as a source for prescriptions. He fears that the underlying influence of the profit motive lies behind the over-marketing of certain drugs as "miracle cures," starting with Milltown (meprobamate) in the mid-1950s, progressing to Valium (diazepam) and Librium (chlordiazeproxide) in the 1960s, and cresting with Prozac (fluoxetine) in the 1990s. He worries that the "good science" behind the anti-depressants has been accompanied by an unwelcome "scientism," (324) which shifts many behavioral traits to the "depression scale" and defines them as treatable by wonder drugs.

Shorter's book includes no references to spirituality or religion, or to transpersonal psychiatry. The tone of his discourse implies that philosophical and religious questions lie far beyond the boundaries of psychiatry. He does not entertain the transpersonal claim that there are "levels" of consciousness that can extend beyond the ordinary, and in fact stresses that psychiatry should confine itself strictly to serious biological disorders of the brain. For Shorter, psychiatric science is rooted in organic

processes, and the subtle interactions between mind and brain. Psychiatric experiments with hallucinogens warrant only two brief mentions in his book, in which he judges that LSD research "led to no clinical payoffs" (265).

In *Mad in America: Bad Science, Bad Medicine, and the Enduring Mistreatment of the Mentally Ill* (2002) Robert Whitaker offers a bleak depiction of the current and historical state of science in psychiatry. He builds the case that two parallel lines of treatment—"moral therapy" and the "biomedical model"—have run through psychiatric history in the United States. The former offered humane and for a time effective treatment, while the far more dominant biomedical/scientific approach generated many cruel, even brutal outcomes.

Whitaker maintains that psychiatry's drive to be scientific often resulted in a willingness to employ methods that could inflict great pain on patients, leading individual practitioners to look the other way in the name of dispassionate analysis and objectivity. To be scientific was to put aside feelings and sentiments, to be unafraid to be bold and cruel when necessary. From the beginning, the Enlightenment ethos encouraged the fledging science of psychiatry to use fear and intimidation to more or less frighten the minds of the mentally ill to surrender their madness. Methods included inducing severe nausea and bleeding, near-starvation diets, and severe scalp and genital irritants. Benjamin Rush, the doctor widely credited as the father of American psychiatry, viewed madness as a disease of the circulatory system and advocated draining four-fifths of patients' blood. He then introduced the "Tranquilizer Chair," which spun patients rapidly around while their limbs were strapped down and their heads confined in wooden contraptions.

Moral treatment emerged in the late 18th century at least in part as a response to the harshness of the medical model, Whitaker writes. Doctors during the French Revolution noted that when mentally ill patients were not treated harshly, their behavior improved. In response, the Quakers of York opened a "retreat" for the mentally ill in 1796, replete with gardens and walking paths. This asylum used poetry, gardening, and warm baths as therapy, and even held tea parties for patients. It reported high rates of success.

Dozens of asylums based on this model opened in the United States in subsequent decades. Pennsylvania Hospital for the Insane used the Moral Treatment model and included on its grounds a greenhouse, a museum, a grandly appointed dining room, a gymnasium for daily exercise, suits and dresses for patients, and an emphasis on healing and patient responsibility. Whitaker quotes Dorothea Dix who compared Moral Treatment favorably to the asylums using the medical model in which, "Insane Persons (were) confined...in cages, closets, cellars, stalls, pens! Chained, naked, beaten with rods, and lashed into obedience" (34). Nonetheless, despite the reportedly high success rates, the Moral Treatment asylums did not last long. Medical psychiatrists resented the competition, and lobbied states to mandate that medical doctors be placed as supervisors in every asylum. Meanwhile, patient loads increased and state funding dropped. Doctors began using bloodletting, opiates, and physical restraints instead of gardens and warm baths. Neurologists "dealt the final blow" to the moral treatment model after the Civil War, when they began to enter the asylums and institute themselves as "men of hard science" (37). They derided the former asylum superintendents as naively influenced by

Christian tradition, and proposed that mental illnesses be viewed henceforth as outcomes of brain disease.

The collapse of Moral Treatment left no counterweight to scientific objectivity. In the search for scientific cures, Whitaker writes, "nothing was too outlandish," and psychiatrists "invariably reported good results" (78). On the hypothesis that mental illness resulted from impurities in the kidneys, hydrotherapy involved suspending patients in a bathtub for many hours or even days, sometimes with eyes and ears covered and sometimes with ice on their heads. A variation involved the "needle shower," consisting of pressured water, or the "wet pack" which involved binding patients in wet cloth for hours or days. Upon drying, the wet pack would produce severe overheating and occasionally heart failure. "Hysterical" women sometimes had their uteruses removed, and clitoridectomies were used in American asylums up to the 1950s. In 1916, Trenton State Hospital began experimenting with the removal of mentally ill patients' teeth, on the theory that bacteria on teeth could cause brain diseases. Doctors began removing other organs, including gall bladders and fallopian tubes, for similar reasons[18]. "Deep-sleep therapy" involved induction of sleep through heavy use of barbiturates, but came to an end as a result of high mortality rates. Some doctors used refrigerated blankets or ice cabinets to drastically reduce body temperatures, but the treatment also produced high fatality rates.

The shift of psychiatry into its more modern era, in the 1930s, involved the use of insulin to repeatedly induce comas, with the theory that comas killed degenerated brain

[18] Whitaker notes that the APA began investigating Henry Cotton's claims of an 85% cure rate for mental illnesses through the removal of bodily organs. Attempts to replicate the results were unsuccessful, and a subsequent investigation found that more than 100 people (or 43% of those he treated) died at Cotton's hands.

matter. Whitaker states that the insulin coma was psychiatry's first reliable method for changing patients' behaviors, but that it resulted in "total disorientation" and "infantile" behavior. It was widely used, but produced a 5% fatality rate. Shorter cites the insulin coma as a genuine success, but Whitaker states that the relapse rate was worse than if the patients had been left untreated. Whitaker and Shorter also disagree about the efficacy of the injection of malaria-infected blood to induce high fevers. Both note that Dr. Julius Wagner-Jauregg won the Nobel Prize for it in 1927, but Whitaker argues that the treatment had a high fatality rate while Shorter states that it freed many from syphilitic dementia.

Metrazol convulsive therapy, involving the injection of camphor, was used to induce seizures, which were seen as antagonistic to schizophrenia. The procedure produced a "convulsion so severe it could fracture bones, tear muscles and loosen teeth," (81) and had to be used multiple times in each patient in order to "work." Even Shorter allows that patients dreaded the procedure. Whitaker states that it had to be implemented almost always against a patient's will, but that the feelings of patients were regarded as irrelevant in the scientific model.

Whitaker and Shorter also agree that electroconvulsive therapy (ECT) represented a more humane advance over metrazol shock, but disagree about the order of magnitude of this advance. Whitaker states that about one million Americans were forced into ECT in the mid-twentieth century, while Shorter reports many of them found the treatment helpful. As further indictment of the "scientific attitude," Whitaker reports on a 1942 program instituted at Bellevue Hospital in New York in which 98 "schizophrenic" children (aged 4 to 11) were shocked twice daily. The program was hailed as a success,

but a follow-up study found that "many of the children had become violent and disturbed" (99-100). Aspects of the program were repeated in 1955, when Bellevue's Dr. Lauretta Bender gave a two-year-old a treatment of twenty electroconvulsive shocks.

The "darkest era" in psychiatry, according to Whitaker, occurred between 1900 and 1950. Parallel to the hospital experiments, psychiatry made many inroads into the eugenics movement with a "stream" of articles in journals based on the reputedly "science-based notion that the mentally ill are possessed of a germ plasm that could threaten the population at large" (42). Though it never took strong root in England, eugenics received enthusiastic financial and moral backing from Americans ranging from the Carnegie and Rockefeller Foundations. "By 1914," he writes, "forty-four colleges [including MIT, Harvard and Cornell] in America had introduced eugenics into their curriculums, with the subject taught as a science" (49). Aaron Rosanoff declared in his 1920 *Manual on Psychiatry* that mental illnesses are genetically inherited, and that one-third of Americans had defective genes. The most prominent American psychiatrist of the time, Adolph Meyer, served on the advisory council which formed to consider the creation of a eugenics association. Floyd Haviland, president of the American Psychiatric Association, agreed to offer his advice but did not join.

The American Eugenics Society formally constituted in 1926 and lent its support to state legislation barring the mentally ill from marrying, and to mandatory sterilization laws that were enacted in various states. The U.S. became the first country in the world to adopt such forced sterilization when the Supreme Court ruled that it was indeed constitutional. Oliver Wendell Holmes wrote in the majority opinion that science had proven the genetic basis of mental illness. So began the support that American

psychiatry would—perhaps wittingly, perhaps not, according to Whitaker—lend to Nazi extermination programs. The Rockefeller Foundation had begun funding extermination programs in Germany in the early 1930s at the same time as a number of American sources began to propose the idea of "merciful" extermination of the insane[19] (65).

The Nazis began their extermination of 70,000 mentally ill hospital patients in 1940, providing the equipment that one year hence would be used in concentration camps housing Jews. It was the photographs of liberated German concentration camps that aroused social criticism of the psychiatric profession in the mid-1940s, as American newspapers began to make comparisons with U.S. asylums. Newspapers published "scenes of patients cuffed, strapped to chairs, and wrapped in wet sheets," and told of "high mortality rates," routine violence, and very little medical oversight (67). Whitaker quotes the words of a letter from the grand jury which indicted the Cleveland State Hospital. They reported being "shocked beyond words" (71) at the conditions that included patients sleeping several to a bed, and on the floors and hallways. These types of conditions Whitaker speculates were at least indirect results of eugenic belief that the mentally ill were hopelessly deranged products of faulty genes.

Whitaker sees a missed opportunity for the potential return of humane therapy along the lines of the Moral Treatment model, once eugenics was fully discredited and lobotomy dismissed as inhumane. But instead of a shift toward moral therapy came the dawning of the psychopharmacological revolution. Whereas psychiatrists such as Alan

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[19] Whitaker quotes Harvard anthropologist Earnest Hooton who wrote that the insane were "'specimens of humanity who really ought to be exterminated'" (65), a *New York Times* article which agreed with Connecticut legislators that some of the mentally ill "'exhibited a case for merciful extinction,'" and the Nobel Prize-winning Doctor Alexis Carrel who wrote in 1935 that the insane who had committed any crime "'should be humanly and economically disposed of in small euthanistic institutions supplied with proper gases'" (66).

Hobson (2001) and Peter Kramer (1995) describe the introduction of psycho-pharmaceutical drugs as revolutionary, Whitaker views them with a jaundiced eye. Chlorpromazine, the drug which started the "revolution" in 1954, was initially described by psychiatrists as a "lobotomy in pill form" because of the "vegetative" effects it produced (143). Some doctors described its use as "hibernation therapy." But the field, eager to recover from various criticisms, shifted the narrative surrounding chlorpromazine from "immobilization drug" to an "antipsychotic miracle cure." Not coincidentally, Whitaker notes, the pharmaceutical industry had already begun to "shower" individual psychiatrists and their professional organizations with marketing funds.

One-by-one the neuroleptics (antipsychotics) were hailed as all-but-miraculous advances by psychiatrists, but described by patients as producing fiercely negative and often permanent side effects. Thorazine frequently resulted in tardive diskinesia, in which the tongue or jaw moves uncontrollably and "people suffe[r] from jerky, spasmodic motions of all types...and difficulty walking, sitting, or standing..." (190-191). Tardive diskensia is irreversible, and about 90,000 psychiatric patients develop it each year even in the current period. Thorazine's immediate successor, Haldol (haloperidol), produced akathisia—extreme agitation—in 75 percent of patients. Whitaker writes, "[Patients] told of pain so great that they wanted to 'jump out of their skins'" (187), and suicides were frequent. In fact, Whitaker argues that the "image we have today of schizophrenia is not that of madness—whatever that might be—in its natural state. All of the traits that we have come to associate with schizophrenia—the awkward gait, the jerking arm movements, the vacant facial expression, the sleepiness, the lack of

intiative—are symptoms due, at least in large part, to a drug-induced deficiency in dopamine transmission" (164).

Whitaker concludes that "any hope of reforming our care of those 'ill with schizophrenia' will require us to rediscover, in our science, a capacity for humility and candor" (287). He continues, "In truth, the prevailing view in American psychiatry today is that there are any number of factors—biological and environmental—that can lead to schizophrenia...Thus, if we wanted to be candid...we would admit this: Little is known about what causes schizophrenia. Antipsychotic drugs do not fix any known brain abnormality, nor do they put brain chemistry back into balance...Although such candor might be humbling to our sense of medical prowess, it might also lead us to rethink what we, as a society, should do to help those who struggle with 'madness'" (291).

PERSPECTIVES ACROSS THE MAINSTREAM OF PSYCHIATRY

Roy Porter concludes his history of psychiatry by stating that at the dawn of the twenty-first century, "controversy rages, within and beyond the profession" (2003: 217). He notes that at the opening of the twentieth century, the *British Medical Journal* pronounced that psychiatry had made enormous progress in the treatment of mental illness. The *Journal of Mental Science*, a specialist journal, on the other hand, struck a downbeat chord, noting that psychiatry had made very little progress in understanding mental states. Porter states that the same disagreements about the state of psychiatry's understanding can be seen a hundred years later. Some in psychiatry are quite sanguine about where the field stands, and some believe that the field is no closer to understanding mental illness than it was decades ago. The following review of psychiatric sources indicates the differences in perspective. It is meant to add context to Nikolas Rose's

contention that psychiatrists actively invent the human self by making choices about what it is that they see.

The View that Psychiatry is Making Steady Advances

Nancy Andreasen, editor-in-chief of *The American Journal of Psychiatry,* immediately establishes the claim in her preface to *Brave New Brain: Conquering Mental Illness in the Era of the Genome* (2004) that psychiatry has experienced steady scientific advancement, and is now in a state of profound optimism regarding new possibilities for treating mental illness based on brain science. Andreasen writes that many psychiatrists anticipate that at some point in the 21st century major mental illnesses will be easily and effectively treated. She is clear that mental illnesses are organic, i.e., that they are effects of brain chemistry. She gives no credence whatsoever to arguments that the mind is anything more than a product of the brain. Mental illnesses *affect* the mind, she writes, but are not products of the mind (of psychical processes) because the mind *is the product of the brain.*

However, Andreasen cautions that in light of technological progress, psychiatry must not distance itself from its humanistic tradition. In fact, she affirms that one of psychiatry's greatest strengths is that it has long been the branch of medicine closest to philosophical, literary, and social science traditions. Despite her conviction regarding the primacy of the biomedical model, Andreasen's book includes a number of reflections that seem to be in common with many transpersonal psychiatrists. First, she points to the difficulties inherent in analytical knowledge, noting that it must be complemented by synthetic knowledge to produce a full picture of the human condition. Analysis provides

important knowledge, but can also "destroy the vital essence and meaning of things by breaking them into pieces" (26).

Synthesis, she writes, is not used often enough in science, and is necessary to provide insight into the wholeness of things. The following quote could have been extracted from a typical transpersonal writing: "If we can achieve synthetic thinking, which is more difficult than analytic thinking, we can perceive things as they really are. Synthesis permits us to see things free of boundaries, as they exist in the natural world, *as a divine creator made them*" (26, emphasis added). This passing reference to a "divine creator" is never addressed again in the text, nor are the subjects of spirituality, religion, ultimate meaning, or other subjects similar to those addressed by transpersonal psychiatrists.

Andreasen addresses what she believes to be unfortunate and unnecessary dichotomies that divide the field of psychiatry: "mind versus brain," "drugs versus psychotherapy," and "genes versus environment." Each of these dichotomies marks lines of division in the field, with partisans on either side. Her introduction to the synthetic model that would be required to overcome these dichotomies could also have been written by a transpersonal psychiatrist: "Abandoning these false dichotomies gives us a much better grasp on how life actually works, if we can handle the more complex way of thinking that arises when the world consists of continuities without arbitrary dividing boundaries" (35). She develops a synthetic model, and then expands the model to include "levels of mind and brain," with eight levels ranging from genes at the lowest, to thought at the highest. This model appears very similar to models developed by the transpersonal

psychologist Ken Wilber, with the exception that Wilber's models extend beyond thought to include various levels that might be called "soul."

Harvard Medical School faculty Alan Hobson (2001) provides another account of scientific progress within psychiatry in which brain chemistry promises to reveal ever greater and deeper understandings of human behavior and of mental illnesses. But he does so by noting from the outset the psychiatry is a field in a state of deep crisis, professionally, intellectually, and institutionally. In fact, he quotes Daniel Weinberg, a psychiatrist at the NIMH, who sums up the general outlook inside the profession as "woeful" (210). Hobson wrote his book after interviewing "a wide range of experts" from key psychiatric institutions and titled it *Out of Its Mind: Psychiatry in Crisis* (2001). But for Hobson the problems are not so much scientific as social. Extensive scientific knowledge of the brain is growing exponentially, but many forces misunderstand it or fail to appreciate it.

Neither Andreasen nor Hobson mention transpersonal psychiatry, or any form of spiritual psychiatry directly, but his passing comments about clinical psychology provide an indication of how he might regard the work of transpersonal psychiatrists. He warns that a desire for mystery sometimes leads otherwise capable people to resist the clearest implications of brain science (15). He also warns that since clinical psychology does not have the foundation of hard science, it attracts "New Age and other gurus" and as a result "all manner of psychological theories are fair game" (212). He also worries that clients are "wander[ing] off" toward therapies that can "involv[e] pretty bizarre things like reincarnation, invocation of 'natural' forces or 'therapeutic touching'" (59).

A Defender of Psychoanalysis as Science

Elio Frattaroli, a professor of psychiatry at the University of Pennsylvania, offers an extensive defense of psychoanalysis as a science in *Healing the Soul in the Age of the Brain: Becoming Conscious in an Unconscious World* (2001). He opens by providing six quotes from prominent psychiatric experts who represent what he deems the "official philosophy" in psychiatry, all to the effect that mind is absolutely and irrefutably reducible to brain chemistry and brain functioning. They are stronger views than those expressed by Andreasen, but quite similar to those of Hobson. Frattaroli views these conclusions as dehumanizing and based on misunderstandings of science and the actual effects of psychiatric medications. Moreover, he says of the quoted passages that "there is no evidence whatsoever to support them! No philosopher, scientist, or psychiatrist even pretends to have any idea *how* brain processes could possibly produce the mysterious and ineffable experience of human consciousness. Yet the belief that 'brain...creates mind'—and the general philosophy of 'scientific materialism' it reflects—is so strongly held by so many scientists that it is considered unscientific even to question it" (8).

Despite a title which so prominently includes the word "soul," Frattaroli uses the term largely in the sense of the Freudian unconscious rather than in a more traditionally religious sense. He makes no reference to any of the works of the transpersonal psychiatrists, although much of his reasoning parallels transpersonal claims. On the other hand he argues that dynamic psychotherapy "has a powerful advantage over all other approaches that make use of the inward journey" (78), among which include favored transpersonal favorites such as meditation and vision quests. He borrows concepts from

quantum physics[20], and judges that Freudian psychoanalysis holds up to scrutiny as a modern science while much of what qualifies as scientific psychiatry is "based on an outmoded nineteenth-century model of scientific objectivity that was made obsolete three-quarters of a century ago" (167). He affirms the psychoanlaytic aim of describing the patient's "emotion both as an inner experience that is known through listening to the soul and as a measurable biochemical event or an external behavior that is visible in the patient's facial expression and body language" (173).

In many ways, Frattaroli takes a position more extreme than many of the transpersonal psychiatrists. "[My] understanding is so fundamentally at odds with the modern psychiatric view of mental illness as a chemical imbalance," he writes, "that I want to reemphasize it here. *I am convinced that all psychiatric symptoms originate...as adaptive mechanisms to relieve the anxiety generated by inner conflict*" (78-emphasis in the original). By including psychotic symptoms, this statement stretches beyond models proposed, for example, by transpersonal psychiatrist John E. Nelson and transpersonal psychologist Ken Wilber, who take great pains to attribute major psychoses to physical causes. Nonetheless, Frattaroli does allow that medication sometimes provides the stability necessary for psychodynamic therapy to work effectively. His model, he writes, is an integration of both sides, rather than a rejection of one side or the other.

Frattaroli writes that his intention is to restore the soul as the proper focus of the psychiatric field. The soul is a "complex entity, the center of the whole person, the experiencing self..." which encompasses "mind and body, spirit and flesh" (20). The narrow "neurological vision of Medical Model psychiatry" he judges to be the result of

[20] Transpersonal psychiatrists borrow concepts from quantum physics at great length, and write extensively about how it ushers in a new paradigm not only subatomic observation but on other levels as well. This approach has been refuted as a misapplication by others (e.g., Steven Barrett, above).

"shallow philosophical prejudice (13). Aspects of the interiority are reduced in the medical model to neurological "glitches," and "nuances of thought, feeling, impulse, and imagery...which are of such deep concern to our patients" are reduced to "mere epiphenomena" (83). Meanwhile, a quantum approach would consider both psychic interiority and brain chemistry. Echoing Nancy Andreasen, he warns that analytical approaches always come at the cost of wholeness.

Psychiatry as Psychopharmacology – Debates from Within

Peter Kramer's Case for "Better than Well" Psychopharmacology

Brown University psychiatrist Peter Kramer attracted enormous popular and professional attention with the publication of *Listening to Prozac* (1995). His critics charged him with exuberantly endorsing the widespread use of antidepressant drugs (SSRIs) to reshape or remove personality traits such as shyness, introspectiveness, and dourness, and he himself coined the term "cosmetic psychopharmacology." Kramer responded in the second edition that his critics had "overlooked the worried tone of much of the book" (329). He insists that in fact *Listening to Prozac* is an attack on biological reductionism and an incautious approach to SSRIs. He insists that the text was more or less a meditation on what constitutes the self, and how individuals, professions and cultures respond to technologies—like anti-depressants—that alter the make-up of the self. But the text itself seems to send multiple mixed messages, which may or may not be the author's intent. He freely speculates in its pages about what Prozac and similar drugs reveal about the human personality, and about where such personality-shaping drugs may lead our society at large.

"Biologists do not know what depression is," writes Peter Kramer. "The reigning model at the cellular and chemical level, the biogenic-amine hypothesis, is demonstrably false or incomplete. Understanding of minor mood disorders, or normal variants, is even more primitive...The biological study of the self is so primitive as to be laughable" (283). Thus, Kramer, a seeming advocate of the biomedical model who has been so roundly criticized by transpersonal psychiatrists and others provides perhaps the most strongly-worded admission of the limits of biological psychiatry. He makes the point that SSRIs do not treat disease pathologies; rather they provide clinicians with subtle indications about the essence of personality. By "listening" to the subtle changes produced by Prozac in their clients, psychiatrists may come to understand which aspects of the self are essential and which are contingent.

He worries openly that "our culture is caught in a frenzy of biological materialism," (xiii) and that such biological reductionism is leading parents to view their children's behavior with biological eyes rather than to "look for unconscious or spiritual causes" (319). He reiterates his belief that psychotherapy remains the "single most helpful technology for the treatment of minor depression and anxiety" (327) and voices his hope that in the future psychopharmacology will become a sub-discipline of psychotherapy. Nonetheless, he frequently slips into odes of high praise for the powers of SSRIs, with terminology that can only be likened to the miraculous. He states that the introduction of Prozac ended "thirty years of stasis in psychopharmacology" (60) in which clinical work was "all art and no science" (59). Instead of general effects produced by the older tricyclics, the SSRI family of drugs was allowing clinicians to "reach into a person and alter particular elements of personality" (97).

In many of his patients, Prozac was not so much restoring patients to former levels of happiness but was transforming them in broad ways—"extend[ing] social popularity, business acumen, self-image, energy, flexibility, sexual appeal" (13). He writes pointedly about one patient transformed by Prozac: "There is no unhappy ending to this story" (10). He quotes another patient's self-assessment of her experience with Prozac as the difference between "night and day" (27).

He suggests that people—psychiatrists and laypersons alike—are squeamish about drugs for the wrong reasons. The fact that Prozac may indeed make many consumers feel "better than well" is a desirable goal that conflicts with the traditional American distrust of "hedonism" and "fear of pleasure" (263, 264). On the other hand, the suspicion that if drugs reduce psychic agony they are robbing individuals of their essential selves is misplaced. Why, he asks, is pain seen as more authentic than happiness and self-confidence? This type of thinking, that links anguish with creativity, parallels the Catholic elevation of guilt to a holy virtue. Likewise, he dismisses the charge that SSRIs may be drugs that facilitate social conformity in the way that benzodiapenes were "mother's little helpers." On the contrary, he suggests, Prozac may be a "feminist" drug that allows depressed and un-self-confident women to get out of the house and into the workforce. He responds to critics who argue that the mood-brightening effects of SSRIs may lead patients away from inner psychological quests that in actual patients the "drug seems to aid rather than inhibit the struggle to locate the self" (278).

Three Critiques of the Pharmacological Approach by Psychopharmacologists

Harvard Psychiatry Professor Joseph Glenmullin dismisses Kramer's *Listening to* Prozac as "couched in a barrage of almost senseless data, which unfortunately looked like impregnable science to the lay readers" (13). After encountering negative symptoms in his own patients and reviewing the psychiatric literature, he wrote *Prozac Backlash* (2000) as an exploration of the reputedly faulty science behind the widespread use of SSRIs and to explore non-drug psychiatric alternatives. He focuses on some of the long-term side effects and withdrawal symptoms that may result from the use of SSRIs, including facial tics, muscular spasms, and involuntary tongue movements. His encounters with these symptoms in his own patients, as well as his review of psychiatric literature, led him to conclude that SSRIs have been drastically overprescribed and may be causing long-term brain damage in some patients. *Prozac Backlash* is both the title of his book, and of a physiological occurrence he says results when the brain responds to long-term SSRI use. He speculates that SRRIs may be following what he calls the "10-20-30 year pattern" that has marked the introduction of psychiatric "miracle cures," in which a particular group of drugs is hailed as a miracle treatment in the first ten years, regarded more warily as evidence of problems mounts over the second ten years, and then regarded as potentially nightmarish drugs after about thirty in light of occasional disasters.

Glenmullin derives his evidence from his experiences in private practice and from an intensive review of psychiatric literature, and insists his conclusions have been "tempered and cautious...and rooted well within the known evidence" (335). He quotes journal articles which suggest that SSRIs boost the presence of serotonin in the brain

beyond healthy levels, to pathologic levels. Even the DSM-IV now includes a "specific diagnostic category recognizing the neurological side effects being seen with Prozac-type medications, including the untreatable tics" (23). Side effects may take months or years to develop but the FDA does not conduct long-term monitoring. Moreover, it employs only five doctors and one epidemiologist to monitor 3,000 drugs on the pharmaceutical market. Meanwhile, physicians and drug companies routinely inform consumers that they may need to take SSRIs throughout their entire lifetime. Neither the medical profession nor psychiatry maintains a central database to keep track of reported side effects of SSRIs. Only by reading case study after case study would a doctor, researcher or consumer obtain an accurate sense of what occurs in patients. Glenmullin lists dozens of instances in which doctors report severe side effects and withdrawal symptoms in patients, many of which are untreatable, permanent, and debilitating.

Psychopharmacology's "narrow chemical prescription for healing people in troubled states," Glenmullin writes, "seem[s] oddly out of sync with the essential psychological nature of many psychiatric symptoms" (190). The focus on chemistry above all other concerns produces a "profound lack of communication" between psychiatric patients and their doctors. Moreover, Glenmullin maintains that the very cornerstone of psychopharmacology rests on the assumption that behavior results from chemical imbalances; this hypothesis has never been demonstrated by a medical test or in any laboratory experiments. Nonetheless, "in an act of remarkable reductionism the disease model acts *as though* there were such a simple, biochemical explanation for psychiatric symptoms" (196). In addition, every finding linking psychiatric symptoms to a particular gene has been retracted after scrutiny. He examines the source for claims of

serotonin imbalance and for selective uptake, and pronounced them "pseudoscience" (202). He contrasts American psychiatry's increasing reliance on SSRI's with European psychiatry's explicit warnings that SSRI are associated with "agitation and suicidality" (185). In psychiatry, he maintains, drug prescription has become a ritual similar to the "healing methods" found in ancient Chinese and Native American contexts but with far more potent chemicals.

Glenmullin proposes what he believes to be effective alternatives to drug treatment for various conditions which rely on psychological methods. He examines the effectiveness of psychotherapy, couples therapy, cognitive therapy, herbal treatments, nutrition, changes in sleep patterns, alterations in work patterns, and twelve-step groups, and suggests that they might at least be attempted prior to using potent chemicals. He suggests that psychiatrists encourage patients turn to "family, friends, and church" as "valuable community resources" (238). Other than the vaguely-spiritual twelve-step programs, this passage is his only reference to something that may resemble a transpersonal approach. The church here is to be used more as a source of friendship networks rather than for any intrinsic spiritual value.

Elliot Valenstein is not a psychiatrist but has spent forty years studying brain chemistry as a biopsychologist. He states immediately that he is not opposed to the use of drugs in psychiatric therapy, or the use of biological models to explain human behavior. He insists that he did not write *Blaming the Brain* (2002) with the intention of proving any biological models to be inadequate, but as an open-minded exploration of the ability of various brain chemistry theories to explain human behavior and of the use of given drugs to treat mental illnesses. He writes that his experience and his investigation

into various areas of research convinced him that most medical claims that mental disorders result from "biochemical imbalances" in the brain "are far from compelling and are most likely wrong" (3). "I have examined the arguments for [various chemical theories of mental illness] with an open mind," he writes, "and have tried to tell a coherent and convincing story when lecturing to graduate students, but there is just too much data that indicate that the theories could not be right" (165). Neither biopsychology, he writes, nor psychiatry, nor any branch of medicine, yet understands what causes mental disorders. Drugs sometimes do lead to improvements, but no one knows exactly why.

Valenstein notes that the shift from the psychoanalytic to the biochemical model in psychiatry has been nearly total, with virtually every department chair now committed to the brain chemistry approach. In contrast, psychiatry devoted very little attention to the role of brain chemistry until the 1940s, when various researchers took note of the powerful effects of LSD. Though he notes that most early experimentation with LSD focused on religious experience (Aldous Huxley), peak experiences (Abraham Maslow), and meditation and mystical experience (Albert Hoffman), it was eventually discovered that LSD's powerful effects resulted from the blockage of serotonin reuptake in the brain. This became "the first clear statement that mental states might depend on the action of a neurotransmitter[21]" (15). Thorazine (chlorpromazine) ushered in the pharmacological revolution in psychiatry in the mid-1950s, followed by Haldol (haloperidol), which was "found to be many times more effective than chlorpromazine in treating schizophrenia" (36). In successive order emerged the monoamine oxydase inhibitors (MAOI's) and

[21] Valenstein asserts that LSD had no psychotherapeutic value, which contradicts a number of transpersonal psychiatrists.

tricyclic antidepressants for treating depression; lithium for treating biopolar disorder; and the minor tranquilizers for treating anxiety. Valenstein finds it to be significant that each of these drugs was discovered by accident (i.e., not in response to any psychiatric theory). Theories emerged to explain the drug effects only after the drugs were widely prescribed, but "based on the very little knowledge of brain chemistry that was available at the time" (56). Nonetheless, the theories became entrenched and were defended despite "the clear inadequacies and much contradictory evidence" (57).

Valenstein suggests that the widespread use of psychiatric drugs cannot be viewed in isolation from the fact that the drug provided the profession with the medical legitimacy it needed. The potential profit combined with the challenge of uncovering the precise mechanisms involved in producing drug effects attracted skilled researchers to the task. Nonetheless, he argues that despite all of the scientific effort dedicated to understanding neurotransmitters and drugs that operate on them, "the whole question of how antidepressant drugs work and what causes depression is no more clear today than it was in the 1960s" (79). He cites a review of studies that he believes delivers a "crippling blow to any theory that assumed that either a serotonin or norepinephrine deficiency was the cause of depression" (98), and alleges that the review was ignored because it did not suit professional or economic interests. Thus, the serotonin deficiency theory has become a "cultlike belief" that "is a testimony to the strong need for simple solutions to complex problems" (102).

He makes similar claims regarding antipsychotic drugs, including the dopamine theory of schizophrenia on which such drug treatments are based, or even the classification of schizophrenia as one disease. "The evidence," he states, "does not

support any of the biochemical theories of mental illness" (96). Patients who use antipsychotics face a "Catch 22 dilemma" (118) because most will face relapse if they stop taking the drug while in remission, but if they continue taking the drug they face the risk of developing the serious side effects of tardive diskenesia. As did Whitaker, Valenstein cites a World Health Organization report indicating that schizophrenia relapse rates after treatment are lower in developing countries where antischizophrenic drugs are rare.

David Healy writes in *Let Them Eat Prozac* (2004) that he has always been and remains committed to biological treatments for psychiatric disorders. He immediately distinguishes himself from the antipsychiatry tradition of Thomas Szasz and R.D. Laing because he does not agree that mental disorders are "myths." Nonetheless, he is deeply concerned by the extent to which corporate marketing has penetrated the psychiatric profession. Psychiatric science, he states, is being gradually transformed into "Big Science" as its needs become more and more identical to those of the pharmaceutical industry. The thousand -fold increase in the rate of depression diagnoses after the introduction of Prozac in the late 1980s, he judges, resulted not from scientific improvements in diagnostic capacity but from the enormous success of Eli Lilly's marketing campaign. Likewise, as SSRIs such as Zoloft and Paxil approached the end-patent stage, they were reclassified as treatments for anxiety and re-patented.

Healy writes that both psychiatry and anti-psychiatry have been "swept away and replaced by 'corporate psychiatry.' More than one quarter of all biopsychiatry journal articles are now ghostwritten by companies who pay handsome consulting fees to leading scientific psychiatrists for their bylines. Information criticizing drug effects—from

withdrawal symptoms, to tardive diskinesia, to akathisia, to suicidal ideation—are simply not reported and little drug testing is conducted.

It should be added that the psychiatrist E. Fuller Torrey, author of *Freudian Fraud: The Malignant Effects of Freud's Theory on American Thought and Culture* (1999), and one of the most outspoken supporters of the biomedical model of mental illness, has recently begun questioning the influence of the pharmaceutical industry on the field. Fuller Torrey has been so outspoken a supporter of the psychopharmacological approach to schizophrenia that his public talks often draw protests from groups criticizing the reputed over-medicalization of mental disorders in psychiatry. Nonetheless, in an article in *The American Prospect* (2002) titled "The Going Rate on Shrinks: Big Pharma and the Buying of Psychiatry," Fuller Torrey expresses alarm at the enormous sums being showered on American psychiatrists. According to his figures, pharmaceutical firms spend between $8,000 and $13,000 per psychiatrist in the United States to market prescription-only medications. Over and above this figure, pharmaceuticals contract with psychiatric "advisers" whom they provide with business-class air fare, four-star hotels, and honoraria of $2,000 to $5,000 to speak favorably about their products. Most worrisome for Fuller Torrey are the "pharmaceutical extravaganzas" that take place at psychiatry conventions, in which major drug companies build elaborate exhibitions replete with dazzling gifts for attendees. The overall impact, he concludes, is that psychiatrists receive literature appearing to provide objective evaluation of drug products and their side effects without being told that experts who endorse the drug frequently own company stock and receive $10,000 retainers. The amounts of retainers appear to vary directly in relation to how favorably the expert endorses the drug. He writes that one

psychiatrist who endorsed the efficacy of the anti-depressant, Remeron, receives $75,000 per year from its manufacturer, Organon.

The impact of pharmaceutical funding seems to be roiling other members of the field as well. Loren Mosher, chief of the NIMH's Center for Studies of Schizophrenia from 1968 to 1980, and editor-in-chief of the *Schizophrenia Bulletin*, posted his resignation letter from the American Psychiatric Association on the internet. "[I]n my view," he writes, "psychiatry has been almost completely bought out by the drug companies." He suggests, with some bitterness, that the group officially change its name to the American Psychopharmacological Association, charging that drug companies have so overwhelmed the APA's objectivity that even the process of training new psychiatrists has become little more than a training "in the art and quasi-science of dealing drugs, i.e., prescription writing."

CONCLUSION

David Pilgrim and Anne Rogers (1994) write that sociological perspectives on psychiatry have followed several consecutive stages. The social causation approach, "which accepts the legitimacy of psychiatric nosology," (521) emerged first in the late nineteenth and early twentieth centuries and remained the primary sociological account for the first half of the twentieth century. By the 1960s, symbolic interactionists such as Erving Goffman and Charles Lemert produced highly influential works that challenged the epidemiological focus of the social causationists, and shifted sociological focus to interactions between patients and staff in psychiatric insitutitons. Marxist sociologists focused their work in the 1970s on the ways in which psychiatry served the economic interests of the state. By the 1980s, Pilgrim and Rogers explain, Foucauldian

perspectives had made an epistemological break with all previous sociological approaches to psychiatry and "opened up the inevitability of plural social realities and the precarious nature of knowledge claims" (524).

The pervasive influence of psychiatric conceptions and "technologies of the self," has transformed the U.S. into a "psychiatric society," Pilgrim and Rogers claim (526). But the very concept of the self has "entered a crisis that may well be irreversible," notes the Foucauldian sociologist of psychiatry Nikolas Rose (1997: 169). At a time when the self is in crisis, the "psy disciplines"—psychiatry, psychology, and psychotherapy—continue to craft discourses of human normality and abnormality. "Psy experts have achieved a certain privileged positions over the past century," writes Rose, "for it is psy that claims to understand the inner determinants of human conduct, and psy that thus asserts its ability to provide the appropriate underpinning, in knowledge, judgment, and technique" (13).

Disagreements about what constitutes legitimate science in psychiatry range widely across the mainstream of the field, as documented by sociologists such as Rose (1997), Rosenberg (2006) and Pilgrim and Rogers (1994); anthropologists such as Lurhmann (2002); historians such as Porter (2003) and Shorter (1997); and journalists such as Whitaker (2002). If the self has entered a period of crisis, as Rose claims, what do psychiatrists see when they examine human behavior? For some of the psychiatrists noted above, the object of psychiatric knowledge is still the psyche, interpreted as both a mind and a body which are enfolded within a larger unit identifiable as soul (Frattaroli, 2001). Others, such as Andreasen (2001), discourage any notion of mind which can be interpreted as more than the product of brain chemistry. Hobson (2001) notes that

disagreements about how to interpret and treat psychiatric symptoms have left the field in a state of deep crisis.

"The biological study of the self is so primitive as to be laughable," writes the psychiatrist Peter Kramer (1995: 283). Kramer is one of the most widely-known popular advocates of the use of antidepressants to enable patients to become better than well. Yet he insists that biologists have come nowhere close to understanding what depression is. Glenmullin (2000) and Valenstein (2002) likewise note that every major theory—including the "dopamine hypothesis" that links excess dopamine to schizophrenia; the "catecholamine hypothesis" that links excess norepinephrine to mania; and the serotonin hypothesis of depression that links too little serotonin to depression—based on connections between levels of neurotransmitters and specific mental illnesses has been widely rejected. Therefore, Kramer urges psychiatrists and the culture at large not to abandon the search for spiritual and unconscious causes of human mental states.

Valenstein (2002), Glenmullin (2000), Healy (2004), and Torrey (2002) have drawn attention to the growing ability of pharmaceutical companies to shape the psychiatric view of mental illness and the "science" of diagnosis. Their research illustrates Rose's (1997) point that views of the self in any given place, time, or context are based on active choices of those with authority and power. Valenstein, Glenmullin and Healy emphasize the nightmarish potential for psychopharmacology to overwhelm other psychiatric focuses. Kramer, on the other hand, emphasizes the bright prospect psychopharmacology now offers individuals with a wide array of personality symptoms to become "better than well."

Whom do we believe when we are faced with contested versions of reality?" (161), asks the historian of medicine Roy Porter. His rhetorical point is that the field has been contentious for decades. As much as the field strives to be a precise medical science, Porter shows that it has never been free from political, economic, and philosophical trends. The theoretical, diagnostic, technical and linguistic tools that psychiatrists have deployed in specific contexts also seem to have been broadly dependent on personal inclinations. As one example meant to provoke a humorous and ironic retrospective among today's readers, Porter notes that as Paul Cezanne and the Cubists were gaining broad popular acclaim, the British psychiatrist Theodore Hyslop pronounced that they must clearly be "suffering from neurological eye complaints" (179).

Likewise, the sociologist of medicine and science Charles Rosenberg notes that psychiatric boundaries are "always in process, always contested, and never completed" (2006: 420). As a culture, we are broadly aware of psychiatry's arbitrary and contested terrain. But paradoxically, the more aware we become aware the more we insist upon psychiatry's ability to explain the sources of our behavior in precise medical terminology. "The dominance of reductionist styles has a long history in the explanation of human behavior," he states, "but it has an extraordinarily salient place today. We have never been more infatuated with visions of molecular and neurochemical—ultimately genetic—truth" (417).

On a panel in which he presented research aimed at lobbying the American Psychiatric Association to include a new category for "spiritual emergencies" in the *Diagnostic and Statistical Manual-IV*, Robert Turner asked, "Is consciousness located in the body, or is the body located in a field of consciousness?" (Turner, 1992). To some,

this question has long ago been settled in favor of material explanation and might appear absurdly naive. But the lenses through which psychiatry views the mind—the sources of mind, the connections between mind and brain, and the ways to treat the mind—remain contested. Some observers of psychiatry, such as Rose (1997), Rosenberg (1997; 2006), Whitaker (2002), and Lurhmann (2000) even deploy the original language of the psyche when they examine what it is that psychiatrists study and treat. Rose notes that "the 'body' itself is a historical phenomenon...an outcome of a particular cultural, scientific, and technical history" (183).

CHAPTER EIGHT
TRANSPERSONAL PSYHOLOGISTS AND THE MAINSTREAM: BRIDGES AND BARRIERS

> All of us in the transpersonal field—I don't have to tell you this—we are looked upon by conventional theorists as being totally flaky, wacko, off the wall, crazy. We are sort of looked on as the phrenologists of the universe. Well-intentioned but totally nuts. So I have tried to be, in my writing, very critical, very discriminating, very sharp, very intense.
>
> Ken Wilber, responding to an interviewer in 1995

That quote and others similar to it served as an early impetus to this project. Wilber's implication that the culture of the human sciences has eliminated any discussion of spiritual considerations, no matter how rigorously formulated, made sense to me on the surface. I could not recall any point during my undergraduate or graduate education during which questions regarding the nature or source of human consciousness received any examination. Given my understanding of what it meant to be scientific, I also viewed the transpersonal literature as something quite strange indeed, with its integration of traditional academic theory and studies in spiritual psychology. But I also grew more curious about how the culture of academia dispenses with issues of consciousness and spirituality. After a systematic reading of transpersonal literature, the need to understand the personal insights and experiences of the transpersonal psychologists themselves became pressing. I chose to conduct face-to-face, in-depth interviews with leading contributors to the transpersonal literature in order to understand the circumstances surrounding emergence of the transpersonal perspective. Most important for this study, I wanted to understand how to the mainstreams of psychiatry and psychology have responded to the development and the premises of transpersonal psychology. To build a

sample I began with contributors to the *Textbook on Transpersonal Psychiatry and Psychology* (1996) because that text stands as a statement of the overall focus of transpersonal psychology, and because it includes a representative cross-section of transpersonal authors. All twenty-nine contributors were invited to participate, and eleven agreed. I then supplemented the sample pool by interviewing transpersonal psychologists who contributed to or held key positions in transpersonal institutions: the *Journal of Transpersonal Psychology*, the Institute of Transpersonal Psychology, past-presidents of the Association for Transpersonal Psychology, and authors and editors of key transpersonal texts. I conducted a twenty-one interviews were conducted (for names, titles and dates of interviews see Appendix A).

All respondents were asked about their professional development, from their decisions to pursue psychology or psychiatry, their perceptions of their graduate or medical school training, and their experiences working professionally in teaching, research, private practice or other settings. The purpose of these questions was to establish how they perceived their disciplines, and how those perceptions may or may not have changed over time. Inquiries were also made regarding respondents' attitudes toward "spirituality" or "religion" prior to and during the pursuit of their professional paths in order to understand why the transpersonal perspective became appealing to them at some point. In order to assess the accuracy of claims such as Wilber's above, or transpersonal psychiatrist Stanislav Grof's charge that university human sciences departments "dogmatically" resist and reject studies of spirituality, respondents were questioned about their experiences with professional associations, university departments, and mainstream journals.

A second category of questions was posed to all of those who played roles in founding or contributing to the overall development of key transpersonal organizations. The objective was to understand the circumstances that gave rise to the institution, the strategic considerations of the proponents, and reactions and interactions of any kind on the part of mainstream organizations or colleagues. The interview pool included the two founders of the Institute of Transpersonal Psychology, the founding editor and current editor of the *Journal of Transpersonal Psychology*, and four past-presidents of the Association for Transpersonal Psychology. Also interviewed were the editors or co-editors of five of the major foundational volumes of collected works in transpersonal studies: Bruce Scotton and John Battista, co-editors with Alan Chinen of the *Textbook of Transpersonal Psychiatry and Psychology* (1996), Charles Tart, editor of *Transpersonal Psychologies* (1987), Seymour Boorstein, editor of *Transpersonal Psychotherapy* (1996), Frances Vaughan, co-editor with Roger Walsh of *Paths Beyond Ego* (1993), and Rosemarie Anderson, co-editor with William Braud of *Transpersonal Research Methods for the Social Sciences* (1995).

Taken together, the interviews suggest that the respondents hold a diversity of perceptions regarding the fields of psychology and psychology and the degree to which these fields have been open to the investigation of spiritual and religious questions. Most respondents took a more tempered view regarding the mainstream of their disciplines than the two most prolific and public transpersonal authors, Stanislav Grof and Ken Wilber. A number of the interviewees reported that they have noticed considerable increases in mainstream receptivity over time. Others have established professional lives almost completely separated from mainstream institutions, maintaining professional

connections only or primarily with other transpersonal colleagues. It also became clear that transpersonal psychologists whose primary research has been in the fields of parapsychology or psychedelic psychotherapy are much more likely to perceive a barrier to the acceptance of their research than those who primarily focus on spiritual approaches.

The interviews also provided further clarification as to how transpersonal psychologists and psychiatrists define the nature of transpersonal experiences and how they approach the question of spirituality. For instance, James Fadiman, one of the first psychologists to join the transpersonal discussion group in the 1960s, explained that the early participants perceived the transpersonal approach as a "fourth force," building sequentially on the previous movements within psychology: behaviorism, psychoanalysis, and the humanistic tradition. Early transpersonal proponents saw themselves as reintroducing western psychology to the spiritual psychologies and practices that had been developing for centuries in other global regions. In Fadiman's words:

> To us it was a new frontier, but people had been living there for thousands of years...So there was a realization that we were starting from a very sophisticated place, because we weren't inventing a psychology, we were incorporating thousands of years of research.

When asked how transpersonal psychology differs from conventional psychology, Seymour Boorstein, a transpersonal psychiatrist and editor of several books exploring transpersonal psychotherapy, replied:

> It acknowledges...a certain interconnectedness, a oneness, which can be experienced in a certain meditative state directly, which for me by the way is

> where traditional Freudian psychotherapy comes in, as it grapples with the dual principles of love and hate. My own concept, which I think most spiritual people would probably agree with, would say that at our basic core we are loving, and that when we get frightened we cover up the love. That is working from a very different paradigm from traditional psychiatry.

Boorstein defined spirituality as "that which is beyond our traditional sense of self...it is the accessing, or living a life, or doing a practice aimed at...the personal work of getting rid of the obstructions to the heart."

Robert Frager, one of the two co-founders of the Institute of Transpersonal Psychology, described the transpersonal approach to spirituality:

> We have an operational mode of transpersonal psychology which includes these six areas: physical, emotional, intellectual, community, creative expression, and spiritual, in other words, the notion of the whole person...Part of the transpersonal agenda was to take some of the things that had been described in limited, theologically-biased language in religion, in order to look at areas like mystical experiences, but to develop a [culturally unbounded] language and a way of doing research on it.

Many transpersonal psychologists and psychiatrists addressed the question of the relationship between spirituality and religion. Frances Vaughan, a prolific contributor to the transpersonal literature, offered one of the most direct explanations:

> I see it in terms of psychological development. For example, James Fowler's *Stages of Faith* describes different stages of development. As children, we take stories literally, then we interpret them as metaphors. Then we may go through a period of totally rejecting whatever religion we grew up with, then we begin to appreciate the deeper meaning as we explore in our experience the metaphoric meaning. Finally, we may come to our own kind of universalizing faith, which he says is free of ideological shackles. But nevertheless, it doesn't ignore the reality of experience.

Some of the major contributors to the transpersonal literature take a more critical posture. The parapsychologist Charles Tart, for instance, expressed a wariness of what he perceived as too much willingness to believe in spiritual themes among some transpersonal advocates. He explained:

> I teach a course at ITP on parapsychology as a basis for transpersonal psychology...This is a very strong position of mine, and I am one of the few people who holds it. One of the basic points I make is, 'Look, you cannot just say, 'I am going to believe in spiritual things because it makes me feel better.' We live in a science-dominated world, and we have to come to accommodations with mainstream science. And you don't do that by ignoring it. Otherwise, you stay marginalized.

Psychologist Richard Yensen suggested, however, that transpersonal phenomena, such as Maslow's "peak experiences," are rejected on face value no matter how rigorously they are proposed or studied. There is in psychology, he said, "a religious zeal for excluding those things, although it is not owned or identified as a religious zeal."

Arthur Hastings, a parapsychologist and faculty member of the Institute of Transpersonal Psychology, explained that one of the distinguishing lines between transpersonal research and other social scientific or humanities related to spirituality and religion is the emphasis of the former on experience. Psychology and sociology of religion he viewed as engaged primarily or all but exclusively on observations of behavior in formal institutions. Even religious studies programs primarily exclude experiential study. He proffered the example of Buddhist studies: "Usually, if you go to Buddhist studies at most universities, the idea of having an *experience* is certainly beyond the pale. So for a Buddhist scholar to be meditating is a really new thing." Most scholars of religious experience "take the position that they don't have to experience these things;

they can just read about them." In contrast, the psychology program at ITP emphasis that "you have to experience what you are learning."

PART ONE – THE EXPERIENCES OF INDIVIDUAL RESPONDENTS

Early Perspectives of Interviewees Regarding Spiritual and Religious Issues

Initial questions aimed to understand early experiences, beliefs, and attitudes that may have led respondents to transpersonal psychology. Some respondents indicated that they held long-term interests in spiritual or religious questions prior to entering their doctoral programs in psychology. The other respondents either held little or no interest in the subject, or regarded it with some degree of antipathy. Those in the latter category attribute their shifts in perspective to a variety of sources, including emersion in the spiritual traditions of another culture, as in the case of psychiatrist Donna Dryer's study in Thailand while in medical school; an encounter with meditation courses, as in the case of psychologist Kaisa Puhakka's extra-curricular activities while in graduate school; or a transformative experience with psychedelic substances, as was the case for James Fadiman.

Four of the respondents felt that the term "atheist" best described their earlier approaches to the question of religion. Richard Yensen recalled that he was "a pretty rabid atheist" when entering college. He was conditioned in this view by his cousin, a psychiatrist, whom he said impressed upon him: "There is no spirit, there is no God. [Such thinking] is the opiate of the masses. There is just science, and science is the new God. Science is truth." Donna Dryer reports that she was "an avowed atheist when I was in college," until a friend offered to pay for transcendental meditation (TM) courses provided that Dryer agreed to practice every day. By the time she entered medical

school, meditation had become a daily part of her life. Seymour Boorstein said that throughout his medical school training and psychiatric residency, "there was nothing spiritual about me...I was a bona fide atheist." Then, in 1970, after he had been practicing psychiatry for a number of years, he had an unexpected spiritual experience which he has described in his book, *Transpersonal Psychotherapies* (1996).

John Nelson described his atheist during medical school at the University of Missouri in the mid to late-1960s as all but a necessity:

> At that time, I was an atheist and a scientist. That was my worldview, which meshed quite nicely with medical school where you have to put on those horse blinders that force you to look in one direction only. Anything else is a distraction, and let me tell you, you don't need distractions when you're in medical school. There is a corpus of knowledge you must master, and if you're going to go that road that should be your primary task without any other kinds of distractions. You don't want to do any paradigm challenging.

Charles Tart, Rosemarie Anderson, and Ron Jue indicated that they had had life-long interests in spirituality, from somewhat different perspectives. Rosemarie Anderson has written in her book *Transpersonal Research Methods for the Social Sciences* (1998) that there was never a time in her life when she did not have a spiritual connection. But, she explained in the interview, "I kept my spiritual life—which was active—separate from my training. I taught Sunday school, for example, for a year or two during my graduate training. But I kept that kind of quiet, because people laughed at that affiliation." Anderson is a full-time faculty members of the Institute for Transpersonal Psychology and an ordained Episcopalian priest.

Charles Tart reported:

> I was reading [parapsychology and spirituality] by the time I was 12 years old...but I wanted to be a discriminator. I don't want people to believe in the

> spiritual because that is somehow better. I don't want a spiritual that is nonsensical. I want the transpersonal to arise from research that keeps separating out what works from what doesn't work.

The remaining respondents described an event or process that led them toward an interest in spiritual points of view. Frances Vaughan said that she had developed some interest in comparative religion and humanities during her undergraduate coursework in psychology, and became interested in the psychology of Carl Jung before she entered her graduate training in psychology. After having finished his undergraduate studies at Harvard, but before entering graduate school at Stanford, James Fadiman underwent a psilocybin [the extract of psychedelic mushrooms] session with Richard Alpert and Timothy Leary. This led him to spend his years as a graduate student working on the subject of therapeutic healing through psychedelic substances. Miles Vich stated that it was his close and lifelong identification with nature—especially the experience of spending much time in forests as a child—that led him to develop an interest in transpersonal psychology.

Robert Frager developed his interest in transpersonal subjects when he went to Japan to complete his doctoral research at Harvard. He explained the personal impact of his studies:

> I studied Aikido in depth from a teacher who demonstrated in a very physical way that a shift in consciousness could manifest in the physical world....I also got involved in meditation in Japan. So I spent two years in Tokyo and came back to Harvard with my research completed...very much committed to the physical and spiritual practice of Aikido. And those things made me ready to be a maverick at Harvard.

"I have always had a resonance with the teachings from Hinduism, especially the Upanishads," explained Psychologist Ron Jue, who has served as president of the

Association for Transpersonal Psychology for six years. After receiving his Bachelor's degree in biological science at California State University, he taught high school science and then received a Fulbright scholarship to study in India. His philosophy professor supplied him with a list of spiritual teachers and:

> For the next eighteen months I went on a spiritual odyssey. I met a lot of teachers...[Jiddu] Krishnamurti had several schools in India and I visited several of them...but I didn't find what I wanted to find in India. I went to Burma and studied with one of the teachers there, and got very much involved in meditation. Then I went to Bangkok. Outside of Bangkok, I met a teacher. Her name is Haan Ja Ne..She didn't speak English, but I was attracted to her because she was a teacher of the monks and the nuns there...She was an incredibly wise woman...She taught me how to really be present, I think, and to really see the spiritual aspect in life, not outside of ordinary life...For over a year I studied with here. I was her first American student...

But Jue indicated that the most definitive experience for him followed his instruction with religious teachers in Asia, when he returned to California. He discovered that the well-known humanist psychologist Willis Harman was conducting research with LSD and since he was now engaged in a Master's degree program in psychology, he asked to participate.

> I administered MMPIs and then finally, under [Harman's teams] direction, I had my own experience. It was the most profound experience I had ever had. I really began to—it was more profound than anything I had experienced in meditation, in terms of going beyond the ego boundaries, and transcending and going into these other spheres of reality. It was most amazing...It really turned my whole life around. I might add that there was one very profound experience that I had under the influence of LSD, and that was the awareness that the spiritual life was the life of recognition, of recognizing the spiritual in everyday life. It was not like some—it was not to be found in Tibet, or in some cave, or something like that. The message was very, very clear that no matter what you do, everything is very spiritual.

Similarly, John Nelson described his experience with LSD:

> In 1968, I graduated (from the University of Missouri School of Medicine) and came to California. I was in Long Beach, doing my internship at Saint Mary's Hospital of Long Beach. Well, 1968 in California was the heyday of the psychedelic movement. A couple of friends and I drove up to Idlewild one weekend when I was an intern. I was thirty years old then. We went up into the woods and I took LSD. It was pretty much the most amazing thing that ever happened to me....There was a radiant light, and it was infusing me with divine inspiration. It was like a choice. I could die right then and there. I felt completely out of my body. I was all alone on the mountaintop in Los Padres Falls. An angel told me, "No, no. You're not ready to die. Go back to your body. Go finish your internship, and go live your life. You've got more to do down here." It is difficult to remain an atheist after you have experiences of such magnitude and proportion. That got me going on a spiritual track.

Respondents Describe Their Professional Training Programs

Most respondents reported that they regarded their professional training programs quite favorably while they were enrolled in them, and many continue to look upon those previous experiences favorably. Whether or not the respondent felt a sense of dissatisfaction, or "alienation," in the words of one participants [Donna Dryer], seems partly dependent on when the respondent developed an interest in spiritual inquiry. Seymour Boorstein, for instance, reports having had "zero dissatisfaction" with his training in medical school and in psychoanalysis, because "there was nothing spiritual about me in those days." Other respondents indicated at least some degree of conflict between their interests in spiritual research and the environments and expectations of their graduate and medical school programs.

Robert Frager explained that after his encounter with Aikido and with meditation in Japan during his field research:

> I felt like I was 'passing' when I was doing social-psychology in some ways. I did, if you will, come out of the closet. But once out of the closet, I received no negative feedback. I was a good enough graduate student and they asked me to

> teach an honors seminar at Harvard. I gave it the title, "Asian Conceptions of Man," and I had people read [Ramana] Maharshi and Ramakrishna out of the Yoga tradition. I had them read books about Zen. We tried fasting, and chanting, and meditation. It was a very popular class, too.

Rosemarie Anderson states that she made a "conscious choice" not to discuss her identity as a Christian while completing her doctoral degree in psychology at the University of Nebraska. The department was socially close-knit, and on a number of occasions the faculty made generalized anti-Christian, particularly anti-Catholic, comments. "People laughed or made fun," she said. Ironically, the chair of the psychology department became a transpersonal psychologist in subsequent years, but "he did not talk about that kind of stuff at the time."

She said that she felt no conflict in keeping her training separate from her spiritual life, because "I felt that our work in graduate school was honest, and integrous, and ethical...and that sufficed. My work was of service, from a Christian perspective." She pointed out with good humor the irony that as a co-author of the core transpersonal methods books that she is a trained Skinnerian:

> I value that training tremendously. It is not as if I spurn that training. Some people expect that, but it is not the case. It [Skinnerian behavioral psychology] is limited in its worldview and perspective, but what it does it does very well. It certainly trained me to observe very well.

Anderson, while a faculty member at the Institute of Transpersonal Psychology, also completed a divinity degree and serves as an ordained priest in the Episcopalian church.

Frances Vaughan's exposure to psychology as an undergraduate at Stanford was also "strictly behavioral," and as a result, she said, "it was not very interesting to me." Only upon discovering humanistic psychology several years after graduation did she

decide to return for graduate studies at the California School of Professional Psychology. Humanistic psychology appealed to her because it was "more growth-oriented than pathology-oriented...less focused on measurement, prediction and control of behavior, and much more focused on values, meaning and purpose in life." She was able to work with one of the founders of humanistic psychology, Carl Rogers, at the beginning of her career.

Miles Vich, who has served as editor of both the *Journal of Humanistic Psychology* and the *Journal of Transpersonal Psychology,* indicated feeling that his graduate department at San Jose State University during the mid to late 1960s did not discourage him—or any other students—from pursuing any particular topic. "It was a department which was just burgeoning like mad," he explained, "and everything fresh and new was going to get a hearing somehow. It was also the countercultural era, and therefore everybody was crying for everything coming out." He described the American Psychological Association as itself "extremely diverse...[it] changes frequently. Cognitive psychology has become a more integrating force...although it is not friendly to religion."

Stanley Krippner, an educational psychologist and a co-editor of *Varieties of Anomalous Experience* (2000), reported having had two separate academic experiences as a graduate student at Northwestern University given that he was involved in two different departments. He invited the noted parapsychologist J.B. Rhine to speak on campus and found that Department of Education to be fully supportive. They were "very open to my interests" in parapsychology and anomalous experiences:

> But, the psychology department was a different thing. The chair of the department did not allow any of its members to attend the J.B. Rhine lecture. And in the psychology department, I wouldn't have thought to mention anything parapsychological or transpersonal while taking those classes. It was just prudent, because why get into an argument with your professors?

After re-emphasizing the extent of openness he encountered in the Department of Education, Krippner recalled the atmosphere in the Department of Psychology: "When they talked about spiritual matters or parapsychological matters in class, it was virtually always in a very negative, condescending, satirical, and derogatory manner...with a couple of exceptions."

Several other respondents reported having experienced a greater degree of discord during their graduate school experiences. Donna Dryer recalls of her years at Harvard Medical School:

> I would sit in medical school classes and feel like what I was hearing was bullshit. I would come to a conclusion or have an opinion that was completely alienated from other peoples' experiences...the way they had set it up [the process of diagnosis] was completely horrifying to me—like objectifying people.

But during her fourth year of medical training, she spent five months among the Hmong hilltribes of Thailand. This experience deepened and extended her sense of spiritual connectedness. She explained:

> They had a very palpable spirit world that they live in every day. The Thai physician that I went into the hills with and worked with for those months was also very knowledgeable and had a very close relationship with many of the shamans in the towns and the villages that we went off to...and I had this whole new set of experiences that I had never had—of being in a spirit world that I could feel.

Upon returning to the United States, Dryer states, "I felt this vacuum—like this large sucking sound of no spirit world. There was nothing here. It was a little scary." But her experience during her internship and three years of psychiatry residency at Cambridge City Hospital introduced her to what she felt to be a more supportive environment. "I think [those years were] the first time I interacted within an institutional setting where at least people didn't put me down, or didn't make me feel ashamed of having had these experiences."

"I was appalled by the lack of conceptual rigor," Kaisa Puhakka says of her Ph.D. program in experimental psychology. "I was also saddened, actually, by the very impoverished and small view of the human psyche, by which I mean the mental life, as well as behavior." She described unexpectedly sensing that most of the psychological research in her program was futile. She reported that researchers often arbitrarily chose variables and designed ways to control the study of the variables ever more precisely without ever asking how such studies contributed to knowing about mental life or human behavior. She opted to leave experimental psychology after completing her Ph.D. and teaching for three years as an experimental psychologist. She chose to study in a psychoanalytic institution so as to pursue psychotherapy as a profession.

James Fadiman said he experienced a "dual education" while in graduate school at Stanford in the early 1960s. He described it in the following way:

> By day I was a psychology student...taking classes and writing papers. By night I was furiously trying to understand consciousness and reading the *I Ching*, the Tibetan *Book of the Dead*, and *The Life of Milarepa*, and trying to make sense of my own psychedelic experience, because I was also working at a place called the International Foundation for Advanced Study, which had a federal drug license to do research. So my mentor was really Willis Harmon [a renowned early researcher with psychedelics]. Stanford did not know quite what I was doing...so

> I had something like a disguised world, where I had a false identity as a graduate student in psychology at Stanford, and a real identity as a very serious researcher on consciousness.

He reported that it took two years to find a committee who would sign off on his dissertation titled, *The Effects of Behavior Change Following LSD Therapy*.

Charles Tart recalled that faculty discouraged him from studying parapsychology throughout his doctoral training at the University of North Carolina at Chapel Hill. "As I spoke to professors...I met resistance," he said. "I wasn't supposed to be thinking about these kinds of things." He also recalled discovering that published parapsychology research was routinely misrepresented by other psychologists:

> I learned that the leading authorities of the field could go absolutely ape when one of their sacred premises was challenged. It was not a rational consideration of whether the evidence was any good. They were so worked up about this [a discussion of reincarnation in a book published during Tart's graduate years] that they were totally irrational.

His advisors warned him against accepting a post-doctoral fellowship with Gardner Murphy, who had written a book on Asian psychology and conducted studies on telepathy. This opposition came despite Murphy's status as a former president of the APA. Tart stated wryly: "He thought we could actually learn something from little brown men in Asia. They [his advisors at Chapel Hill] didn't want me exposed to that wild stuff, so they sent me to California instead—thank goodness."

Richard Yensen experienced what he describes as considerable freedom of movement in his graduate program at the University of California at Irvine, in part because he felt supported in his choices of topic and in part because he spent much of his time studying at other locations. He explained that his application to Irvine read:

"Fundamentally, what I am interested in are altered states of consciousness. That is what has informed my undergraduate education, and that is what I expect to pursue in graduate education. These areas have been abandoned and misunderstood." He was accepted and felt able to pursue the research that he had specified. During his program, he was invited by Stanislav Grof to work as an intern at the Maryland Psychiatric Research Center, where he trained as a psychotherapist. One of Grof's colleagues invited him to Mexico, where he met Maria Sabina, the "woman who had given the secret of the mushrooms to the west, and who became a major figure in my life." He was then invited by another psychiatrist who had been awarded a grant to lead a tour to Mexico, for the purpose of meeting with Maria Sabina. His dissertation on the work that he conducted with Grof proved controversial enough at Irvine that his committee chair took the extraordinary step of inviting a representative from every college in the university to his oral exam. The project was ultimately approved.

Psychiatrist Charles Grob is somewhat younger than most of the other participants in this study, and as such he has been one of the respondents whose education was shaped by some of his forerunners. He described his medical and psychiatric education at Downstate Medical School in Brooklyn and in psychiatry at Cedars-Sinai in Los Angeles, "I was appalled" by the limited framework in which these fields viewed the mind and body. As a pre-medicine student at Oberlin College he changed his major to comparative religion and history "because I felt this was more in sync with what I wanted to learn." Before entering medical school, he worked under the supervision of transpersonal psychologist Stanley Krippner at the Maimonedes Hospital Dream Center. There he discovered Krippner's library of literature on transpersonal, anomalous, and

spiritual experiences. He took special interest in Stanislav Grof's 1972 paper from the *International Journal of Pharmacopsychiatry* on treating patients with terminal cancer with LSD. He chose it to present during a public health seminar during his second year of medical school. The following quote described the reaction and its impact on him:

> It was a moving, great paper. It was a brilliant paper, and it really addressed an area for which modern medicine was very deficient, which was addressing the psychospiritual needs of people who have terminal medical illness. It is something conventional medicine has tended to ignore, and not deal with, shove aside.
>
> That paper, also—Grof developed that book with John Halifax into his second book, *Human Encounters With Death* (1978), a great book. So I presented it to my class, and I was shocked. No one had anything to say. There were no comments, no questions. I thought we would get a really good discussion, but no one wanted to talk about it. No one wanted to talk to me. I realized that I was not supposed to talk about this. This was the mid-1970s, and this was now a taboo topic.
>
> I didn't talk about my interest with anyone, but every month I would go to the medical school library, and take out *Index Medicus* and look up lysergic acid diethylamide (LSD) to see if there was anything new and exciting. Of course, there never was. There were articles on the effects of hallucinogens on, you know, the optic nerve of rats, or salamander reflex, or whatever, but nothing on the relation to the human condition, as it were. There was nothing about clinical applications. At that point, it had become a taboo area. I kept looking at *Index Medicus*, reading whatever I could find. But I kept my interest to myself for many years.

Becoming Affiliated with the Transpersonal Psychology Movement

Participants indicated that transpersonal psychology represented a convergence of interests that had been developing for them over a period of time. James Fadiman, one of the earliest participants in transpersonal discussion groups and the second president of the Association for Transpersonal Psychology, approached editor Anthony Sutich in 1965 after completing his Ph.D. at Stanford to volunteer for *The Journal of Humanistic*

Psychology. He met a number of other participants who were interested both in humanistic psychology and in issues relating to psychedelic psychotherapy, Eastern religious traditions, and altered states of consciousness. He recalled:

> We were in an era...particularly out here [California], where we were changing the world... We were trying to make this bridge between the spiritual and psychological. We knew that the bridge indeed had to be built, but it seemed clear that they [mainstream psychologists] were not going to build out to the middle. So we just had to build it.

Robert Frager said that after he returned from his field studies in Japan in 1966, he:

> began to think that only [Abraham] Maslow was asking the right questions. Before that, Masow was "this grandfatherly type" who could ask the questions he was asking because he was tenured. [But I came to see that] the only one interested in this area of what makes extraordinary human beings seemed to be Maslow. I thought to myself, rather than devote my life to the issues in social-psychology, I thought how much richer and rewarding it would be to study what makes extraordinary people extraordinary. Of course, that's a paradigm shift question.

Frager began meeting other transpersonal pioneers such as the parapsychologist Charles Tart; psychedelic psychiatrist Claudio Naranjo; and the inventor of biofeedback, Robert Ornstein. Michael Murphy invited him to Esalen to teach Aikido, and there he met Fritz Perls. "Back in 1968," he said, "there was no name for this [spiritual or transpersonal psychology movement] yet."

Rosemarie Anderson heard about transpersonal psychology while she was in seminary school in 1981, several years after completing her Ph.D. in psychology. "I heard about it through Sufi circles," she said.

> I am a member of the Sufi Order of the West. It is a western, kind of universalistic grou I was reading traditional theology in my coursework, and then anything else that had a more transpersonal feel to it. I read a lot of [Alfred North] Whitehead at the time, and process theology, narrative theology, liberation theology and hermeneutics. That overlaps with transpersonal psychology.

Richard Yensen became interested in transpersonal psychology when he took a course at UC-Irvine titled, "Altered States of Consciousness: the Psychology of Awareness." There he read Charles Tart's *Altered States of Consciousness*, and decided to undergo an LSD experience. He reported feeling some ambivalence:

> Tim Leary had been at the university several times...I was pretty appalled by watching Leary. I thought he was kind of tuning into the scene around him, and going into a grandiose pose. Nonetheless, he had some fascinating things to say that piqued my curiosity.

Yensen's first LSD experience was "a very powerful experience. It was an experience that was vastly beyond my worldview up until that time. That led me to Stan Grof's work."

John Nelson also was led to the transpersonal movement through an LSD experience in 1968, shortly after his completion of medical school. The experience proved so profound that it compelled him to spend several years in the 1970s writing a manuscript which he entitled *Madness, Mysticism, and Creativity*, blending the work of Carl Jung, R.D. Laing, and Thomas Szasz. Subsequently, he encountered the work of Ken Wilber, which led him to largely rethink Laing and Szasz. During the 1980s he joined a shamanic initiation group at the Esalen Institute, where he also began taking courses with Stanislav Grof. Subsequently, he converted *Madness, Mysticism, and*

Creativity into *Healing the Split: Integrating Spirituality into the Treatment of Mental Illness* (1996).

Bruce Scotton, who co-authored the *Textbook of Transpersonal Psychiatry and Psychology* (1996), reported that his interest in spirituality overlapped with his training in medical school at Columbia University, his residency at Langley-Porter at the University of California-San Francisco, and his training at the San Francisco Jung Institute. His first formal spiritual studies began with his interest at the Integral Yoga Institute in New York, during which he read extensively in the classic works of Hinduism and Buddhism. "For about twenty years I practiced one or both of these, sometimes simultaneously," he stated. "In Buddhism, I got centered in Tibetan Buddhism and studied the Ningma tradition...I also, for a number of years, pretty heavily studied Sri Aurobindo's work....I also visited the ashram in Pondicherry, India a couple of times."

Charles Tart discussed the subject of the general social climate that led to the congealing of transpersonal psychology in the late 1960s. He began by mentioning the prevalence of existential crises in the culture at the time:

> There were lots of people around who had made it, and they had by now reached a point where they were saying, "Is this it?" It's like Maslow's hierarchy of needs, they were discovering the need for deeper meaning. Of course, western religions were not providing the meaning. Psychedelics had entered the cultural picture. There were just an awful lot of people around who had had their minds opened. They had had direct experience or other kinds of ways of organizing the mind. And the spiritual systems—especially Eastern ones—seemed to have something sensible to say about it, something that conventional psychology had nothing to say about, except to dismiss it as bad or crazy.

Charles Grob reported keeping "my interests to myself" for several years after completing medical school and working as a psychiatrist Johns Hopkins. In the late

1980s, he took a post at the University of California-Irvine where he began running an adolescent inpatient unit. Transpersonal psychiatrist Roger Walsh was a senior member of the staff and to Grob's surprise responded supportively when he said he wanted to pursue the now "taboo" subject of the use of hallucinogens for psychotherapeutic treatment. "He was the first person (to respond positively) and he was a professor and I was an assistant professor. So it was great to have my views validated by a senior, highly-accomplished, respected person like Roger."

Experiences In and Interactions With the Mainstream

Miles Vich judged that transpersonal psychology in general is a field characterized by "a lot of modesty." Therefore, it has not been highly vocal about attempting to influence the mainstream. He stated:

> The transpersonal people, as long as I've known them, realize that this is a minority point of view. It's a little corner of things. Publishers call it a 'niche interest.' Marketing people call it a 'small cultural market.' Nobody sees it as overgrown and big. Even though you are talking about the cosmos and human experience over all the ages...the number of people who are willing to talk about them in this way, at this level, is very small.

The following sections detail the ways in which transpersonal psychiatrists and psychologists report their experiences with professional associations (the American Psychological Association and the American Psychiatric Association), scholarly and medical journals, and mainstream university departments and hospitals.

Professional Associations

Respondents appeared divided evenly over whether or not they have maintained active ties and participation in mainstream professional associations. Frances Vaughan,

Charles Tart, and Stanley Krippner, for instance, continue to attend and present at the American Psychological Association, as do Donna Dryer, Seymour Boorstein, Bruce Scotton, and Francis Lu with the American Psychiatric Association. Several other respondents indicated that they saw no fruitful reasons for attending annual convention meetings or for presenting.

"I have always been a member of APA," said Frances Vaughan:

> I have seen my role as one of some bridge-building work between the fields. I have presented papers at APA for twelve years. The last paper I presented there was on spiritual intelligence...it was very well-received and I have had numerous requests for the paper. I have also given a presentation on spiritual issues in psychotherapy.

She elaborated,

> The interesting thing is that wherever I did a presentation, I would be very worried—it felt like going into a lion's den...But the fact is that the people who showed up were already interested, they were very interested and positive. At APA, our symposium on spiritual intelligence was in a packed room with hundreds of people. They all loved it—I mean, the people who spoke up loved it.

Likewise, Seymour Boorstein stated about his meetings at the American Psychiatric Association, "The seminar that my [transpersonal group] has been giving in the last fifteen years—a number of them have been standing-room only." When asked if panel attendees are primarily favorably predisposed to the transpersonal approach, Boorstein responds, "Most people have heard something and they want to know more. Occasionally, someone drops in accidentally, but that is rare. So the dialogue goes pretty well, because people want to talk." When further questioned about whether he has discussed transpersonal issues on panels at the APA that are not specifically focused on

transpersonal themes, Boorstein says, “A ‘straight’ panel? Probably not. A lot of the ‘straight’ psychiatrists who are wonderful therapists, it doesn’t resonate...I am very sensitive to the kind of context I am in.” When asked if this was disappointing to him, he responded, “No, we should go slowly.”

Charles Tart has been invited four times to give addresses at the American Psychological Association, which he attributes to a career development award that the association awarded him for his pioneering work on altered states of consciousness while at the University of California-Davis. All of his talks, he said, have been very well-attended. “Lots of people talk to me,” he reports, “All the hidden transpersonalists come up and talk to me, because I am safe.” When asked if anyone has ever challenged him at an APA meeting, he replied, “Very rarely. I’m not easily challengeable, because I am a scientist. If someone wants to talk methodology,” he always has very well-prepared responses ready.

Miles Vich pointed out that some of the strongest resistance to transpersonal psychology came not from the mainstream of psychology, from humanistic psychology. One of the early reasons for the formation of transpersonal psychology was the feeling among some of the founders that humanistic psychology was unnecessarily hostile to religion. “There was a kind of antagonism to religious institutions,” he reported. “A lot of the humanistic people were worried about religion. They carried it over from the Freudian traditions...equating religion with father displacement theory.”

Rosemarie Anderson, Richard Yensen Robert Frager and James Fadiman have all distanced themselves from the American Psychological Association, for various reasons. Robert Frager recalls the two occasions during which the APA formally rejected

applications for recognition of a transpersonal division within the association[22]. He recalled:

> What happened was that we worked really hard, and we fulfilled all the requirements for a division, and they turned us down. I think there were preliminary attempts early, like 1976 or 1977. I got in in 1997 or 1998, and we made another shot by 1979 or 1980. Looking around, I said, 'My God, everything else in the world—consumer psychology, gay and lesbian psychology, most everything else they have made divisions for. If they were not going to accept this...I stopped going.

He shifted his conference attendance to the Association for Humanistic Psychology and the Association for Transpersonal Psychology.

Frager expressed continued surprise at the APA's refusal to recognize a transpersonal division. In the late 1970s, in preparation for the application,

> We had a whole group of people who were committed. We collected signatures. I did some presentations at the APA, and then we had a hospitality suite co-sponsored by the Association [for Transpersonal Psychology], by Saybrook, and by other schools. I found that I was able to cross the paradigm divide by that time, but it was a lot of work. I was able to translate for audiences.

The following brief excerpt from the interview with Frager probes the aspects of "translation" to which Frager referred:

> RN: What was the kind of translating you had to do?
> RF: I would say things like "research on excellence," "research on extraordinary subjects," "people who were extraordinary in many different ways," which made sense to people.
> RN: What were the types of words that you left out?
> RF: Consciousness. Spirituality. Those types of things.
> RN: Religion?
> RF: Absolutely.

[22] The APA twice rejected applications for the formal recognition of a transpersonal division. Today, there is a recognized "transpersonal interest" group within the Division of Humanistic Psychology.

When I asked Stanley Krippner about whether he found it necessary or desirable to "translate" or soften transpersonal context for his colleagues when he worked in mainstream institutions (he first served a faculty member at Kent State University, and later as a member of a research team at Maimonedes Hospital in Brooklyn, and at Fordham, New York University, and Brooklyn College), he responded:

> The "translation" that you talk about is not something I have ever had to do with any of my primary jobs. I do a lot of translation, but that is mainly at special events, or lectures, or colloquia for psychology departments, talking to colleagues who know very little about the field, et cetera. I think a certain amount of translation can be done with integrity without really sacrificing away one's principles.

James Fadiman expressed disappointment in general at the direction of psychology. Structurally, most members and institutions in the field have chosen to concentrate either on cognitive work, which he describes as "rat studies," or to become adjuncts of psychiatry. "So it wouldn't occur to me to attend a national meeting," he says. "I lost interest. I go and I feel weird."

Rosemarie Anderson indicated that her decision to stop attending APA meetings after 1983 was motivated less by dissatisfaction with the national organization than by feeling that her professional needs are well-met by transpersonal-related groups. The concentration of transpersonal psychology among a fairly close-knit group of participants, she said, is:

> both a problem and an asset of transpersonal psychology and transpersonal studies more generally. Some people call it isolated, I wouldn't. I had this discussion with an editor of an upcoming issue of the *Journal of Humanistic Psychology* dedicated to transpersonal psychology . . . He said to me something about living in a ghetto. I don't fee like I'm living in a ghetto. I have a lot of professional

> contacts, just not in mainstream psychology. I know their language. I was trained to speak it. But there is really not room for a lot of discourse.

Anderson believed there has been some movement toward more inclusiveness. In the summer of 2001, she dropped in on the APA convention in San Francisco for one day for the first time since 1983. "I noticed a couple of things," she reports:

> There were a number of topics on the program that were transpersonal-related topics, much more than I recall in years past. I went to one...They just weren't very interesting from my point of view. Compared to what we're used to out here, they just weren't very sophisticated. But what I liked was that at least they were talking about transpersonal subjects. It was fairly well-attended.

Richard Yensen's primary criticism of the APA related less to its lack of openness toward transpersonal topics, and more to the poor choices he felt that it made in regard to managed care. As a result, he says, "I have just become more and more focused on my own work...and I opt to try not to waste time with other things."

After a great deal of hesitation in pursuing the topic of hallucinogens research while in medical school and in his first decade as a psychiatrist, Charles Grob began to conduct research on ayahuasca and methylenedioxymethamphetamine (MDMA). He reported:

> I have organized symposiums at the Annual Meeting of the American Psychiatric Association. I have given grand rounds on this topic. In fact, I am giving grand rounds tomorrow on MDMA. I do, and I try to be balanced...I'm waiting for someone to get up and throw a rotten tomato at me, but it hasn't happened yet. People either say, "Gee, that was strange," or they say, "That was great. I haven't heard that in twenty years." Some people are just left with cognitive dissonance. They just don't understand. And some people resonate with it.

He recalled the previous year's (2000) symposium at the American Pyschiatric Association:

> The meeting goes over six days and they gave me the last time spot on the day. I thought, "If five people show up, that's going to be a surprise." We filled the room. We packed the room. It was standing room only. There is a lot of interest in this [the topic of hallucinogens and pscyhotherapy]. There is latent interest in this. People are afraid to bring it up, but I think there is a lot of latent interest, and I think a lot of recognition out there that it is unfortunate that this area has gone unexamined for so long. It has had pariah status, and I think it is gradually coming back into the field.

Journals

Seymour Boorstein, Stanley Krippner, Francis Lu, Charles Tart, and Bruce Scotton continue to regularly submit articles to mainstream journals with some degree of success. Many other respondents have chosen for various reasons to confine their submissions to transpersonal or transpersonal-friendly journals, or in the case of James Fadiman, to turn to writing transpersonal-related fiction. One of Seymour Boorstein's most recent articles was on spiritual psychotherapy, which he was invited to submit by the editor of *The American Journal of Psychotherapy*. He reports, "there are traditional, middle-class psychotherapists who were reading that, and they have requested copies."

The prolific Charles Tart listed 317 "articles, letters, chapters and reviews" in his curriculum vitae published as of 2001. But he explained that they are almost entirely in journals and other sources that are not regarded as clearly part of the mainstream, such as *The Parapsychological Review* and the *Journal of the American Society for Psychical Research*. His articles that do appear in more mainstream journals, such as *The Psychological Bulletin* and *Contemporary Psychology*, are those articles that he described as his more mainstream research.

"If anybody in the parapsychological community tells me they're going to submit an article to a mainstream journal," I tell them, 'Well, okay, but it's not going to be accepted. Some reason will be found to reject it, no matter how irrational it is." He relayed that a colleague of his conducted an analysis of rejections by the journal *Science* of articles on parapsychology and arrived at the conclusion that, in Tart's words, "If it was a theoretical article, it was rejected on the ground that there was no empirical data to make this work worth considering. If it was an empirical article, it was rejected on the ground that there was no theory to make sense out of it But the real case was prejudice." Tart did have one letter to the editor published in the journal *Science* on the subject of parapsychology, and, he says, "people think I was very lucky even to get that much."

John Battista reported instances wherein mainstream psychiatric journals rejected his research on consciousness studies. In the mid-1980s, while he was on the faculty at the University of California-Davis, he spent several years working on a model of consciousness and ego function from a developmental point of view, specifically critiquing the disease model of psychopathology. He reported feeling that his model of ego functions provided a strong tool for discriminating degrees of ego hierarchy and ego-pathology. He explained his interactions with academic and medical journals regarding his work:

> I tried to turn over the disease entity model pretty overtly, and tried to say that a developmental model was far superior and that we should conceptualize psychopathology from a developmental point of view. I was really keen on this. I thought it was really breakthrough stuff, [but] that article was never accepted for publication anywhere. It was rejected by *The American Journal of Psychiatry*. It was rejected by *Psychiatry*. It was rejected by all the big name journals....*The American Journal of Psychiatry* did later go back and accept it, but took all of the stuff where it challenged the disease entity model, which was a major part of the article.

"I have attempted to submit journals articles which have gotten strange responses," reported Bruce Scotton. He offered the example of a piece that he sent to *The Journal of the American Psychiatric Association*:

> I wrote one overarching sort of theoretical piece trying to critique the current worldview of psychiatry, and to talk about what would have to be done to make it a truly scientific worldview. They looked at and asked me if I would change a couple of things. I did. They looked at it again and they sent me back the strangest response saying, "We feel that your piece is either"—how did they put it?—"either fifteen years too late or ten years too early. But sorry, we can't publish it for you."

Rosemarie Anderson also publishes frequently, but confines her articles primarily to the *Journal of Transpersonal Psychology*. When asked why she has chosen not to submit to mainstream journal, she smiled wryly and said:

> Why? What the heck? I know who needs to read it, and if I put it in the *Journal of Social Psychology* or something like that, the people who need to read it aren't going to get it easily. We have our own journal. There are several transpersonal journals now.

In response to a question regarding whether she considers reaching out the mainstream a priority, she stated, "We just have only so much time, so much energy."

Richard Yensen and Donna Dryer have co-written articles on psychedelic research that they have not succeeded in publishing in mainstream journals. Yensen wryly noted, "One reviewer wrote back, 'Don't they know this stuff is illegal?'" He continued, "I had another reviewer, from the *Journal of Psychedelic Drugs*, no less, who said, 'How does this guy make a living?"

Arthur Hastings indicated: "I have been careful to publish in journals that I thought would accept what I wrote. And I have been happy enough to get my

publications into books and journals that have somewhat of a transpersonal orientation." One exception included *Omega: The Journal of Death and Dying* which published his research on experiments using a psychomantium[23]. Hastings indicated that this mainstream journal decided to "take the risk" of publishing his article dedicated to the communication between bereaved participants and their recently deceased relatives, despite one negative and one "mixed" peer review. He also indicated that he was about to send to *The Lancet,* a mainstream British medical journal, an article related to hypnotic states induced by MDMA.

Working in Mainstream Institutions

Most participants had experiences working professionally in mainstream institutions, although for many the experiences were limited. Frances Vaughan has consistently worked in private practice, and has indicated that such a capacity provided her the greatest sense of freedom to write about and to pursue transpersonal issues. The experiences recounted by the remaining respondents provide some context regarding how mainstream psychology departments and other institutions respond to the spiritual and religious issues raised by transpersonal psychology, and how transpersonal psychologists and psychiatrists respond strategically to various challenges. Though most reported feeling positively toward their experiences with mainstream institutions, all indicated feeling that there were clear limitations as to whether and under what terms transpersonal issues can be discussed.

[23] Hastings described the psychomantium as a "darkened room with a mirror where you sit in a chair and look into the mirror, which reflects the darkness of the room....In that situation, people begin to see images in the mirror, or they begin to generate dialogue. It is a very, very powerful facilitator of communication with people who have died...Now we don't have any way of knowing whether this was actually the consciousness of the person coming through on the other side, or whether this was just being generated from the person's own psyche. But we weren't so much concerned with that, but rather concerned with the effect on bereavement."

Those who report instances in which mainstream universities regarded their work most unfavorably included Charles Tart, James Fadiman and Robert Frager, all of whom are now faculty members of the Institute of Transpersonal Psychology. For Frager and Fadiman, what they perceived to be inhospitable environments at mainstream universities led them to found to the Institute of Transpersonal Psychology. Charles Tart joined them many years later.

Before he was hired in a tenure track position at the University of California-Santa Cruz, Robert Frager had been invited to serve as a visiting professor at the University of California-Berkeley because he had been a student of Stanley Milgram at Harvard. "Frankly," he said, "[Berkeley] was the home of rat and dog research. The fact that I was a social-psychologist and interested in cross-cultural research was radical enough...[to] put me in the far left of psychology at Berkeley." Nonetheless, he was given the opportunity to design his own course, and he chose the psychology of religion, using William James as a foundation. "People came up and expressed surprise," he recalled. "They would kind of whisper, 'Are you really interested in these things?'"

Frager called Santa Cruz, where he began teaching in 1969, "day" compared to Berkeley's "night." One of his colleagues was another new hire who "had been doing research in India on linguistics but had gotten turned on to yoga and meditation." There were two other professors teaching psychology of religion, one from a phenomenological point of view, and a Nepalese psychologist who taught the psychology of Buddhism.

But even at Santa Cruz, Frager reported:

> I couldn't even begin to explain to the traditional psychologists what I was up to. I didn't even have the words to cross the paradigm divide. I couldn't talk about human potential, or research on extraordinary human beings. That didn't make sense to them. It was like, 'Why would you do that?'. . . I could talk with maybe

> a third of the faculty which was not the third that ran the department. There was literally a split in the department, between something of a humanistic wing and a traditional wing...and the traditional wing were the senior professors.

Early during his time at Santa Cruz, Frager designed a course on the psychology of eastern religion. He reported:

> That was politically probably a terrible choice . . . I ended up with probably about 10 percent of the student body, many of whom were wildly enthusiastic about what I was teaching. I experimented with experiential education, so I had them chanting and teaching other. We even used one of the dining halls in one of the colleges because we didn't even have a big enough classroom to hold my class. I would have Buddhist monks as guests, and Hindu teachers.

A senior faculty member admonished him that his students were too enthusiastic, and that enthusiasm is not rational.

It became clear to him near the end of his first five years, he says, that he would not receive tenure: "The tenure committee consisted only of people on the other end of the psychology department." He thus began making plans to create a graduate program that would be structured around a transpersonal perspective. A year after being denied tenure, he launched the Institute for Transpersonal Psychology.

James Fadiman never held a tenure track position in psychology, a fact that he attributes to the academically unpopular topic of his dissertation. "No college in the country wanted someone who was a specialist in LSD and related states of consciousness," he explained. "Such places that had such people were trying to get rid of them." By the time he applied to the psychology department at Stanford, he had published three books and twelve articles, and had taught part-time at San Francisco State and Brandeis University. Moreover, he had been teaching courses in design engineering

at Stanford for eight years. "But," he says, "I was told by someone in the meeting that they looked at my publications. I had one that has the word 'telepathy' in the title...They laughed." Fadiman's career since then has primarily consisted of consulting positions, supplemented by teaching at IT

Charles Tart's twenty-eight years as a professor of psychology at the University of California-Davis have been written about in other sources as a well-known instance in which a university actively discouraged a tenured faculty member from pursuing work in parapsychology. While the university did eventually grant him tenure, he recalls consistent unfavorable "interference" by the department and university administration. In one early instance, he

> was turned down for a routine merit increase once that I had earned several times over with twenty articles and a book...They rationalized it by saying they had looked at the books and that the writing was so clear that it couldn't possibly be of scholarly value.

He continues to be listed as an emeritus faculty member of the University of California-Davis.

Other respondents report experiencing less friction. Rosemarie Anderson has also left mainstream institutions, but never as a result of dissatisfaction or other form of conflict. She resigned from two tenured positions, one at Lake Forest College, and one at the University of Maryland Overseas Division where she served as a dean. In the first case, she never felt pressure but "wanted to see the world." In the Overseas Division, she taught traditional courses and spent her free time visiting religious centers. "I didn't 'come out,'" she says of her interest in religious issues while at the University of Maryland. She described the environment of the Overseas Division as "tolerant of free

spirits," but one in which "eastern traditions were more acceptable than to have a Christian identity." Asked whether she had experienced any sense that spiritual and religious issues were restricted subjects, she reported, "No. I can say that across the board. It just wasn't an issue for me. I read voluminously and have an active religious life, and participate in different religious communities."

On second thought, she added:

> The only time there was conflict was when I taught one course as an adjunct at UC-Santa Cruz. I did that while I was a chaplain [on campus] at the same time. It was a major 'no-no.' It was totally inappropriate [with students and faculty] on that campus. I was not well-received there...knowing that I was a priest. Everything I said was kind of suspect, and [seen as] culturally inappropriate."

She reported having met the well-known social-psychologist, Elliot Aronson, while he was in the department there. She recalled that in their "few conversations...I can remember feeling—I was just persona non grata." Her perspective regarding this one instance of institutional conflict was that: "it is a radical campus. Otherwise, I liked the radicalness. In some ways, I was more radical than they were, but they wouldn't have thought of it that way."

Richard Yensen, who now works primarily in private practice, was invited to teach a series of courses at Johns Hopkins from 1974 to 1984 on "Personal Growth." He explained that the head of the Department of Applied Behavioral Sciences had participated in previous psychedelic research with him and decided to create a "Colloquium on Human Behavior." The Hopkins colloquium ended at approximately the same time that the LSD research at the Maryland Psychiatric Center was ended. Reflecting, Yensen assessed:

> My experience at the Research Center and to a much lesser degree places like Hopkins is that wonderful things can happen [from a transpersonal point of view] for a while, but these structures, these marvelous places, are sort of almost watery structures, and tend not to last for the long run.

Stanley Krippner reported spending ten years at Maimonedes Hospital during the 1960s and 1970s and finding this mainstream institution highly receptive to anomalous research. The director of the hospital's mental health center recruited Krippner to work as director of the center's dream laboratory, which studied anomalous experiences at length.

Charles Grob also reported a highly supportive atmosphere in his more recent position at the University of California-Los Angeles (UCLA) where he is a professor of psychiatry and pediatrics and at the UCLA-Medical Center where he is director of the Division of Child and Adolescent Psychiatry. He described the current atmosphere at the university and in the hospital, which has been highly supportive of his several television interviews and his testimony before Congress on the controversial topics of MDMA and ayahuasca research:

> You never know when someone is going to lower the boom. But I've been treated very well here. My chairman is very supportive. I haven't had a problem. Occasionally, people might comment. But I have a good position. I'm a full professor. I run a big division. I've been here a long time. I'm not sure I could do this at other places. I'm not sure I would have been allowed to do this at Johns Hopkins, where the chairman there was extremely reactionary. I doubt very much I could have done it there.

Reaching the Mainstream?

Robert Frager, the founder of the Institute of Transpersonal Psychology, reported that the Western Association of Schools and Colleges (WASC), which has granted

accreditation to the institute for twenty-five years, has recently begun encouraging them to "get out into the mainstream more...to let other schools know what [transpersonal psychology] is all about." I queried all participants about whether they see themselves as attempting to gain larger exposure for transpersonal ideas within the fields of psychology and psychiatry, or within the culture at large. Participants were asked about their perceptions regarding changes in receptivity over time, and to supply examples in this regard.

What became apparent is that respondents described their relationships—and their desired relationships—with the mainstream in ways that differed quite substantially from the urgent written rhetoric of transpersonal standard-bearers such as Ken Wilber and Stanislav Grof. Others who have written about barriers to transpersonal psychology include Harvard psychiatrist John Mack (1996), who has judged the transpersonal and mainstream paradigms as "opposing ontologies" (1993: xi). Ralph Metzner and Daniel Goleman have attributed ecological crises to the "mechanistic" and "objectivist" worldviews of mainstream science, and claim that the more holistic perspectives of transpersonal and other spiritual outlooks are necessary to avert catastrophe.

Most participants, in contrast, seemed relatively content to pursue their own writing, teaching and research agendas without feeling an imperative to alter the worldview of the mainstream. But if they are not actively attempting to change minds, their opinions divide regarding just how to understand the state of the mainstream at this time. Frances Vaughan, Stanley Krippner, and Seymour Boorstein indicated that they believed that the psychiatric and psychological mainstreams have become quite tolerant of spiritual discussions. "The climate is changing," says Vaughan. The remaining

respondents see transpersonal psychology as a small, dynamic, relatively self-contained community of thinkers and researchers who are not likely to change many minds given the current level of academic receptivity. Rosemarie Anderson's earlier quote above perhaps sums up the perspective of this group: "There is not a lot of room for discourse."

Frances Vaughan stated:

> I think that the mainstream has in fact been influenced to a great extent in terms of the interest that is so widespread now in spiritual terms...Twenty years ago, you couldn't even mention the word [spirituality]. It was considered flaky or something. Now we have all of these mainstream people saying, 'Yes, of course it makes a difference.'

One example she offered of mainstream receptivity was the development within mainstream psychology of "positive psychology," devised by past-APA president Martin Seligman:

> It is a big movement going on now...which is essentially a lot of what the humanistic people have been talking about for many years. The only thing [Seligman] has been seriously criticized for is not giving credit to people who have done what he is doing now.

When asked about Mack's quote on the "opposing ontologies," which appears in his foreword to her book *Paths Beyond Ego* (1996), Vaughan responded:

> I don't see it that way. I see it more as a dialectic in terms of thesis and anthithesis, in that people tend to line up on one side or another. I think there are fundamentalists on both sides. There are people who are scientistic, who have a rather narrow-minded view of science. There are those who are more open and really see science as a search for truth...That doesn't mean necessarily that all of the researchers are suddenly not materialist, but [there is some acknowledgement among many researchers] that materialism doesn't explain [everything]. Seymour Boorstein suggested that there has been change on both sides. There is

more gradual acceptance of the transpersonal approach because the research has been

more development, "there is a lot more clarity and...systematization...a lot less of the 'golly gee whiz' stuff." When asked about the quote from Ken Wilber that opened this chapter, Boorstein judged, "Ken sometimes says some outrageous things. I have a very much in-this-world presence...it depends on how you present it. If you present yourself as outrageous, what you have to say it is either going to be threatening or ignored." About Stanislav Grof, he said, "His paradigm is so different from traditional psychotherapy that he would probably get a lot more resistance than I would. I am still in the ballpark. He is a brilliant researcher, but his approach is one that...is so far away from traditional psychotherapy."

Stanley Krippner also reported sensing a great deal of openness on the part of the mainstream:

> The APA published our book, *Varities of Anomalous Experience*. The APA loves our book...they are coming out with a second printing of it....It's gotten good reviews...The strategy was to say, 'We are going to be discussing these as experiences, not as events. We are not going to be concerning ourselves with the verifiability of these experiences....and these experiences have profound implications for psychology, in terms of pathology, in terms of treatment, in terms of personality, et cetera.' So that's what each of the chapters does not in that book. And we have gotten very good feedback from APA on that.

Krippner in fact faulted some of the transpersonal work itself for being "too radical" and thus unnecessarily antagonizing the mainstream. When prodded, he explained:

> They gave too much emphasis to altered states of consciousness being an important epistemology, and transpersonal experience as being the core experience of the human being and therefore the most important experience we can study. Some of them went so far as to say, 'These experiences cannot be studied by conventional scientific techniques.' I am sure that drove the governing council up the wall. This is more than translation, this is strategy. You just don't use terms like that if you hope to get serious attention from the mainstream.

Other respondents differed considerably from Boorstein, Vaughan, and Krippner on the topic of the existence of or possibilities for dialogue with the mainstream. Charles Tart's response is worth quoting at length:

> You have to consider degrees of unacceptability, here. Hypnosis is funny, but it kind of fits somewhere in abnormal psychology. Meditation—well, I watched meditation become mainstream. You see, here's an example of how prejudices change regarding the importance of materialism. When I was in graduate school, I was researching dreams. And I was discouraged from doing that, because dreams were subjective. And then brainwaves were discovered, then dreams became real. The same thing happened to meditation. Up to a certain point, meditation was something that little brown men in loincloths who were [seen as] probably schizophrenic did while sitting in the mud. And all of a sudden, there was this article in *Science* by [Keith] Wallace and [Herbert] Benson...showing brain wave and other physiological changes with meditation. Then meditation became real. It's funny in a way that something is not real until you have a physiological correlate. But it's had enormous effects on people when that has happened...

On the subject of consciousness research contrasted with parapsychology , Tart stated:

> There has been a big shift toward the legitimacy of consciousness studies...but parapsychology is still way out there. Consciousness research can be justified in a materialistic paradigm, because in a dominant, materialistic paradigm it is just assumed that neurologists will eventually understand consciousness. And with computer modeling, and big advances in neurophysiology, consciousness research is becoming more legitimate. I go to the University of Arizona's conference on consciousness, held every other year, and that is a big deal. That is something I hardly dreamed could happen when I first started working in this field. Now hundreds of people come together to talk about consciousness studies...while there is some tolerance of a little parapsychology, the emphasis is on brain research.

On the subject of the study of spirituality, Tart stated:

> Let's face it. From a materialist position, this [ITP] is a school that teaches illusions to people prone to believe in illusions by faculty who believe in illusions, since there can't be anything genuinely spiritual, [despite the fact that] it makes them get out of the hospital sooner.

James Fadiman, on the other hand, felt that mainstream psychology itself is a field in decline and as it ossifies it becomes less and less capable of incorporating new ideas and approaches. As university psychology departments continue to pursue research on brain systems with small mammals, it is clinging to the mantel of science while neglecting concerns that are of relevance to the population at large. He offered the anecdote of his son-in-law, who had recently completed his Ph.D. dissertation in psychology at Stanford on the visual systems of ferrets. His son-in-law neither wanted to study the dissected brains of ferrets, nor felt the research to be particularly relevant for perspective on the human psyche. But this research, said Fadiman, is a portent: "As [psychology] declines it gets more and more both artificial and mechanistic."

When asked if he regarded changes in the dominant psychologist perspective as possible in the near future, Fadiman responded:

> Well, in the 1960s, we gave everybody drugs and we were doing fine. And I don't mean that in a trivial sense, as we had a way of breaking down the dominant paradigm from a direct experience. At the moment, the dominant paradigm is one that has marginalized us as psychology itself has been marginalized from the other direction.

He stated that he was optimistic about neither the future of mainstream psychology nor transpersonal psychology *per se*, but that the source of transpersonal psychology would:

> do just fine. It has always done fine in every culture, because the need to know God, or the need to know what is beyond this reality is built into the genetic wiring. And every culture that has found ways to explore them has used them.

Rosemarie Anderson signaled that she does not regard it as particularly constructive or important to change minds within the mainstream. "[I am] in a community," she said:

> I am not trying to break down any barriers...I am a full professor [at ITP]. I publish a lot and I love it. I have always done well and I just like it. So people are going to have to come to us, quote honestly. I am happy to respond, and I will do so generously. But they are going to have to come to me.

Psychiatrist Charles Grob has been perhaps the most publicly outspoken of the participants in this study. He described the extent of his televised interviews and testimonies before state and national political bodies:

> I had a TV crew here yesterday (Febrary 5, 2002), from Fox News in San Diego. They're putting together a special on ecstasy. I have critiqued a lot of the MDMA neurotoxicity research. A lot of it, as far as I am concerned, is seriously flawed, bordering on fraud. In a very diplomatic way, I try to say that. I have some real concerns about health and safety issues with kids indiscriminately taking drugs called "ecstasy," whatever they are. Then again, there is the untapped treatment potential that should be brought up, and that often usually is not.

Grob continued:

> I have been on BBC documentaries about plant hallucinogens. For me, this is fascinating. I have been able to speak up publicly without any—it's remarkable, because when I first started doing this, I had a lot of trepidation: "I'm going to get attacked. People will try to take shots at me." But it really hasn't happened...I went to Washington last year (2001) to testify at the U.S. Sentencing Commission hearings. They were going to make the MDMA laws even worse, so I testified to a big hearing there. That got some press. In fact, I was denounced on the floor of the Senate by Joe Biden. He denounced a few others as well: the doctors and scientists who refused to get on the anti-ecstasy bandwagon. Okay, these guys are demagogues, and although I thought Biden was a liberal, apparently not, not on this issue. A couple of weeks ago I went to Sacramento and testified to the Senate and the Assembly in the State Capitol on efforts to make the laws even more draonian than they are. I'll do that, because I feel I have some responsbility to speak up on these issues, because I feel the laws are terribly unfair and counterproductive.

PART TWO – TRANSPERSONAL PSYCHOLOGY INSTITUTIONS

The following section aims to understand the establishment of and mainstream reaction to some of the most important institutions within the transpersonal psychology movement, including the *Journal of Transpersonal Psychology* the Association for Transpersonal Psychology. I conclude with an interview of two of the editors of the *Textbook of Transpersonal Psychiatry and Psychology*. The objective is to understand the ways in which these institutions interact with the mainstream of psychiatry and psychology.

The Journal of Transpersonal Psychology

Miles Vich served on the editorial committee that founded and managed *The Journal of Transpersonal Psychology* in 1969 and served as editor from 1975 to 1999. He explained the perceptions of those who helped to launch the journal in its earliest days, including the late founding editor Anthony Sutich:

> Psychology and psychiatry were not dealing with this [spiritual] dimension of human experience properly and people were being misdiagnosed, misjudged, mistreated, abused, and all kinds of things were happening because of it.

He continued:

> Not every person who has a vision is a spiritual saint. A fair number of them are having schizophrenic hallucinations and can be helped by medication. But how do you distinguish those who do from those who don't?...So think there was a sophistication about cultural, spiritual, religious and psychological issues that this kind of work with the journal attempted to address: Let's make sure that we all know the difference between psychotic hallucinations and transformative visions.

Regarding early decisions about how and whether to appeal to the mainstream, Vich explained:

> The editorial committee acknowledged early in the journal's history that articles would not be accepted on the basis of their potential to appeal to the broader psychological community. This independence allowed the committee to select articles on the basis of their potential to open new areas of inquiry. We didn't really have a lot of hopes for getting integrated into the APA...We were pretty sure about that.

Anticipating this limitation, he stated, saved the transpersonal journal from taking on a more bureaucratic tone. They were free to publish articles from less orthodox contributors such as Chogyam Trungpa, the Tibetan rinpoche who had established the Naropa Institute (now Naropa University) in Colorado, Swami Nitya, or Ram Dass (the former Richard Alpert).

Vich reported experiencing difficulty in generating active exchanges between the transpersonal authors and broader psychological scholarshi Few mainstream psychologists responded to the journal. "I didn't get a lot of point-counterpoint," he states. "I was always kind of disappointed. It was hard to get a (counterpoint) article—you almost had to build a roar to get some kind of argument. I think the more recent editor, Kaisa Puhakka, has done a better job of that. But I think there could be more of it."

Puhakka speculated during her interview that few mainstream psychologists know about the *Journal of Transpersonal Psychology.* But there are others types of bridges, she stated. For instance:

> I get invited to all kinds of situations, but maybe not mainstream academic institutions....Last spring I was invited to speak at a conference in Arizona sponsored by the Institute for Noetic Sciences, the University of Arizona and the World Health Organization...It was a big, wonderful event, but not really a straight academic one..."

Puhakka noted that the JTP is a membership-based journal, and that the membership of the journal has shrunk. She worried about the long-term future and direction of the journal:

> The membership was the size it was because of the conferences...for all these thirty years they always had an annual conference. But somehow in the last five or six years, the conference scene has kind of gone down—not just the transpersonal conferences, but just about any conference. It is almost like the era of the conferences is gone. So the Association of Transpersonal Psychology is trying to think of some other way to survive and support the journal.

Association For Transpersonal Psychology

Arthur Hastings, who served as president during the 1980s, described the Association for Transpersonal Psychology as an organization of individuals who were content to quietly conduct their research. There was little attempt, need, or desire, he explained, to change minds in the mainstream:

> ATP was generally run, after Maslow, by a bunch of introverts. So they did not advertise much. You sort of had to find them out. They had a small office here in Palo Alto, a very small staff. It was not a moneymaking proposition. The conferences themselves brought in money, and the memberships brought in a little bit. So the transpersonal never got itself into a big promotional kind of thing. Mostly the two things they did were to publish the journal and hold conferences.

Miles Vich, a long-term editor of *The Journal of Transpersonal Psychology*, reported that debates regarding which transpersonal ideas to include in the journal were rather staid and polite. The ATP, on the other hand, served as a venue for constructive disagreement. "We had arguments and discussions and counterpoint stuff going on and on," he stated.

Kaisa Puhakka explained that membership in the association has declined. The large annual meetings have been discontinued and have been replaced by smaller professional training meetings. Arthur Hastings judged that the marginalization of the Association has resulted partly from a change in the general culture: "The culture has moved and it (discussion related to spirituality) is more acceptable."

He argued that a need for the critical examination of spiritual issues remains. The increasing visibility and acceptance of spiritual themes, Hastings explained:

> ...has had two effects. One is, if it is more accepted, you don't have to argue as much. You can talk about it. You can explain it...The downside is, it is accepted uncritically. Too often you have people who are emotionally accepting of all of these ideas, but uncritical. Let's take an area like after-death communication, or ES After-death communication means apparent messages from somebody who has died. At least 50 percent of widows and widowers of whatever age will report a contact with the person who has died. Maybe they have a very vivid dream with the person. Or maybe they actually see the person sitting in their old armchair....Well, in the psychiatric literature, these are called "hallucinations"...

The Association for Transpersonal Psychology continues to publish *The Journal of Transpersonal Psychology*. Its current editorship by Marcie Boucouvalas at the Virginia Polytechnic Institute and State University (Virginia Tech) marks the first time that a non-Californian has headed the journal. Indications are that the membership has dropped from a high of 2,000 to a smaller, unspecified number. The Association no longer holds annual conferences, but it does host many special events—including pre-APA convention events—both in the United States and abroad.

The Textbook of Transpersonal Psychiatry and Psychology

Though there have been many collections of transpersonal articles published a full-length volumes, such as *Paths Beyond Ego* (1993), *Transpersonal Psychotherapy*

(1996), and *Transpersonal Research Methods for the Social Sciences* (1998), *The Textbook of Transpersonal Psychiatry and Psychology* (1996) was the first general textbook on the topic. Two of its co-editors, Bruce Scotton and John Battista, participated as interviewees in this study.

Asked how the book came to be, Bruce Scotton explained in the early 1980s, a group of psychiatrists and psychologists interested in spirituality and already acquainted with the transpersonal literature, began meeting in the San Francisco Bay Area. "We have met on Tuesdays once a month now for the last sixteen years," he explained. Part of the premise guiding these meetings was the fact that most cultures have not separated spirituality from healing and the belief that certain potentials for healing are lost when the separation occurs. Many of those included in the meeting were on the faculty at the University of California-San Francisco and they found their students expressed particular interest in the topic of spirituality.

> We placed a particular emphasis on trying to offer ourselves to students . . . Then somebody hit on the idea of offering a course at the American Psychiatric Association. After we taught the course about four times, we started feeling our oats and feeling as if maybe we could do something even more striking with all of this, and the idea of *The Textbook* came u..I volunteered to be the senior editor.

John Battista adds that the book found a receptive publisher in Basic Books because one of the company's editors attended one of the transpersonal courses at the American Psychiatric Association in the early 1990s:

> At that point there was more acceptance of the transpersonal model. It's still not unaccepted but there was a period there where there was more interest. The *Journal of Cosnciousness Studies* had started and there was a lot of interest in Ken Wilber's work. Scott Peck was a kind of big figure...The point is that it sold. So

> many books came out about consciousness, for example, that the market was stuffed.

In response to inquiries about the reception of the book, both Scotton and Battista indicated that it had made a modest impact at best on the mainstream. "Book sales would seem to indicate that it hasn't gotten out there that much. It continues to sell steadily but in small numbers," Scotton said. He indicated that the mainstream of psychiatry demonstrated a lack of receptivity to the *Textbook's* subjects:

> We had a well-respected professor from a Midwestern institution—a sort of heartland of American institution—write a really rave review about it. This person had stature and has published other reviews in the *American Journal of Psychiatry* . . . For reasons that he never quite would specify, they wouldn't publish the review. He even went through the old boy network of using friends who knew friends: "Would you take a look at this? It's pretty good. We don't know why it was overlooked." They took another look and still wouldn't touch it. We couldn't even get the book reviewed . . . which of course means that most of the people in the profession out there don't know the book exists.

I questioned Scotton on whether or not the editors made strategic decisions to avoid or soften certain language or to marginalize various topics so as to appeal to a wider audience or to minimize the possibility of out-of-hand rejection by certain scholarly circles. The text, for instance, contains chapters dedicated to past-life therapy, shamanism, parapsychology, and psychedelic substances in a therapeutic context. It also carries a chapter devoted to the phenomenology and treatment of Kundalini experiences. Scotton indicated that no attempts to restrict controversial topics were made. Regarding his own position as senior editor, he said:

> I tend to be on the counter-phobic side, actually . . . .In other words, "Let's put in what we think is correct, and if necessary we will fight for it" . . . But I have to admit, I think Basic Books was wonderful for us. They made absolutely no attempt to control the content. They let us direct it entirely.

He did concede the past-life therapy was the one topic to evoke the greatest amount of misgivings, although the chapter author, Ron Jue, took pains to explain that the topic of past-lives is generally understood metaphorically among serious therapists who engage it. Scotton explained the reaction:

> . . . past-life therapy did generate some criticism even within transpersonal circles: "How could you put something like that in? It will just make people disbelieve what is essentially solid scientific inquiry" . . . But again, my counter-phobic approach comes in at that point. I say, "If we are really going to do what we are saying, if we are really going to say, 'We have to examine all of this stuff,' we have to assume that some of this stuff that we examine will ultimately prove to be false. It's not fair to just throw something out on the face of it to say, 'That's ridiculous so we won't include that in our investigation.'"

The book did get some support from the University of California-San Francisco, but Scotton said the grant was limited to research that he did on Tibetan Lamas that eventually made its way into the chapter on Buddhism. The university did not fund directly fund any part of the Textbook itself. In 1998, it also won the Award for Excellence in Medical Communication from the American Medical Writers Association of New England. Neither Scotton nor Battista viewed the award as a significant sign of embrace by the mainstream, nor did they think that it increased the book's visibility.

Battista reported that colleagues of his who are traditional psychiatrists have read the textbook out of curiosity. "They gave it mixed reviews. That's usually what it gets," he said. "They said that some of the stuff was really interesting, and some of the stuff seemed a little loose. They couldn't follow it." Regarding more unusual or controversial phrases such as "Kundalini awakening" or "past-life therapy," Battista concluded:

> The theory of cognitive dissonance is, in fact, correct. We don't seek out information which challenges our worldview and our belief structure. So most people ignore it. When provided an opportunity, for instance, in a journal to review something is outside, I think there is definitely a bias toward that. People are on the lookout for whether their own view is substantiated. It would disrupt the context in which people are operating.

CONCLUSION

The interviews that formed the basis of this chapter indicate a diversity of experiences on the part of transpersonal psychiatrists and psychologists regarding their communications with the mainstreams of their disciplines. Few of the participants seemed to agree with the quote by Ken Wilber which opened this chapter, suggesting that mainstream routinely, energetically, and harshly rejects all spiritual ideas or systematically dismisses transpersonal theory as totally without merit. Taken together, the responses indicate the presence of diversity of bridges barriers—both theoretical openness and cognitive dissonance, to use John Battista's phrase—between mainstream and spiritually-themed scholarshi

Frances Vaughan and Seymour Boorstein, for instance, reported noticing a general increase in receptivity to spiritual topics over time. Vaughan, who has a private practice as a psychologist, explained that while she initially expected resistance and criticism when she began presenting on transpersonal topics at the American Psychological Association during the 1970s and 1980s, she encountered only receptivity. In more recent years, the positive responses have grown, and so have requests for reprints of her articles. Boorstein reported the same sense of growing receptivity in the field of psychiatry, where he has received hundreds of requests for reprints of his articles related to transpersonal psychotherapy.

Other transpersonal psychiatrists, such as Bruce Scotton and Francis Lu, also reported that the courses they have taught at the American Psychiatric Association receive standing room audiences. Charles Grob, a psychiatrist at the University of California-Los Angeles, also found his institution (the UCLA-Harbor Medical Center) to be highly supportive of his research and writing on psychedelic psychotherapy (including MDMA and ayahuasca). Nonetheless, each of the psychiatrists who participated in interviews—John Nelson, John Battista, Bruce Scotton, Francis Lu, Charles Grob, Seymour Boorstein, and Donna Dryer—indicated that that only a small window exists within mainstream psychiatry to discuss spiritual issues. The narrowness of this discursive space is partly reflected in the fact that no mainstream psychiatric journal carried a review of the *Textbook of Transpersonal Psychiatry and Psychology.* Most of the psychiatrists interviewed in this study, however, appeared hopeful for a future of increasing psychiatric receptivity to the topics included in the textbook. Donna Dryer seemed most convinced that "only a major paradigm shift" would lead to growing receptivity to spiritual issues in the field.

Among the psychologists—Robert Frager (co-founder of the Institute of Transpersonal Psychology), James Fadiman (co-founder of the Institute of Transpersonal Psychology), Kaisa Puhakka (editor of the *Journal of Transpersonal Psychology*), Miles Vich (founding editor of the *Journal of Transpersonal Psychology*), Ron Jue (past president of the Association for Transpersonal Psychology), Stanley Krippner (co-author of a number of transpersonal and parapsychological texts), Charles Tart (faculty member of the Institute for Transpersonal Psychology and author of a large number of transpersonal and parapsychological texts), Arthur Hastings (faculty member of the

Institute for Transpersonal Psychology and former president of the Association for Transpersonal Psychology), Richard Yensen (co-founder of the Orenda Institute), and Rosemarie Anderson (co-editor of *Transpersonal Research Methods for the Social Sciences*), and Frances Vaughan (author and co-editor of a number of transpersonal texts)—the perception of barriers to transpersonal research and ideas appeared both more marked and more diverse. Many of the psychologists who participated in this study have distanced themselves from the mainstream of the profession. They teach at transpersonal institutes, submit articles largely to transpersonal journals, and speak at transpersonal or similar events. Most of them felt, however, that the choice to participate largely in transpersonal institutions reflected less a sense of restriction imposed by the mainstream than a choice to participate in those institutions which most closely reflected their interests.

The participants continue to work on refining and critiquing transpersonal ideas from within. Arthur Hastings and Charles Tart both insisted that the transpersonal movement must work on developing measurements to carefully measure and test transpersonal ideas. Robert Frager said of the sub-field, "We haven't done a good job in looking at where we have intellectual antecedents and where we may have shifted from those antecedents in a very clear, theoretical way." He felt that such work may contain the key to the field's eventual acceptance by a larger audience. Stanley Krippner was particularly forceful in critiquing the field from within, arguing that it must develop more discriminating measures for spiritual and anomalous experiences.

Charles Tart, however, felt that regardless of changes that may occur within the transpersonal field, the mainstream is unlikely to alter its exclusion of spiritual,

anomalous, psychedelic, or paranormal topics. As quoted above, he said of the Institute for Transpersonal Psychology:

> Let's face it. From a materialist position, this is a school that teaches illusions to people prone to believe in illusions by faculty who believe in illusions, since there can't be anything genuinely spiritual, [despite the fact that] it makes them get out of the hospital sooner.

CHAPTER NINE
CONCLUSION

This dissertation opened with a quote by the sociologist and historian of medicine, Charles Rosenberg (1997), who proposes that students of intellectual history should not assume a necessary antagonism between science and religion. These two systems of knowledge have maintained a varied and symbiotic relationship, he writes, even if this mutuality has not always been apparent. However, Rosenberg does not himself provide a framework for understanding the ways in which religions and science influence each other and the ways in which they construct boundaries. John Ziman (2000) interrogates prevailing assumptions which separate science from religion. Both are organized systems of knowledge and both are continuously shaped by their surrounding cultures. Moreover, to stress the differences between science and religion, he states, is to obscure the substantial ways in which science and religion differ internally in terms of practices, assumptions, and attitudes.

The sociologist of knowledge E. Doyle McCarthy (1996) notes the ways in which the pragmatic tradition uses the metaphor of "carving" to understand the ways in which culture actively construct narratives of reality. Robert Bellah argues that the social sciences have increasingly assumed the role formerly occupied by religions in culture—that of telling us "what kind of creatures we are and what we are about on this planet" (1982: 1). The social sciences carve out for us the contours of the self and the ways in which our selves are and are not connected to the biosphere and to the cosmos. Likewise, Nikolas Rose (1998) illustrates the ways in which the "psy disciplines"—psychiatry, psychology, and psychotherapy—actively make choices regarding how to conceive of the self and how to determine what it means to study the terrains of normality, health, and

psychopathology. Even the body, heretofore assumed to be a more or less fixed quantity, assumes different properties and different shapes as cultures lenses and practices change.

Rose suggests that sociologists interested in science, knowledge, and power should question the ways in which the psy disciplines construct for themselves the authority to "speak of our truth in the language of the psyche" (178). In so noting the development of such narratives within the psy professions—and the ways in which the psy discourse is woven into the structures of the state, schools, prisons, and hospitals—Rose seems to miss the ways in which conceptions of the "psyche" have changed. As demonstrated in the preceding analysis of Koch and Leary's (1992) edited collection of writings by noted psychologists (chapter six), most scientific psychologists would seem to distance themselves from the root term "psyche." Their psychiatric counterparts seem equally ambivalent about the "psyche," as illustrated by the work of Frattorolli (2001), who defends it, and by Hobson (2001), who appears to reject it. Professionals within each field seem to regard the term as a remnant of an earlier epoch, one which still deployed the terminology of "psyche's" insufficiently scientific synonyms—the mind and the soul.

This dissertation has explored this transformation of the ways in which psychiatry and psychology actively make choices in "carving" the study of humans and human being-ness. To carve means to shape, but it also involves the process of discarding and rejecting that which falls beyond a given scientifically legitimate path. A number of cultural histories of academia have suggested that scientific materialism, according to which "the world as the senses know it is all there is" (Goode, 2000: 181) had become hegemonic in the West by the beginning of the twentieth century. Accordingly, to

imagine that life and nature may be endowed with some sense of purpose, or that evolution may unfold with direction, is to engage in fallacious teleological reasoning. The religious or spiritual claim that there are dimensions or properties which exist beyond the material order likewise acquires an aura of illegitimacy.

Transpersonal psychiatrists and psychologists propose that the *a priori* exclusion of spirituality results more often as a matter of convention than of scientific necessity. Others have observed the consensus which emerged from the beginning of the twentieth century and reached similar conclusions. Philosopher of science Charles Taylor traces the ways in William James at the opening of the century struggled over the increasing degree with which science as high culture regarded religious faith as "something weak and shameful" (31). This equation of religion with cowardliness mirrors Max Weber's contemporaneous comparison of science with manliness and religious impulses with its opposite. Page Smith's history of higher education in the United States explores the ways in which the culture of the universities began to eliminate spiritual considerations after 1900, along with most of what he regards as essential aspects of human subjectivity. Schneirov and Geczik (2003) explore the ways in which scientific rationalization of modern scientific discourse "erases" the human spiritual dimensions.

SCIENCE AS AN AGENT OF CULTURAL FORMATION

Robert Bellah, who describes himself as a neo-Durkheimian; Peter Berger, who calls himself an "unreconstructed Weberian"; and Joel Kovel, whose scholarship on liberation philosophy follows partly in the Marxist tradition, each examine the construction and impact of modern science in ways which both rely upon and critique their predecessors. Bellah judges that the social sciences underestimate the degree to

which they constitute and direct reality as much as they explain and describe it. He assesses that social science in contemporary universities bears the message of "radical secular individualism," as both an ideology and a way of life (1982: 8). The rational choice model, which has emerged as dominant in many social science fields in recent decades, has enormous normative impact. Rational choice theorists claim to be describing human behavior as it really operates, unburdened by unscientific ethical or moral values. But, counters Bellah, "if we believe that the struggle for strategic advantage is the truth about human beings, then we should realize that we are not just teaching a scientific truth; we are preaching a gospel" (2000: 6).

Bellah (2000) draws attention to the importance of the military-funded Rand Corporation in constructing rational choice, despite the insistence among its advocate that rational choice emerged among disinterested parties. The Rand Corporation, launched in 1946 by a grant from the U.S. Air Force, aimed to fuse the interests of scholars, scientists, and the military. It has in effect had the impact of teaching students that human action can be explained in terms of competitive struggle for individual advantage (2003). Such a view has a corrosive effect, by teaching students any noble impulses they may have and to reinterpret the gestures of others as veiled attempts to gain the upper hand. Ironically, Bellah argues, this view can be traced back to versions of dissenting Protestantism and so has religious roots of its own. But he worries that the development of a post-Durkheimian society, wherein there is no shared morality, has a diminished possibility of survival. If the Biblical tradition's emphasis on "faith" and "love" were to be completely expunged from academic culture, Bellah worries, there may be no other tradition to balance unrestrained power and the Culture of Money.

Kovel (1991) and Berger (1999) examine the sources and impact of despiritualization in modern culture. "[W]e tend to forget that a science is first of all a statement," Kovel argues, "and only secondarily a description of its domain" (16). Our modern sciences are statements reflecting the worldviews of those who work with them and contribute to them. He judges that an alignment of utilitarian rationality, capitalism, and technology ultimately contribute to scientific worldview that are "drawn so as to exclude any participation of spirit in nature" (16). Beginning in the twentieth century, *logos* increasingly assumed the role of sole arbiter of knowledge in the social sciences, progressively denying a role for critique and for *poesis*. Kovel elaborates that *poesis* refers to "the form of thought corresponding to intuitive, direct, and empathic knowledge" (231). It includes poetry, artistic expression, and even prayer.

Berger's point is that the modern social sciences constructed a narrative which proposed a secularity as the logical, progressive, and perhaps inevitable outcome of the twentieth century embrace of science and rationality. The secularized social science view, he argues, became so self-enveloped that it lost sight of the extent to which much of the rest of the world had either remained intensely religious or was experiencing an renewed intensification of religiosity. Social scientists viewed their secularized worldviews as normal and the persistence of religiosity as all but inexplicable. They lost sight of the ways in which the human quest for transcendent meaning—for better or for worse—seems to be deeply rooted in the species. In other words, social scientists constructed a view of the world based on what they observed by interacting with each other. It turned out that as their gaze began to extend beyond this secularized world, they confronted a world that they did not readily understand.

HEGEMONY, SPIRITUAL NARRATIVES, AND THE POSSIBILITIES OF CRITIQUE

John Ziman (2000) and Stephen Toulmin (2001) draw attention to the ways in which science has traditionally cast itself as the voice of reason that has traditionally stood up to the persecuting forces of church, state, and tenacious superstition, at times under the threat of great peril. Sandra Harding (1998) also shows the ways in which science has employed the narrative of the "dark ages," an era of repressive cultural blindness from which emerged the voices of Enlightenment rationality. Each of these authors claims that as science constructed a discourse centered on the distinctiveness of science from all other forms of culture and knowledge, it also began to construct a repressive machinery which buried certain strands of knowledge. Ziman examines the elements of the scientific "Legend," among which was the claim that science, and science alone, could produce objective knowledge of the workings of nature. Toulmin argues that the scientific tradition in the West since the seventeenth century has embraced the "dream" of Rationality at the expense of Reason. The dream presupposed that a singular, precise, and undistorted account of the physical, natural, economic, and psychological realms was possible. Based on a misreading of Newtonian physics, the illusion of a fully calculable world would inflict unto reason a "wound that remained unhealed for three hundred years" (13). He suggests that the postmodernism of the late twentieth century, and its embrace of uncertainty and pluralistic narratives, reflected the return of earlier humanistic understandings.

Sandra Harding also critiques the hegemony of Enlightenment rationality and the logical positivism that proceeded to follow in its footsteps. Like Toulmin, she sees the contemporary period as one in which both values and reason are making their return to

the culture of science. But Harding's emphasis is on ways in which Western (or Northern) science emerged in the context of empire, both through appropriating the localized knowledge of colonized people and expanding the power of the technological power of the West. She notes the ways in which Thomas Kuhn ushered in the beginning of a major shift in scientific self-perception and a reevaluation of the narrative of cumulative knowledge. However, she writes, even the post-Kuhnian approach "can sometimes appear parochial if one starts asking epistemological questions from outside the European-American intellectual traditions" (4).

Here we might ask whether the transpersonal movement represents such a development—the posing of questions from outside of the Euro-American traditions. In some ways, it does appear to frame questions and to pose challenges in ways which represent a revisiting of western knowledge through the lens of other approaches. Its beginnings in the 1960s represented a reaching beyond the boundaries of western empiricism, materialism, and objectivism. It began to reinterpret human consciousness, behavior, and suffering through the knowledge traditions of shamanism, Sufism, Hinduism, Tibetan and Zen Buddhism, and Jewish and Christian mysticism. Thus, it was an American movement which reached beyond—and sometimes rejected—the dominant practices of both science and religion in the West.

Critics might answer that transpersonal psychology falls quite short of a true interrogation of the western intellectual tradition from a fully external vantage point. It is not the voice of formerly colonized peoples but the voice of Western elites who borrowed heavily and selectively from eastern, mystical, and shamanic traditions. Bonnie and Eduardo Duran (1995), for instance, have even argued that the appropriation of Native

American practices by white, westernized professionals—some of whom are transpersonal psychologists—constitutes a new form of colonization. These are criticisms to which some transpersonal psychologists are rather responsive (see Walsh and Vaughan, 1993), acknowledging that they represent only a fraction of what is available in the wisdom traditions and they are still developing the bases of their scholarshi

In any case, transpersonal psychology seems to offer at least a partial lens through which to view the construction of scientific narratives. Robert Bellah (2003a) has argued that in an era during which the United States increasingly is assuming the features of empire, buttressed by right-wing religious doctrine, the religious minority traditions will be needed to pose counter-narratives to the doctrines of military might and the privatization of all human pursuits. The transpersonal movement, though small, reflects a multifaceted embrace of minority traditions. If the effective of modernity has been to frame all social forms and human relations in terms of social or psychology utility, as both Bellah (1982) and Kovel (1991) write, transpersonal psychology imagines radically alternative frameworks for viewing human interconnectedness.

THE NOTION OF THE SOUL

"The very notion of soul," writes Bellah, "entails a divine or cosmological context that is missing in modern thought. To put the contrast in another way, the traditionally religious view found the world intrinsically meaningful" (1982: 3). Elsewhere, he contrasts intrinsic meaning with the commercialized, privatized, and increasingly militarized influence that American culture currently exerts on the rest of the globe.

"Affluence and self-indulgence as the answer to the meaning of life," he judges, "would not seem to be a firm basis for the dissemination of democracy in the world" (2003a).

Barbara Katz Rothman also revisits the uses and possibilities of the notion of a "soul" in an era categorized by increasing emphasis on genetic reductionism and determinism. She is cautious, noting that "there is no idea that cannot be used against people, used to divide and harm and separate" (1998: 230). But she also wonders what other prospects—what other terminologies—exist for re-imagining the connections between people, for responding to the pure utilitarian approach of the market, for valuing individuals as amounting to more than their genetic codes.

Her point is well taken that the notion of a "soul" has frequently been used divisively. Robert Bellah, too, notes the ways in which this term is now deployed in ways which divide the world's population into the "lost" and the "saved" (2003a). But one conclusion stands out for me most prominently after researching and writing the foregoing chapters. Dialectical engagements with spiritual and religious thinking have the potential to deepen and advance our understanding and to stretch our frameworks beyond mere convention. The possibility that spiritual thinking is sometimes naive and that religious thinking is frequently dogmatic is well-recognized. But sociologists of science have observed the ways in which science, too, can rest on wishful thinking (Bloor, 2005), contribute to repressive power apparatuses of the state (Rose, 1998), or construct dogmatic and limiting frameworks (Harding, 1998; Berger, 1999). Toulmin (2001) writes also of science's stubborn inability to accept uncertainty and to embrace the aesthetic and value dimensions of everyday life.

In fact, if we fully take Ziman's (2001) assertions into account we might begin to reframe the ways in which we draw the boundaries between scientific and religious questions. We might use Toulmin's (2001) criteria for assessing the value of knowledge—that is, we might ask that our knowledge be both rational and reasonable. The former implies the desire or ability to eliminate distortion to the fullest extent possible, and the latter implies the goal of minimizing injustice. Talal Asad (2003) critiques the assumptions that lie behind such binaries as "religious" and "secular," scientific" and "nonscientific," or "belief" and "knowledge." We can then begin to see the world from unexpected positions. Sandra Harding (1998) constructs the possibility for "robust reflexity" by challenging such binaries, particularly the binaries between "the West" (which is assumed to be the home of rationality) and "the rest" (which in the western narrative has often been cast as the home of bias and superstition.

Perhaps we could then construct dialectically useful ways re-examining, critiquing, and expanding our knowledge. One example of such a dialectical approach might be David Toolan's *At Home in the Cosmos* (2003). This volume won the Catholic Book Award; was published by Orbis, a Catholic printing house; and is dedicated to the memory of Pierre Teilhard de Chardin, a Catholic priest and paleontologist. Toolan himself was an associate editor of the Catholic journal, *America*. Under conventional circumstances such close identification with the Catholic Church might not be regarded as of value or utility to inform the sociology of science. But it engages in a measured, careful, reasoned dialectical examination of science, western culture, and Judeo-Christian theological principles. It notes the ways in which science, from the seventeenth century onward, "contributed mightily to our sense of wonder at earth's bounty, beauty and

fragility...introducing a new form of love into the world, a love of nature virtually unknown in the ancient world" (127). At the same time this book traces the ways in which science combines with industrial culture in which ways that "empt[y] nature of value, except as a resource or raw material" (43-44). Scientific industrialism has contributed mightily to a "throwaway culture of one-time use...a human industrial subsystem which behaves as no other subsystem" (108).

Toolan mines the ways in which science both expands and narrows moral horizons. He grapples with the ways in which scientific and religious ideas have contributed in some ways to the competitive ethos that lies at the heart current ecological, political, and economic crises. Modern science lays at the heart of the expansionist economics that now contributes to the ecological crisis; it is inextricable from the institutions which have been based on an ethic of "more is better" (92-93). But postmodern science, he proposes, is at least part of the solution, for it opens up new possibilities for the ways in which we might position ourselves with nature, with the cosmos, and with the Other.

In an earlier book (1987), David Toolan explored transpersonal psychology in depth. He examined the fruits and the limits of the scientific method, the latter including the ways in which the scientific method "eliminated contingency, randomness, and ambiguity—and therewith the chance of making sense of the evolution of a planet such as ours" (189). Consciousness, and even nature itself, became an anomaly in an otherwise lifeless universe. But the new physics has reintroduced uncertainty and ambiguity, including the possibility that "far from being dead, the cosmos is fundamentally erotic, a

balancing act of knottings (matter) and information (consciousness) in a sea of noisy energy" (180).

Sociology is the systematic study of society, and the universe may seem to lie quite some ways beyond our purview. But the narratives that any society constructs about the universe that it inhabits lie well within the subject matter of sociology. Indeed, we sociologists help to construct those very narratives. Weber noted in the early twentieth century that science was leaving us with no choice but to accept a cosmos that no longer had any inherent meaning. Disenchantment was all but complete, and the very possibility of narratives of meaning were vanishing. Durkheim also took note of the impact of our cultural loss of coherence over the matter of universe, and held out the hope that the professions instead could give us the moral sense of coherence and morality.

But scientists have been constructing any number of ways of describing the universe that would conflict with the earlier positivist accounts whose legacy we continue to live with. "The universe is more open, more subtle, and more supple in its character than people in the eighteenth and nineteenth century could know," explained John Polkinghorne, a professor of mathematical physics at Cambridge in an interview (2002). He quotes the physicist Paul Dirac, who discovered both antimatter and the positron. Dirac, Polkinghorne explains, "was not a conventionally religious person," but he often remarked that the physical world has a structure that "seems always to be expressed in beautiful mathematics." For Polkinghorne, the presence of such mathematical representations "suggest that there is a Mind behind the structure of the world, and that our minds are somehow attuned to that Mind."

I believe that this means something at this point in our cultural history. As a sociologist, I am interested in the narratives we are willing in this culture to believe about ourselves. Erich Goode draws attention to the ways in which scientific hegemony foreclosed on certain narratives of purpose in the universe. He notes that much of the rest of the culture outside of the university continued to believe in these narratives anyway—whether in the form of creationism or paranormal phenomena. But in the universities, in the learned environments, in science, "transcendence had been reduced to rumor," in the words of Peter Berger near the beginning of his career (1969).

The rumor—or many variations of the rumor of transcendence—continues in the universities and in science. I follow Goode's instructions that as a sociologist it is not our position to determine which narratives represent truth, so much as to pay careful attention to the struggle to define something *as* true. Polkinghorne and Dirac represent part of a discourse of science, only two among many thousands. The former is an Episcopalian priest, and speaks cautiously about the possibilities of meaning in our universe. Dirac was more or less areligious, but wrote poetically of meaning of mathematical problems in physics.

Robert Bellah shows that our narratives of ourselves have consequences. The dissenting Protestant bequeathed us a capitalism of extreme individualism and consumerism. As our former institutions melt into air (Marx, 1948; Berger, Berger, and Kellner; 1974), capitalism continues to reduce everything to exchange value. The systems, based as they are on efficiency, seek to convert all human exchange to numerical values. Bellah follows Jurgen Habermas in seeing a modernity that consists of the "systems" and the "lifeworld." The lifeworld—community, family, religion,

education—is the aspect of modern life that is mediated by language. Its liberating potential lies partly in the stories we have to tell ourselves. The systems—both the market and the state—are the nonlinguistic aspects of modern life. They facilitate the economy and the bureaucracy. But if left unbalanced by the lifeworld, they begin to colonize the lifeworld.

What stories of ourselves do we have left? Does it matter whether we view our universe as supple, pulsing with energy, alive? David Toolan argues that modern science presents us in the direction of a "fundamentally erotic" universe, in which even matter itself is animated. Would it matter if new views of science provide possible narratives of re-enchantment," as Jeffrey Paine (2004) titled his examination of the impact of Tibetan Buddhism on late twentieth-century U.S. culture? Do these types of narratives provide us with other ways of seeing ourselves, and our interconnections, and our mutual responsibilities?

"Religious faith," Peter Berger wrote recently, "always involves one fundamental assumption—namely, that there is a reality beyond the reality of ordinary, everyday life, and that this deeper reality is benign...Religion implies that reality ultimately makes sense in human terms. It is the most audacious thought that human beings have ever had. It may be an illusion; even so, it is a very *interesting* one" (2004: 1). Those opening words of Berger's book on religion provide a fitting close for this project. It may not be clear what is truth or what is illusion, but there is much interesting work yet to be done on this topic.

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