

# Psychology as if the Whole Earth Mattered: Nuclear Threat, Environmental Crisis, and the Emergence of Planetary Psychology

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This article traces a genealogy for the various strands of contemporary psychology which are concerned with global environmental change, including conservation psychology, ecopsychology, and other subfields and interdisciplinary concentrations. Focusing on a network of psychiatrists, psychologists, and other researchers based at a research center founded in Cambridge, Massachusetts in 1982, the article explores what those who first turned to the psychological causes and implications of climate change and other kinds of global environmental disruption had learned from their studies of nuclear-era psychology. The explorations of these researchers and practitioners in systems psychology, depth psychology, and political psychology, elicited by the first truly planetary crisis of the modern world, the threat of general nuclear war (which, apart from the enormous damage done at Hiroshima and Nagasaki and during weapons tests, remained largely theoretical), were applied to a new planetary crisis which was already unfolding: global environmental degradation. As they completed this pivot from the nuclear threat to the environmental crisis, at the end of the Cold War, using the language of the psychology of survival, these researchers displayed the form and function of what might be called a planetary psychology—of psychological theory and practice which broaches the planetary context of the individual psyche.

*Keywords:* conservation psychology, nuclear psychology, planetary psychology, climate change, ecopsychology

On May 3, 1990, a small crowd gathered at the Cambridge Hospital in Massachusetts to hear three speakers address the theme *Psychology as if the Whole Earth Mattered*. It was the “first venture publicly” of the Center for Psychological Studies in the Nuclear Age, said convener John E. Mack, “into this whole complex problem of the environment” (Mack, 1990). They were gathered to explore their part in the “extraordinarily complex and profound

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problem of creating a sustainable living environment on this Earth.” The nature of the problem called for a systemic approach which scaled from the individual to the global: “a comprehensive, complete, view of the problem, the problem of the institutions, corporations, the society as a whole that creates the destruction that we are trying to do something about.”

By exploring the intellectual trajectories gathered together in the Center for Psychological Studies in the Nuclear Age, which became the Center for Psychology and Social Change, showing how the Center came into being and delineating the paths traveled by its interdisciplinary researchers, this article traces a new genealogy for the disparate strands of psychology today concerned with global environmental change. It shows how the seam of psychological thought about the survival of the human species elicited by the threat of nuclear war changed course as global ecological concerns mounted toward the end of the Cold War. The Center offers one view of psychological theorists turning, in the shadow of planetary crisis, to more radical ideas about the human psyche and its relations with the more-than-human, and laying out the outlines of a planetary psychology—one which conceptualizes the human psyche in relation to the planet.

Environmentalism and global approaches to social problems were hardly new in 1990. The environmentalist movement had engaged enormous popular energy and had achieved much, including the proliferation of environmental government departments and new support for research and teaching concentrations in environmental science across the 1970s and 1980s. But in addition to the local environmental awareness and protection generated in these decades, a sense of global crisis (in which the environment figured large) had emerged in the mid-20th century, with bleak visions of pollution and extinction and conferences articulating international anxiety over resource scarcity and human terraforming (Osborn, 1948; Thomas et al., 1956; Vogt, 1948). The United Nations system responded to and shaped these concerns through the landmark Human Environment Conference in Stockholm in 1972, the 1970s Man and the Biosphere Program, and the 1987 Brundtland Commission. In addition, leading industrialists and senior bureaucrats sought to intervene, forming the Club of Rome in 1969 to further understanding of the world *problematique*, which joined environmental concerns with emerging social, political, and economic anxieties at a global scale. They worked to map this across the complex interdependent systems that constituted global society, making substantial investments in innovative interdisciplinary research to “manage” the planet (Elichirigoity, 1999).

However, by the end of the 20th century there had still been little engagement with the psychological dimensions of the *problematique*. Psychologists and psychiatrists had certainly participated in efforts to define and address the crises and catastrophes of the 20th century. The threat of nuclear annihilation, particularly, had elicited a new “nuclear psychology”—a concerted effort to reckon with the psychological implications of the new technology. Alarmed by the escalation in the arms race with the Soviet Union after Ronald Reagan took office in January 1981, many psychologists enrolled in the peace movement, along with other professionals and students. They studied the anxiety of living with world-ending technology, particularly among children, and the psychology of the decision-making which perpetuated that anxiety. But as global environmental concerns began to eclipse the nuclear threat, some saw the world-spanning, multifaceted *problematique* as a call for a comprehensive revision of psychological thought and even the understanding of the psyche itself. Roger Walsh, professor of psychiatry, philosophy, and anthropology at the University of California Irvine, argued that because these interwoven existential threats were generated by human behavior they could—with his own emphasis—“largely be traced to psychological origins” (Walsh, 1989, p. 158). Walsh drew on various schools of psychological thought to create what he called in turn a “global psychology” and a “psychology of human survival.” He entered the ambit of

the Center for Psychology and Social Change at the end of the Cold War, but its founders called for something more radical than his integrative psychology, a new psychology which connected the planetary environment and the world of the psyche. “We really have to bring something into being that hasn’t been there before,” declared [John Mack \(1990\)](#): a psychology “as if the whole earth mattered.”

In the first years of the 21st century, researchers proclaimed the field of conservation psychology: the study of “the reciprocal relationships between humans and the rest of nature” ([Saunders, 2003](#), p. 138). Integrative, eclectic, and applied, the new field defines the ecological crisis as the product of individual and collective human interaction with the environment and draws on individual and social psychology to avert it. But it emerged late. Its forerunner, conservation biology, had arrived in 1985, anxious to mobilize scientific research to address the dawning ecological crisis ([Soulé, 1985](#)). It was biodiversity that was to be conserved, rather than nature or wilderness as in older, more Romantic formulations. This language of conservation emerged in the wake of the United Nations Conference on the Human Environment in 1972, which concentrated global interest on the deteriorating planetary environment. That conference led to the creation of the United Nations Environment Program and, in time, to the Convention on Biological Diversity presented to the Earth Summit held in Rio de Janeiro in 1992. But it was only at the turn of the millennium that psychologists took up the conservation model, among the emergence of conservation medicine, conservation health, and conservation physiology—and adjacent to other configurations like planetary health which aimed to reconfigure health and medicine in the context of interlocking ecological crises ([Saunders & Myers, 2001](#), pp. 7–8).

[Clayton and Myers \(2015\)](#) argue that the pioneering etiologies of ecological crisis tracing the ways Western notions of self and society had shaped the treatment of the global environment ([Hardin, 1968](#); [White, 1967](#)) long remained peripheral to environmentalism and to conservation and environmental policy. Similarly, psychologists have been slow to address the crisis with their disciplinary knowledge. The subdiscipline environmental psychology had emerged in the 1960s to improve the mental health effects of workplace and residential built environments in the general construction rush which served the postwar boom in population. It began to turn toward the physical environment in the 1980s, and to problems of sustainability at the turn of the century. Ecological psychology, which also emerged in the postwar years, was interested in the theoretical implications of seeing humans ecologically—as organisms embedded in systems in which perception and agency were not discrete analytical categories ([Lobo et al., 2018](#)). And yet, in the first years of the new century, most psychologists still saw their work as divorced from the actual, physical environment ([Clayton & Brook, 2005](#)). Psychology as a whole, as Roger Gifford argues, still largely continues in its founding impulse, investigating the human psyche “as if people acted and interacted nowhere, in a black void” ([Gifford, 2014](#), p. 543). While there has been a great deal of interest in the psychological and mental health dimensions of ecological crisis in recent years, these have, as Gifford argues, been fostered by popular anxiety rather than by any real disciplinary investment or organic intellectual trajectory ([Gifford, 2014](#), p. 544).

In this article I trace an alternative genealogy for these recent turns to the environment and ecological crisis in psychology, conservation psychology and other psychological subfields and specializations which take up environmental change as a theoretical subject and a political concern. I show how researchers at the Center for Psychological Studies in the Nuclear Age in Cambridge turned to the destructive human stance toward the environment after first studying the psychology of the nuclear threat. Psychiatrists John Mack and Robert Jay Lifton founded the Center in 1982 to explore the idea that the willingness to countenance annihilation at a species, planetary scale indicated a need for profound psychological work on

death and the continuity of life—on the problem of survival. It was, from its first impulse, an interdisciplinary endeavor, with “psychological studies” pursued not only by psychiatrists more interested in research and advocacy than clinical work—and who talked of their interventions in terms of depth psychology—but by educators, anthropologists, political theorists, and theologians. This disciplinary encounter is an important part of this history; researchers and practitioners with a wide range of expertise contributed to the innovative work of the Center.

As the Cold War thawed, the Center researchers considered what they had learned in the shadow of the bomb as they turned to a new planetary-scale threat—one that raised similarly stark philosophical and psychological questions about human consciousness. They changed their name to the Center for Psychology and Social Change and organized a series of conferences and seminars exploring the psychological components of global environmental change and its new risks to human survival. They gathered together strands of alternate psychology, seeking to establish a new psychology which would not only take in the psychological causes of environmental destruction and the impact of environmental degradation on the human psyche, but what [John Mack \(1990\)](#) referred to as the human “relationship with the Earth itself.” This planetary, more-than-human imaginary, which has become part of the language of the Anthropocene, now appears in the literature of conservation psychology and still reads as radical—and yet it was broached here, in the explorations of psychologists and psychiatrists who had first glimpsed that relationship in the threat of nuclear annihilation.

The intellectual and activist trajectories concentrated at the Center show how the charged psychological contours of the nuclear age made the way for the new psychology of environmental crisis. Their explorations in systems psychology, depth psychology, and political psychology were elicited by the novelty and enormity of nuclear technology. I argue that the history of this early psychology of crisis and survival prefigures recent movements in environmental and conservation psychology. It also shows the emergence of a new, planetary imaginary in psychological thought. Pivoting toward the environmental crisis, Center researchers talked of the ways that interwoven psychological and psychosocial forces threatened the survival of the planet, creating a singular, whole-earth crisis incorporating both nuclear arms and environmental destruction ([Mack, 1990](#)).

Here I draw attention to the distinctive intellectual work performed at and around the Center for Psychology and Social Change. As small, short-lived, and marginal as it was, at the end of the Cold War the Center offered a theater for the performance of a significant pivot in the history of psychology, from the psychology of the nuclear threat to the psychology driving and being driven by global environmental change. Center researchers sketched the outlines of a new psychology—a psychology as if the whole earth mattered—which they would not bring to fruition, and which the Center itself would not survive to see fulfilled. In the 21st century, psychological research and advocacy work continues to seek a psychological frame capable of addressing the relations between self and planet, between individual well-being and the survival of the species. I argue here that this project of grappling with the psychological dimensions and effects of planetary crisis is common to a range of fields and endeavors, including survival and nuclear psychology, peace psychology, ecopsychology, and conservation psychology. A distinct history is therefore called for, one which reveals early and explicit efforts to tackle these themes—including at the Center for Psychology and Social Change at Cambridge Hospital in the final years and immediate aftermath of the Cold War.

## Planetary Crisis and Planetary Imaginary

Those who drew together in the Center for Psychology and Social Change seeking to fashion a psychology to countenance the whole earth—a planetary psychology—had learned to see the earth as a whole from elsewhere. The planetary imaginary articulated at the seminars and conferences at Cambridge Hospital was shaped by escalating warnings of the Earth's finitude and vulnerability but more powerfully so by apocalyptic images of nuclear war and by the peace movement that coursed through the United States and across the world, ebbing and flowing through the vagaries of the Cold War. John Mack borrowed the "whole earth" language from a conference he attended 18 months earlier at Findhorn Foundation, on the Moray Firth, Scotland, called "The Individual and the Collective: Politics as if the Whole Earth Mattered." It had articulated the Findhorn Foundation's distinct planetary imaginary. The Foundation emerged in the early 1960s in anticipation of the coming "planetary holocaust"—a nuclear one—which spiritualist founders Peter and Eileen Caddy and Dorothy Maclean believed would terminate existing social, economic, and political relations. Cultivating a garden and developing a distinctive community life, they sought to demonstrate a vision of reformed relations between humans and between species which might take root after the apocalypse. This millenarianism held sway at Findhorn for a decade, until U.S. spiritualist David Spangler arrived and helped to establish a set of new priorities as codirector of the Foundation in 1970–1973. Its members would no longer wait for a new age (via holocaust), but act in the present, and in the local environment. "There is no new age," Spangler wrote. "There is only a need to recreate, rethink, refeel, reobserve, renew, reconceive and give rebirth to an ongoing process of planetary life and growth. There is one age, filled with many forms that change and one essence that does not" (Rubin, 1982, opening paragraph). Spangler became a key voice in the new age movement, with his manifesto, *Toward a Planetary Vision*, published by Findhorn (Spangler, 1977). A Findhorn conference in October 1982, "Building a Planetary Vision," sought to open up this vision. The planetary was domesticated and situated through the idea of intentional communities, leading to the global EcoVillage movement (McLaughlin & Davidson, 1986; Riddell, 1990; Scott, 2005). The Findhorn conference John Mack attended 6 years later explored the geopolitical implications of the personal politics of garden and community. Soviet and United States delegates shared visions of peace and cooperation; Mack spoke about his quest for "nonargumentative ways to conflict resolution" and "new myths that unite us, a new concept of human identity" (Burdman, 1988, pp. 40–41).

Mack's own sense of planetary crisis long predated the conference. His vision was influenced by the exploratory and activist elements of the psychiatric and health communities concentrated around Boston, which had been at the forefront of medical antinuclear activism since the early 1960s. Born into a German Jewish family in New York in 1929, Mack graduated from Oberlin College in Ohio, and then *cum laude* from Harvard Medical School in 1955. He served as a psychiatrist in the United States Air Force in Japan in 1959–1961 before establishing himself in Boston as a fellow in child psychiatry at the Children's Unit, Massachusetts Mental Health Center, a private practitioner, and a Candidate in Training at the conservative Boston Psychoanalytic Society. He served on a series of American Psychiatric Association committees according to his shifting research interests in child psychiatry, nightmares and conflict, and the psychology of geopolitics. He joined a taskforce on psychohistory and psychobiography in 1973–1975, his 1976 psychobiography of T. E. Lawrence winning a Pulitzer Prize. He maintained a strong interest in the psychological dimensions of diplomacy and domestic and foreign politics, and was vice president of the International Society for Political Psychology 1978–1980.



In 1977, Mack was invited by University of Pennsylvania social psychiatrist Perry Ottenberg to join a APA taskforce on what, Mack later wrote, “was then euphemistically called the ‘Psychosocial Aspects of Nuclear Advances’” (Mack, 1996, p. 229). The Association typically avoided politics, but its members decided that the nuclear threat overrode its normal constraint (White, 1986). The taskforce’s 1982 report encompassed nuclear emotion and nuclear secrecy, U.S.–Soviet relations, the psychological effects of the Three Mile Island reactor accident, and psychosocial aspects of nuclear power. With Children’s Hospital Medical Center psychiatrist William Beardslee, Mack contributed a chapter on the impact on children and adolescents of nuclear power and weapons. It had been a clear arc for Mack from nightmares and childhood psychology through political psychology and psychohistory to joining with these colleagues in exploring nuclear psychology (Beardslee & Mack, 1983). Beardslee and Mack would serve on another APA committee on nuclear anxiety in children and adolescents.

Psychology had been an important dimension of the antinuclear medical movement from the start. One of the landmark 1962 *New England Journal of Medicine* articles which had launched Physicians for Social Responsibility (PSR) had explored the psychology of defense shelters, and that organization’s founding statement of purpose discussed the psychological effects of the nuclear threat (Leiderman & Mendelson, 1962; Zwigenberg, 2018, p. 45). In 1964, the Committee on Social Issues of the reform-minded Group for the Advancement of Psychiatry, which included Robert Jay Lifton and Jerome Frank, the leading figure in American nuclear psychology, issued a report on the *Psychiatric Aspects of the Prevention of Nuclear War* (Group for the Advancement of Psychiatry [GAP], 1964). In his classic 1967 text *Sanity and Survival*, Frank developed the thought: New psychological structures were necessary to prevent conflict in what was now (and hopefully in multiple ways) a “postatomic” age. A pioneer in the field, his early presentations on this theme had often met with condescension or scorn, his colleagues assuming his nuclear concerns were referred from some psychodynamic struggle—a glimpse of the marginality of this thinking between psychology, politics, and history. In a preface to the second edition of *Sanity and Survival* in 1982, James Muller, cofounder of International Physicians for the Prevention of War (IPPNW), wrote that the book had influenced him powerfully, as a medical student, and that it had done much to bring forth the new group (Frank, 1982, p. xii).

John Mack had been a member of GAP since 1968 as well as serving on the APA taskforces, and he joined both PSR and IPPNW in 1981. He worked to strengthen and amplify the connections between these individuals and organizations. In December 1981, he convened a 2-day symposium at the Boston Park Plaza: “The Threat of Nuclear War: Biological, Psychological and Social Dimensions,” sponsored by Cambridge Hospital’s Department of Psychiatry and the Harvard Medical School Center for Continuing Education (Baughman, 1981). Since 1969, Mack had been based at Cambridge Hospital, with its commitments to community and social psychiatry, and affiliated with Harvard Medical School (Mack, 1996). The conference was in the PSR and IPPNW mold; it aimed “to apprise practicing clinicians of the terrible threat to mental and emotional health that the nuclear arms race poses,” and the faculty included key leaders in the activist organizations (Harvard Medical School Department of Continuing Education, 1981). “The nuclear age is a reality,” the brochure emphasized; faculty would lead participants in “confronting the dilemmas and perils of our own technological advances.”

Mack was characteristically freewheeling in his opening remarks, linking “apocalyptic religions, the transience of modern society, as well as Americans’ and Soviets’ widespread drug and alcohol abuse to failure to cope with the fear of living [in] the nuclear age” (Baughman, 1981). The symposium framing and list of speakers reflected Mack’s interests; they

encompassed many aspects of “the psychosocial context of the nuclear arms race, with particular attention to the medical consequences and stress disorders that can evolve from this problem” (Harvard Medical School Department of Continuing Education, 1981). Mack and other Cambridge Hospital psychiatrists were joined by William Beardslee from the Children’s Hospital, Lester Grinspoon, from Massachusetts Mental Health Center, and two leading experts in nuclear psychology internationally: Jerome Frank spoke on the psychology driving the arms race and Robert Jay Lifton on the psychological impact of atomic weapons in Hiroshima. The faculty included key leaders of the antinuclear medical organizations, Helen Caldicott (PSR president), James Muller (IPPNW cofounder and secretary), and Alexander Leaf (founding member of both PSR and IPPNW). Mack also drew in a range of political analysts and strategists for a multidisciplinary discussion of nuclear psychology, including Randall Forsberg, the founder of the Institute for Defense and Disarmament Studies who had drafted the *Call to Halt the Arms Race*—the manifesto of SANE’s Nuclear Weapons Freeze Campaign (Forsberg, 1982).

Medical antinuclear advocacy continued strong in the Boston area, infiltrating curricula and building support in the medical community. In the months prior to the symposium, Alexander Leaf resigned his chair in clinical medicine to chair a new Department of Preventive Medicine at Harvard. Interested in the structural determinants of health, Leaf studied first the political and environmental systems of potential nuclear war, and then became increasingly concerned about the ensuing ecological crisis (Dunk & Jones, 2020). Leaf, Mack, and James Muller, as well as professor of radiology Herbert L. Adams, proposed a new course in 1982: “The Health Aspects of Nuclear War.” One of the first of its kind in the country, it would cover nuclear weapons technology, the medical effects of their use, but also the “psychological stress” produced by the knowledge of the possibility that they might be used. They aimed to mobilize medical students, they told *The Harvard Crimson*, “because doctors must play a key role in leading protests against the escalating nuclear arms race” (Baughman, 1981). The course was still running, with Center input, in 1986 (McArdle, 1986). Mack and Lifton were closely aligned with the antinuclear organizations. In 1982, both agreed to coedit the volume *Last Aid*, a stark volume of papers presented at IPPNW’s First Congress, with Eric and Susanna Chivian (Chivian et al., 1982) and each also contributed to a PSR volume published the same year, *The Final Epidemic* (Adams & Cullen, 1982).

### Human Possibility and Human Continuity

Psychological perspectives had been prominent in PSR and IPPNW from the start, but Mack wanted to press further. “There are fundamental ways,” he wrote in his chapter in *The Final Epidemic*, “in which the nuclear arms race is psychological at its roots” (Mack, 1982b, p. 21). After 2 decades of antinuclear research and advocacy, there remained fundamental questions about the psychology of the nuclear era—manifesting in childhood and adult anxiety but also in U.S. domestic politics and Cold War geopolitics. In 1981, Mack proposed a new, more focused enterprise, a research center that would seek to better understand this psychology and to encourage dramatic psychological transformations, individual and collective. Together with Robert Jay Lifton, at Yale, and Richard Chasin, a Harvard psychiatrist and trustee of the Rockefeller Brothers Foundation (and a relative of the family), Mack began to workshop a prospectus and funding proposal in 1981. Lifton was interested in “exploring and enhancing new modes of thought and feeling in connection with the nuclear age” (Lifton, 1982a, p. 1). Everyone was talking about nuclear problems, and even discussing individual anxiety and decision-making, he said, but “no one explores such specific questions as: ‘What changes in our thought and feeling are beginning to take place? Which of these are adaptive

and which maladapted? What new psychological pressures and possibilities now confront us? How can we bring specific psychological insight to understanding and interrupting the dynamics of the nuclear arms race? Exploring these questions and raising new ones around them would be the *raison d'être* of the Center" (Lifton, 1982a, p. 1).

Mack's first thought was of a "Center for the Study of Human Possibility." He had for some time been interested in the Human Potential Movement which had grown out of the 1960s counterculture, associated with humanistic psychology. Mack undertook est Standard Training in 1981; the intensive two-weekend seminar run by Erhard Seminars Training (marketed and widely known as "est") which was designed to provoke personal transformation. He was one of the 700,000 Americans to do so between 1971 and 1984. The significant revenue generated by these seminars was channeled by founder (and former encyclopedia salesman) Werner Erhard into a foundation to support education and research into individual and social transformation. Mack found the training valuable and agreed to join the board of the est Foundation. He arranged for Erhard, a controversial figure, to give a lecture at Harvard in 1982 (Rae, 1994). In mid-1982, the est Foundation board discussed possible interventions into the nuclear problem. Erhard was eager to promote human transformation as a necessary antidote to nuclear crisis. It was in conversations with Erhard and Foundation directors that the idea for the center had first arisen, as Mack (1982a) wrote in a letter requesting support for the new venture. After a dinner with Mack, Robert Jay and Betty Jean Lifton, and "Werner and his pals," Chasin reflected: "Werner's talk and the panel were quite an adventure. It was difficult for me to assess its impact, although I am relatively certain that most of those who have seen Werner for the first time have probably replaced their old menacing images of him with more benign ones. I hope I was helpful" (Chasin, 1982, p. 2). The Foundation chose not to support the new center, although it later would, amid other nuclear interventions, including an "under-the-radar" strategic conference on the nuclear deadlock in the Pocantico Hills in March 1983, attended by nuclear experts and philanthropic foundations (est Foundation, 1983). Mack helped organize the conference. The Foundation also supported Joanna Macy, the Buddhist and systems thinker who sought to turn despair into empowerment, who would become a close affiliate of the Center.

The phrase "human possibility," however, made Lifton and Chasin uncomfortable. Chasin (1982, p. 1) thought it might "conjure up unfortunate images associated with that movement." Lifton (1982b) thought it might imply connection with Esalen, the Californian teaching retreat and key locus of the Human Potential Movement, and with humanistic psychology—"which of course are okay, but we want to have our own kind of sense of ourselves." He proposed "the research program for the study of human continuity," a title invoking his own work on death and the continuity of life. The prospectus was circulated more widely in 1983 using this title, with Mack and Lifton identified as authors (Mack & Lifton, 1982). It deftly signaled their intention of guiding the popular energy of the human potential and new age movements. "It is becoming increasingly clear that the cause of our peril lies not alone in the technology of nuclear weaponry," they declared, "but in the workings of the human mind, in outdated, entrenched patterns of thought and behavior and in inadequate forms and styles of cultural and political interaction." The nuclear threat "to human civilization" made it necessary to "reexamine our fundamental assumptions about war and peace, extinction and survival, foe and friend" (Mack & Lifton, 1982, p. 1). The authors perceived "a quickening of the human imagination" throughout the world as many began to question defense and security strategies which depended upon nuclear weapons. This critical intervention was interpreted as "a sign of our urgent striving for human continuity" and the stirrings of a transformation in "the way we think of ourselves, our neighbors, our enemies, and our shared fate on the earth" (Mack & Lifton, 1982, p. 3). Here a nascent planetary imaginary is



visible. In Jonathan Schell's immensely popular essay about nuclear war, published that same year, the planet was not only the site of human history but bound up with it; the nuclear era brought into view the very "fate of the earth."

Mack provided the impetus and much of energy necessary to establish the Center and set its central commitments—decision-making and power—but it was Lifton who provided the main elements of its intellectual framework. He had been in the vanguard of nuclear psychology since the early 1960s, when his work on death symbolization in postatomic Hiroshima had helped precipitate a GAP report on nuclear psychology. His research also circulated widely within the APA nuclear taskforce on which Mack and Beardslee had served. Lifton argued that 20th-century history called for a new psychological engagement with death. His new paradigm, "death and the continuity of life," (Lifton, 1973) theorized the dynamics between the human striving for immortality and the death, and death imagery, erupting in modernity. In place of the approaches of Freud ("rationalist-iconoclastic") and Jung ("hygienic-mythical"), Lifton developed his own "formative-symbolic" theory of psychic life (Lifton, 1973, p. 5). Immortality was symbolized as biological—the continuity of life itself—and as transcendental, where theological and artistic culture offered access to eternal or "mythic" time (Lifton, 1973, p. 7). All continuity was threatened by the proliferation of "extinction imagery" which issued, wrote Lifton, from the "historical predicament" constituted by the threat of nuclear war and the coming crises of environmental destruction and resource scarcity.

It was Lifton's interest in psychohistory, his sense of the psychological significance of the high drama of global war and Hiroshima, that led him to the psychological study of death (Lifton, 1973, p. 3). His curiosity about concepts of self and of history in the aftermath of the war in Japan, in a research project conducted in 1960–1962, led him to engage with Hiroshima survivors. He saw them as suffering a remarkable "psychic numbing," but came to see that the nuclear age involved a more general numbing, as private citizens anticipated and decision-makers actively contemplated the use of nuclear weaponry. Lifton would later build these theories of interruption and resurgence of regular psychic processes into a theory of the modern, "protean" self—building a new psychological paradigm in the shadow of catastrophe (Lifton, 1963, p. 462; Lifton, 1983, 1993). His research also contributed significantly to the identification of posttraumatic stress disorder (Zwigenberg, 2014). Mack and Lifton seem to have been brought together by their shared engagement in psychohistory as well as their specific concern with the nuclear threat; the stark bearing of that threat helped accentuate the intersection of history and psychology. Both had been drawn into their research through their exposure to the world-shifting events of the mid-20th century as psychiatrists in the U.S. Air Force.

Despite efforts to distance the Center from the Human Potential Movement, part of its founding rationale was to sustain and defend the movement's momentum and to overcoming the resistance it had encountered. The prospectus declared this would require the "constant infusion of new ideas" driven by interdisciplinary, public-facing research (Mack & Lifton, 1982, p. 3). "We need to do much systematic research if we are to determine what it is in our thinking that remains dangerously outmoded and nonresponsive to the risk of self-inflicted human extinction"—to identify the assumptions underlying public attitudes, restructure thought processes, and effect "life-enhancing change" at personal and policy levels (Mack & Lifton, 1982, p. 4). The Center would support research which defined and analyzed those "patterns of thought and action" which perpetuated the nuclear arms race. It would be "a meeting place where scholars and policymakers may examine unexplored questions and assumptions, exchange views, and begin to find innovative answers," and would disseminate those answers widely to "nurture and encourage new thinking." This research was categorized into four themes: illusory assumptions and confused attitudes about nuclear weapons which

maintain status quo behavior; the psychological effects of developing nuclear technology and nuclear strategy and anticipating nuclear attack; patterns of U.S.–Soviet interaction on nuclear weapons; and strategies for change, including overcoming resistance. Richard Chasin (1982, p. 2) suggested that these strategies for change might benefit from the application of general systems theory, which, he said, “helps us to analyze patterned interaction” and to learn “how various factors maintain a maladaptive system and to see how certain interventions might serve to change it.” It was the beginning of an interest in systems which would animate the Center’s research and draw it toward planetary and environmental concerns.

Protecting the popular movement required not only intensive research and broad public engagement but also the defenses afforded by institutional reputation. The prospectus, and later the Center’s newsletter and other literature, would claim standing in a range of prestigious institutions and disciplinary worlds, including medicine, public health, divinity, anthropology, and psychology, at Harvard, MIT, and the Carnegie Foundation. More than institutional shelter, however, the disciplinary breadth of the Center’s research associates, speakers, and advisory board members suggest that interdisciplinary exchange contributed significantly to its psychological innovations.

Despite these claims to standing, and the impressive array of speakers assembled at the Boston Park Plaza symposium, their nuclear concerns remained in the minority. Mack saw the Center “providing an alternative to the views of the Kennedy School and other more traditional perspectives,” as he explained at a planning meeting ([Research Program for the Study of Human Continuity, 1983](#), p. 1). Beardslee spoke of the “Harvard View” against which they worked. Mainstream psychology, and other social sciences, had, Mack argued, been significantly coopted by the ongoing Cold War effort as governments looked to inure people to the extreme and unprecedented characteristics of life in the nuclear age. Mack therefore understood the Center as “infiltrating the Harvard structure.” This positioning would come with its own problems, as its executive director would later explain, rather plaintively, to a psychiatrist looking to support their work. The Center received no financial support from Harvard and had difficulty raising external funds. “Most foundations find the work we do a bit too radical,” explained its executive director, “while the foundations who fund activist groups, such as PSR, find us a bit too ‘establishment’” ([Gutlove, 1986](#), p. 1).

## The Psychological Point of View

The researchers began meeting as the Research Program for the Study of Human Continuity. “Who are we?,” asked Eric Chivian, at a planning meeting ([Research Program for the Study of Human Continuity, 1983](#), p. 1). A staff psychiatrist at MIT, Chivian had helped to revive PSR in 1978 and found IPPNW in 1980. They needed to define their purpose in order to strengthen applications for external funding, but also to clarify why those like Chivian, already stretched well beyond their clinical duties, should participate. Mack, Lifton, and Beardslee were all involved in the activist organizations, and another founding member, Roberta Snow (a teacher whom Mack called a “comrade in arms” and who had spoken at the Boston Park Plaza), founded Educators for Social Responsibility in 1982 ([Mack, 1996](#); pp. 233–234). The prospectus envisioned collaboration with these and other “professional and citizen groups” seeking to stave off nuclear war ([Mack & Lifton, 1982](#), pp. 14–16). How then, asked Chivian, would the Center differentiate itself? Beardslee argued that the Center was “not-activist” because it was not an open group and had no specific policy agenda (p. 3). Chivian wanted to create “a research data generating group” (p. 1). Others argued that they should delineate themselves by focusing on the “psychological dimension” (p. 2). “What the country is asking for most of all,” suggested Dorothy Austin,

a lecturer in psychiatry at the Harvard Medical School, was the “conceptual framework—the psychological point of view” (p. 1). The group should support distinct individual and collaborative projects, but the “crucial task of defining the perspective is the work of the group as a whole.” It was this that would make them “unique (p. 1).”

The research-based psychological perspective agenda won out, and in a review the following year, Austin described the settled strategy of the Center: to “nurture the strongest possible research, analysis and training within the University setting” and to use that research to “reshape the frames and reference of public debate” (Austin, 1984, p. 21). In 1983, it had become the Nuclear Psychology Program: Studies of Psychological Issues in the Nuclear Age, after feedback that the language of human continuity “seemed too broad or simply uninformative” (Austin, 1984, p. 21). The program’s monthly seminar was its “intellectual center,” (Austin, 1984, p. 21) helping to establish it as an interdisciplinary training arena for scholars and professionals in psychiatry, medicine, education and social sciences, and to maintain ties with decision-making bodies.

In 1986, the still-informal program was transformed into the Center for Psychological Studies in the Nuclear Age (Center for Psychological Studies in the Nuclear Age, 1986–1987). Mack was academic director and Paula Gutlove was executive director, its first paid staff members. Lifton was listed as a senior research scholar, with the founding members (Beardslee, Austin, Chasin, Chivian, and Snow) now directors, together with prominent education consultant Richmond Mayo-Smith and nuclear psychologist Steven J. Zeitlin. The 25-member advisory board included Jerome Frank, now emeritus at Johns Hopkins, and leading child psychologist Rita Rogers, both of whom Mack had worked with on the APA Taskforce on the Psychosocial Aspects of Nuclear Advances, Roy W. Menninger, David Rockefeller, Jr., and Howard Hiatt, Dean of Harvard School of Public Health. The early Center projects included studies of children and adolescents, decision-making, family dynamics, and prejudice in the nuclear age, and they emphasized public engagement through media appearances, colloquia, national conferences, and a newsletter with circulation above 10,000. Researchers were called on to advise Congress, the United Nations, and a range of other organizations.

The Center was now established on a stronger footing, but the nuclear crisis which had brought it forth was ebbing. In response, Center researchers began to discuss new visions of planetary crisis; they had achieved new insight into what they called, in a Statement of Purpose drafted for internal use in the late 1980s, “the nature of the problem” (Center for Psychological Studies in the Nuclear Age, 1988, p. 1). New developments in biology and physics meant that the universe now presented as “a vast, vibrating matter/energy unity,” and planet Earth as “an interconnected organism with each part dependent on all of its systems both close and distant” (p. 1). It was “a mass of interdependent natural and man-made systems” (p. 1). This interdependence had come into view not only by the emergence of new scientific knowledge, but under the shadow cast by new planetary-scale threats. “We are agreed,” wrote Center researchers, “that civilized life on the planet, as well as the planetary life support system itself (the biosphere), is threatened by material activities in the interconnected nuclear, environmental, and economic spheres” (p. 1). Over the 7 years of the Center’s work, these researchers had come to see these threats as the product of “unconscious and preconscious patterns of behavior” within individuals, between individuals, and within groups. “These different levels of patterns are also interconnected, nested in a system” (p. 2).

The draft Statement of Purpose articulated the Center’s original rationale as the study of the psychological aspects of the relationship between the United States and the Soviet Union —“particularly as they affect (1) the perceptions of this relationship (2) children’s attitudes about their future” (Center for Psychological Studies in the Nuclear Age, 1988, p. 2). Its drafters noted that these efforts to analyze Cold War politics as a “psychological enmity

system” may have contributed to the recent “improvement” in those relations (p. 2). That thawing, and decreasing likelihood of nuclear apocalypse, had allowed the researchers to turn to other problems but it had also brought new clarity on the fundamental dynamics of the Center, revealing “two value systems” both oriented to ensure “the continuation of life and civilized life on the planet” (p. 3). One set arose from “a clinically informed systems/depth psychological approach” in which the clinician performed the role of facilitator or mediator to generate “greater understanding among the conflicting parties, and enable them to move constructively and peacefully from stuck patterns” (p. 3). The other was that of the peace movement, shared by organizations like PSR and IPPNW—which included specific strategies in pursuit of that fundamental goal. This set “did not rest on psychologically informed theory, data, or skills” (p. 3). And the two value sets conflicted with each other, since it was “impossible both to advocate change in the process of policy making and at the same time advocate for particular changes in policies” (p. 4). The researchers voiced an uncommon, and perhaps in the 1980s an unpopular assumption: that “everyone on earth is biased in favor of our planetary environment and the life it supports.” As mental health professionals—facilitators, “interventionists”—they were “far more affected by the fate of the earth than usually by a patient,” just as a physician could not be “neutral toward AIDS” (p. 5). They were, then “more likely to be advocates for a better process of communication than for a particular political stance. And although not completely neutral ideologically, we will avoid positions that treat any individual or belief system as so intrinsically and intractably invalid or evil that the only responsible reaction to it is direct, forceful opposition” (p. 5).

The rephrased purpose of the Center was “to continue to develop and adapt theory and data to help elucidate the psychology of the patterns of thinking, feeling, and acting by people and by groups of people threatening life on the planet” (*Center for Psychological Studies in the Nuclear Age*, 1988, p. 6). Their chief expertise was psychological knowledge spread across a range of disciplines—anthropology, social and developmental academic psychology, and mental health. Clinicians would work to develop clinical techniques that might deliver insight into “the complex of beliefs, emotions, and habits that sustain the patterns” (p. 6). All would work to develop “insights and methods for bringing about shifts in awareness that can result in individual and group behaviors which are life preserving rather than life threatening” (p. 6). It was a mixture, as they noted, of depth psychology, political psychology, and systems psychology—a then-emerging field based mostly in industrial settings and drawing on the theory of Ludwig von Bertalanffy and Gregory Bateson.

National security continued to be a key focus for these explorations, and energy was becoming increasingly significant; representatives from these communities who were “open to a systemic/depth psychological approach,” should be drawn into the Center’s activities and onto its board (*Center for Psychological Studies in the Nuclear Age*, 1988, p. 7). The Center’s public forums became more regular in 1988 when there were lectures by Daniel Ellsberg, a military analyst who had leaked a classified Pentagon Vietnam study in 1971 (while working at RAND, the global policy thinktank with strong military links), and Joseph V. Montville, who had coined the concept of “track 2 diplomacy” to describe diplomacy by professional nongovernmental conflict resolution practitioners and theorists. The researchers were interested in trenchant differences of perspective (including in national security, the energy industry, the Middle East, apartheid South Africa, abortion), in the “psychosocial forces” of the business world where the profit imperative and limited liability together made business “more likely to exploit the planet’s resources than to preserve them,” and in the role of the mass media in identity work. However, from mid-1989, these interests began to be eclipsed by the ever-growing issue of global environmental degradation (p. 10).

In June 1989, University of California Davis psychologist Marc Pilisuk was invited by the Center to discuss perceptions of environmental risk, drawing on his research on radiation protection at nuclear power plants which bridged nuclear and environmental concerns (Pilisuk, 1989). Pilisuk had cofounded Psychologists for Social Responsibility with Alex Rode Redmountain in 1982, after Redmountain wrote, unsanctioned, to the 60,000 members of the American Psychological Association urging them to help “develop a strategy, based on psychological principles, to combat denial among the citizens of our country,” about the nuclear threat, “so that we shall never be lulled to sleep again” (Anderson, 2007, p. 131). Redmountain, a refugee from the Nazi occupation of Yugoslavia, had visited Hiroshima in 1953 and been visited by its nightmare scenes regularly in the decades since, bringing depression (Anderson, 2007, p. 132). He had been encouraged to organize psychologists against the nuclear threat by Helen Caldicott, president of PSR, after one of her advocacy lectures. Many psychologists enthusiastically participated in the wider mobilization of professionals against nuclear war; regional branches of Psychologists for Social Responsibility appeared simultaneously with the national organization in California and New York. Where the leaders of these groups saw strategic advantage in peace work outside their professional association, Canadian psychologists organized in 1984 within theirs, forming a new section of the Canadian Psychological Association which immediately became the Association’s largest, with 97 members and regional groups in four provinces (Johnson, 1984).

In the fall of 1989, as anticommunist revolutions began to break out across Central and Eastern Europe—but before President Gorbachev assured President Reagan at the Malta Summit that the Soviet Union would not begin a nuclear war—the Center for Psychological Studies in the Nuclear Age pivoted toward the environment. The Fall 1989 issue of the Center’s newsletter, *Center Review*, reported that staff and board members had met with representatives from the Appalachian Mountain Club, Maine Audubon Society, Massachusetts Audubon Society, and the Conservation Law Foundation, after taking a decision “to intensify [the Center’s] focus on the psychological and social dimensions of the ecological crisis” (Bragonier, 1989, p. 1). Center researchers planned to continue dialogue with local environmental organizations and to contribute to the environmental movement by studying the psychology of greed and materialism and strategies for enhancing environmental messaging. They would create a network of “individuals who bring a psychological perspective to bear on their study of the ecological crisis,” with a goal of “defining a concrete role we can play in furthering environmental protection” (p. 2). The Center’s “interest in the environment” was described as “a natural counterpart to its study of political relations among nations because international cooperation on environmental issues stemmed from (and supported) peace diplomacy” (p. 2). The common interests between the two causes were signaled by a second article in the same issue on environmental concerns at the Lawrence Livermore National Laboratory, on the eastern periphery of the San Francisco Bay Area, by Hugh Gusterson (1989), a Cambridge and Stanford-trained anthropologist and Research Fellow at the Center. There were also notices for a series of events that December which would help push the Center toward the planetary imaginary and systems focus which would dominate its interventions in the ecological crisis. Physicist, systems theorist, and deep ecologist Fritjof Capra would feature at a symposium cosponsored with Capra’s thinktank, the Elmwood Institute, which was committed to “the nurturing of new ecological visions and applying them to current economic, environmental and political problems” (Capra, 1985, p. 475). Two sessions would run on “Human Resources for Healing” and “Individual and Social Responsibilities for Health,” with Mack as discussant (Calendar, 1989). As well as these indications of a deepening planetary imaginary, the discursive shift from the nuclear threat to the environmental crisis was aided by the Center’s increasing focus on the psychology of survival.



## The Psychology of Survival

The psychology of survival was another inheritance of the nuclear era. It articulated the idea that psychology had both mandate and resources to meet existential threats (Orr, 2008). The phrase can be found scattered through the growing literature of nuclear psychology. It was used in a postwar study of the psychological aftermath of war (von Greyerz, 1962). Jerome Frank's important book was entitled *Sanity and Survival: Psychological Aspects of War and Peace*, and at the end of the Cold War Roger Walsh, at the University of California Irvine, published *Toward a Psychology of Human Survival* (Walsh, 1989). The language of survival encompassed nuclear and ecological threats, so that Walsh's book *Staying Alive* (Walsh, 1984) described the meshing of the nuclear threat with other global problems: malnutrition, resource scarcity, pollution, and rampant population growth, as well as the environmental problems he called "ecology." Walsh's concern came from the same broad sources as those which had produced the Center: he was alarmed by Jonathan Schell's *The Fate of the Earth* (1982) and the TV adaptation *The Day After*, which aired November 20, 1983. Walsh had also closely read the IPPNW volume *Last Aid* and the body of work by Robert Jay Lifton. He arrived at a simple conclusion: since the existential threats facing the human species, nuclear and ecological, were largely produced by human behavior, they should "largely be traced to psychological origins" (Walsh, 1989, p. 158). Walsh figured that the complexity and scale of the problems called for an integrative, "global psychology," drawing eclectically from Western and Eastern psychological and spiritual traditions.

The Center substituted the language of survival for the language of continuity. This was partly produced by the continuing effect of psychohistory in its intellectual constitution. Andrew Bard Schmookler, who had won the Erik Erikson prize in political psychology for his book *The Parable of the Tribes: The Problem of Power in Social Evolution*, had written about Hiroshima as the "inevitable result" of the modern human war against the self and described the Western mutilation of the spirit which had lost its adaptive benefits in the age of total, nuclear war. He was invited by the Center to speak on "The Causes and Cures of Human Destructiveness"—on "making whole" the fragmented world order and "healing the human spirit" (Schmookler, 1989).

Survival was similarly referenced in the funding priorities articulated by Center researchers as they developed new criteria for research projects they would support. Projects on political issues with the "(demonstrable) potential to affect global survival" were particularly well aligned, as were those relating to "psychological processes and dynamics" and projects which were explicitly "extraideological" (Center for Psychological Studies in the Nuclear Age, 1988, p. 9). The Center also began to make an annual award recognizing significant contributions to the psychology of survival. Norman Cousins, the journalist, nuclear peace advocate, author of the famous post-Hiroshima column "Modern Man is Obsolete," and sometime professor of psychiatry, was presented with the Center's first recognition award for his work on positive emotion and the need to transcend nationalism, together with his 1987 book *The Pathology of Power* (Herzig, 1989). Survival was also the theme of the Center's Fall lecture that year. Stanslav Grof, the alternative psychotherapist, spiritualist, and pioneer of transpersonal psychology (including through his technique of holotropic breathwork), spoke to an audience of 150 about the evolution of consciousness and the prospects of human survival. He described the transpersonal experience that could be achieved through the use of psychedelic drugs, breathwork, and other methods. The four stages of transpersonal experience replicated the birth sequence: a womb-like security, claustrophobic nightmare, struggle for escape, and an emergence into vivid light. Grof held that this light would help expand human consciousness and instill a "sensitivity

to the balance of nature”—“a very profound sense of ecological awareness” with an enhanced identity between “nature” and the human self (Everett, 1989, p. 7).

In 1989, the Center presented its second recognition award to Joanna Macy, who explicitly joined the nuclear and ecological threats, having developed a set of insights about the boundary between self and planet during the therapeutic workshops on nuclear despair she had begun running in the 1970s (Everett, 1990). The Center would draw heavily on her work in its calls for a new psychology. Macy had studied biblical history at Wellesley College and then world communist movements at the Institut de Sciences Politiques, University of Bordeaux, as a Fulbright scholar. She worked as an intelligence officer for the CIA, a community development worker in south Asia and Africa with the Peace Corps, and a speechwriter for the National Urban League. She completed her PhD in 1978 at Syracuse University on mutual causality in Buddhist teaching and general systems theory (Macy, 1978). Both those bodies of knowledge led her to a theory of the self as more complex, embedded, and porous than it was conventionally perceived. For Macy, these were far from theoretical concerns. In 1978, she began running group therapy sessions for those struggling with despair or apathy at the prospect of nuclear annihilation, aiming to release these energies into personal empowerment and positive interventions. By 1983, it was clear that the environment had risen in the schema of global threats. “We are bombarded with signals of distress,” she wrote in the programmatic statement for her workshops, *Despair and Personal Power in the Nuclear Age*: of “toxic wastes and famines and expiring species, of arms and wars and preparations for war” (Macy, 1983, p. 1). She identified three core strands to what she described as the prevailing “planetary peril”—each “of catastrophic proportion” and increasing daily: the threat of nuclear war; the “progressive destruction of our life-support system”; and the rampant poverty of half the world’s population. “Threats of annihilation form the backdrop of our lives,” wrote Macy. “They are there on the horizon of every relationship” (Macy, 1983, p. 39). Macy also drew on Lifton’s work to frame her own generation as the first to live with “a recurrent sense of biological severance,” encapsulated in images of thermonuclear damage and environmental decline (Lifton, 1979, p. 338). The human species’ loss of the “assurance of continuity,” she wrote, was “the pivotal psychological reality of our time” (Macy, 1983, p. 2).

By 1989, Macy was teaching in a range of graduate programs in the San Francisco Bay Area—John F. Kennedy University, the California Institute of Integral Studies, and the Starr King School for the Ministry. She continued offering despair and empowerment workshops and had gone further into deep ecology, developing transformative rituals with Australian environmentalist John Seed which helped to advance the deep ecology movement (Macy, 1993; Seed, 1994). The written record of these rituals, *The Council of All Beings* (Seed et al., 1988), animated the environmental indicators of planetary peril in Macy’s earlier work and continued to shape her outlook. “When we look at the information, when we let it in,” she told those gathered at Cambridge Hospital in December 1989 after receiving her award, “what it tells us is that we are living in a world that can die. And a world that in many ways is dying. There are ecosystems. There are species. There are fellow beings for whom it is already too late. We are so interconnected” (Macy, 1989).

Lifton had seen the catastrophic scale of violence and death during the Second World War as opening a new epoch in human history. Macy understood the ecological crisis developing in the 1980s as a juncture of similar proportions—but also distinct in its slow but absolute operations. “Let us not forget,” she warned, “that what we are facing together is new for our kind, is new in history” (Macy, 1989). A new moment called for a “new psychology,” one capable of sustaining the world and the human species within it. It “must involve of necessity a redefinition of the self” that departed from the narrow bounds of self-interest, “that hypothetical piece of turf around which we construe our strategies.” Seeking to define

this new self, Macy looked to Gregory Bateson; she quoted his characterization of the conventional self as the “epistemological fallacy of occidental civilization” (Bateson, 2000, p. 491). That fallacy, wrote Macy, the “false reification of the self” which implied that the separate individual or species was “the unit of survival,” was “basic to the ecological crisis in which we now find ourselves” (Macy, 1989). Such a view ignored the systems, or ecosystems, and feedback loops which supported life. A workshop led by Macy the day after her lecture, “Our Planet Our Self: A Deep Ecology Workshop,” modeled one response (Calendar, 1989). It aimed “to shift the sense of identity” toward an “ecological self”; to mourn for the destruction of the world as a form of mourning for self, or family; to expand participants’ sense of time, remembering the billions of years of planetary history, envisioning its future. That vast depth and weight generated “a sense of authority” and also of adaptive confidence, coded into the atomic structure of our bodies (Macy, 1989).

### Psychology as If the Whole Earth Mattered

These early meetings, workshops, and talks paved the way for the Center to complete its public turn toward a new, ecological psychology. It did so, led by John Mack, during the seminar in May 1990 with which this article began. As he welcomed guests to “Psychology as if the Whole Earth Mattered,” Mack repeated and developed Macy’s call for a new psychology, one which analyzed historical attitudes to the earth across the gamut of human experience and studied how to improve relations to “reanimate our connection with” it, including emotional techniques and explorations of consciousness to find ways of “opening us to ourselves in relation to nature” (Mack, 1990). For Mack, the new psychology would seek personal transformation (the conventional goal of most psychological schools) as a means of political and economic transformation—of those systems which “embody collective attitudes toward the earth and its living forms, but have a compelling life of their own.” It would transgress disciplinary boundaries in order to broach environmental, population, economic, and other aspects of the great, many-headed objective: creating and sustaining “an environment that can support the continuation of human life and well-being.” Achieving it would require psychologists not only to innovate, but to mobilize—to commit themselves beyond their consulting rooms and laboratories “even more than in the case of the nuclear threat.”

Mack introduced three speakers who would each explore dimensions of the intersection of ecology and psychology, articulating different psychological dimensions and solutions to the “problematique” with which they and their enthusiastic audience were engaged. William Keepin, the first speaker, had been born into the first wave of that antinuclear advocacy that sprung from the Manhattan Project. His father, G. Robert Keepin, had been a physicist at Los Alamos from 1952 and an advocate for nuclear safeguards and nonproliferation (Snodgrass, 2008). William also trained as a mathematical physicist and worked in energy before turning his attention to greenhouse gas and global warming and becoming a whistleblower in nuclear science policy (Keepin & Kats, 1988a, 1988b). He had recently become interested in depth and transpersonal psychology and holotropic breathwork. Mack (1990) called Keepin “a psychological growth sibling.”

This was Keepin’s first public talk in this “really new ground,” he warned, in “this whole area of psychology of the environment or environmental psychology”—and began to lay out some exploratory thoughts (Keepin, 1990). He spoke about how both nuclear technology and capital growth threatened existence “in the name of improving it,” and the implication was that the root of both the nuclear threat and the growing ecological catastrophe lay not in contamination and pollutants, not in “the empirical physical material part,” but in what he called human nature. It was “a crisis of psychological or human consciousness,” and it called for a

program of psychological research on acquisitive drives which were so entrenched they were driving the annihilation of the species. The dominant psychological schools had proven incapable of making that enquiry, Keepin argued, having “borrowed pretty much uncritically the major philosophical tenets of Western science”—materialism, reductionism, determinism, and positivism, and “the subject-object split”—and in consequence had more or less disengaged from “psychological reality.” Scientific psychology assumed a psyche effectively separate from its ecological context, and it was only now, on the eve of catastrophe, that humans were beginning to realize that “not only are we part of nature and connected to it, we are nature.” This “psychological reality” called for “a new psychology” which reclaimed the subjective, taking “human psychological experience” accessed by trained introspection and phenomenological methodology as its primary data. Such a psychology would discard the messianic, ego-driven, and psychologically ignorant approaches of many environmentalists—which had done little enough to counter the continuing revelation of the delayed effects of human ecological disruption—and pursue wisdom, “novelty, creativity, mystery.” It would relinquish the mirage of certainty and security for a “closer accord with reality.”

The second speaker was Walter Christie, assistant chief of psychiatry at the Maine Medical Center but also a trustee of the Maine Audubon Society, where he had developed a workshop called “Evolution of Consciousness: Our Relationship to Nature.” Mack (1990) described how Christie had “embarked on something unheard of” in the early 1980s: “to look at the psychology/psychiatry of human ecology.” He had published several papers on the conflictual history of human relationships with the earth, and “the whole struggle to develop a consciousness that can reconnect us” (Christie, 1984, 1985–1986). Christie had been working with his wife Ellen, present at the seminar, “developing workshops, lectures and a new kind of science—psychological science” that addressed this sense of human ecology. Christie (1990) rose to describe what he and his wife had done to develop the “tools of an eco-psychology” that tapped into the “structures inside us, which are partially outside us as well”—structures which had fallen “dormant,” but remained latent, in Western psyches. Searching for release from the grinding work of directing a psychiatric unit, the workshops established “an intellectual framework” which linked personal and species evolution to invert the trajectory of Western civilization so that nature becomes “increasingly alive as your own personhood became alive.” They aimed to “increase the magical experience of the world.” During this intellectual work, Christie found that “there was something that had a hold of me” and he “began, for lack of a better word, to call it the planet.” The living planet “gets at us through our own individual growth processes in odd and strange ways,” Christie said—the urge to join an activist group, a striking sense of “universal love,” a dream steeped in saltwater or birdsong. “The more you enter into your own relationship with the natural world, with the possibility that something beyond your own psychology is calling you, then the larger your psychology becomes. And you begin to notice that it is not contained inside your mind.”

Sarah Conn, a research associate at the Center with a PhD from Harvard in social relations, was the final speaker. A clinical psychologist and researcher at Tufts on collective nuclear psychopathologies, Conn had taught a Center course in 1988–1989 on “The Psychology of Global Awareness and Social Responsibility: Implications for Psychotherapy” (Ongoing Projects, 1989). She built upon the “ecological self” and theories of pain and power which Macy had deployed the year prior. “The separate individual autonomous self” had brought great physical power and wealth—to the West—but had, she argued at Cambridge Hospital, “served its evolutionary purpose” and was now obsolete, even dangerous (Conn, 1990). In its place must come “one that is differentiated, complex, uniquely itself in its relatedness and connectedness to others” and connected, particularly, to “the pain of the world.” She offered two detailed examples of connections her patients had made between their individual pain

and environmental suffering. Mental symptoms could be seen, Conn argued, as a “defense” and as “an expression, of what’s going on in the larger world.” Treating them could release anger and despair into positive energy, healing personal relationships but also generating positive interventions in a sickening global environment.

The Center continued to expand its environmental agenda as the Cold War tapered out. In March 1991, scientists, environmentalists, psychologists, philosophers, economists, and community organizers gathered for a working conference on “The Environmental Crisis: Strategies for Sustainability.” There Mack (1991) pointed to the disjuncture between the beauty participants could see around them in Essex, Massachusetts, and aspects of their awareness of the “dying planet—from the warming trend and the creation of garbage that we’re drowning in, in a sense, and all the degradations of our world that you’re familiar with.” Even in Essex they had seen a “swill” of something when they had gone oyster-picking, and, as they learned on their walk led by naturalist George Sirk, climate change was killing the cedars on the island. Mack spoke of the Center’s recent efforts to “try to relate the psychological depth work that we’re doing to the environmental problem,” searching the psyche for “the distortions or the demonic nature of consciousness that has permitted the destruction of the planet in this slow way” but also for inner resources that could be developed to address the issue. The Center was “moving from the nuclear issue per se,” Mack announced, “and we were never especially created just to focus on the nuclear issue but rather on these collective psychological forces which led to the nuclear crisis and which relate to the environmental crisis as well.” He cited, as a synergistic example, the “attitude toward the planet and its resources, the notion that somehow the human species owns this land, owns its resource, and can exploit it for its own purposes.” Participants included William Keepin, ecofeminist Charlene Spretnak, and historian and cosmologist Richard Tarnas (who would afterward edit a special issue of *ReVision* devoted to the meeting). Duane Elgin spoke about his concept of voluntary simplicity, and Roger Walsh, from the University of California Irvine, discussed his global, integrative psychology of survival, touching on psychodynamics, behaviorism, Maslow’s order of needs, and Buddhist psychology. Donella Meadows, lead author of the enormously influential 1972 Club of Rome report *Limits to Growth*, spoke on the theme “Change is not Doom”; she would return to the Center the following year to discuss “The Environment’s Challenge to the Human Psyche” (Meadows, 1992).

The Center had now completed its environmental pivot. It became the Center for Psychology and Social Change, and in Fall 1992, a new chairperson, Richmond Mayo-Smith, described how the Center had transitioned away “from its founding impulse—using psychological insights to reduce the likelihood of nuclear destruction” to an “exhilarating” new challenge—“how to transform our vision of reality.” “What we in our culture have assumed to be the general case,” wrote Mayo-Smith, “our Newtonian, Cartesian, separate-ego view of the world—is a special case, true enough in many situations. What we have seen as the mysterious exception—mind- and spirit stretching phenomena of interconnectedness—is the general case” (Mayo-Smith, 1992, p. 2).

Not all centers, wrote Mayo-Smith, survive such a transition.

## Conclusion

The Center’s founding impulse had been defensive, seeking psychological strategies to avert nuclear extinction. These were sought at depth, in the transformation of individual psyche and collective psychology, in the conviction that the human species and the planet



required salvation from the catastrophes embedded in dominant Western conceptions of the psyche. Center researchers drew upon and engaged with professional advocacy organizations and popular movements—the 1960s counterculture, the human potential movement, and the wide waves of nuclear peace movements shaped and energized by Physicians for Social Responsibility and its counterparts. From the start, however, the Center’s founders had wanted to lead and sustain those energies by framing structural questions about the human psyche, and incorporating research data in the creation of a coherent conceptual framework. Driven by concern for the continuity of life on the planet, they ventured into depth and systems psychology, political psychology, and psychohistory, and then transpersonal psychology and its experiments with states of consciousness, to build what they called the psychology of survival.

Robert Jay Lifton had parted with the Center in 1986 after he left Yale to found a different research center at John Jay College, City University of New York, together with fellow psychohistorian Charles Strozier—the Center for the study of Violence and Human Survival.<sup>1</sup> It drew in mental health professionals, historians, and social scientists to explore the politics and sociology of violence (Elovitz, 2014, p. 102). Lifton was, Mack wrote in 1995, for a festschrift, “perhaps our most powerful witness to the darkside of the human species” (Mack, 1995, p. 1). He would make his own public turn to the ecological crisis much later (Lifton, 2017). In Lifton’s absence, the Center continued to grapple with the “ultimate questions” which had framed it at its birth. The search for psychologies of human continuity became a search for psychologies of survival, leading Center researchers beyond engagement with international politics toward more searching, and less tethered, explorations. These encompassed transpersonal psychology, new cosmology, and deep ecology—which all advanced new formulations of the self in the light of the catastrophic experience and new scientific knowledge of the 20th century. Center researchers echoed calls for new psychological paradigms. Lifton saw death weighing heavily on global imaginations, and registering more and more in clinics and hospitals. He developed theories of symbolization and a fragmented, “protean” sense of self in want of healing. The workshops Macy began running in the late 1970s responded to subjectively experienced pain at the suffering of the planet, not differentiating between nuclear radiation and environmental pollution. In the course of her work, Macy further developed the concept of the “ecological self” which, registering the pain of the world, became the fulcrum of the new field of ecopsychology, a field at the intersection of deep ecology and psychology. The Center was singled out by the founding text of the new field, Theodore Roszak’s *The Voice of the Earth*; 2 years later Tasmanian philosopher Warwick Fox (1994) surveyed the new field in a lecture at the Center.

The search for survival, initially the survival of the nuclear threat, generated a planetary imaginary which spilled across depth, systems, and political psychologies. As the data provided by environmental sciences poured in across the 1980s, the concepts developed in the shadow of world-destroying weapons—the anxiety of a momentary conflict—rapidly accommodated the slower and surer destruction of the biosphere and the planet’s terraqueous and atmospheric systems. Theories of human continuity elicited by the fear of extinction began to erase the conventional divide between the human self and the planet. Greater ecological awareness extended those theories and the size of the human psyche still further, until, as in the work of Roszak and Macy, it had no observable terrestrial limit. Perhaps it was no

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<sup>1</sup> Lifton places his departure before the Center began operating, concerned by the early steps being taken by John Mack into consciousness studies (including the collaboration with Werner Erhard) and extra-terrestrial research – though the two remained close friends: Robert Jay Lifton interview with James Dunk, 12 August 2020.

surprise that John Mack, who had been an enthusiastic interlocutor and supporter of successive expansions and extensions of the terms and subject of psychology, finally pressed beyond the atmospheric boundaries of human history. As he reflected in 1996:

The expansion of the scope of social commitment has paralleled the evolution of my own psychospiritual development. As I have come increasingly to see myself as connected beyond human relationships and have grown to feel a kind of oneness within the expanse of creation, I have become increasingly interested in the dangers of ecological devastation and, finally, in the problems of consciousness that have restricted human ability to experience life and meaning beyond the boundaries of the earth. I have come to see the major social problems of our time—economic inequality, environmental destruction, and ethnonational conflicts that might escalate to a nuclear holocaust—as deriving from a too narrow definition of ourselves, a kind of psychospiritual bankruptcy that permits, and even encourages, exploitation at every level of existence. (Mack, 1996, p. 199)

From the mid-1990s, Mack's career slipped into the mire of alien abduction research. In a 1995 interview after it became public that Harvard was investigating his research, Mack was forthright. "The fact of the matter," he said, "is that we have 15 to 20 years before the psychological, moral, physical, and environmental collapse of the Earth as a living entity becomes altogether a reality. This is not apocalyptic thinking. This is scientific, predictable fact if you just move the clock ahead from what's going on now" (Emery, 1995, p. 3). Averting that fate was only possible through "a dramatic, radical change in human consciousness," he said. The extraterrestrial encounters which he studied appeared to be part of a campaign to effect that change.

Although Mack was cleared of academic misconduct by the investigating committee, the Center for Psychology and Social Change sustained collateral damage, and folded in short course. Little reference is made to Mack or to the Center in any literature, including the memoirs of members, but in 1995 the freewheeling historian of industrial technology and counterculture, Theodore Roszak, described the seminar as the first public gathering of a new field, ecopsychology, which he sought to define at the intersection of ecology and psychology (Roszak, 1995, pp. 12–13). *The Voice of the Earth* took as its subject the psychological dimensions of environmental ruination, as conservation psychology would do a decade later—though on a different tack (Roszak, 1992). Ecopsychology continues the search for a psychological model integrating human psyche and the planetary environment—for the materials and structures which bind humans and other species together.

The core business of conservation psychology is the scientific study of the relationships between humans and the planet, in order to conserve its species and, in turn, the conditions supporting human life. In a textbook on planetary health (itself a new, transdisciplinary field aiming to bring human health and the integrity of planetary systems into the same field of reference) Susan Clayton, a leading figure in conservation psychology, surveys the paths linking the environment and mental health. There were the unnatural and natural environmental disasters—crop failure, drought, pollution events—which produced depression, anxiety, posttraumatic stress disorder, and suicide. Subtler shifts in ambient conditions (associated with climate change and other disruptions to earth systems) could affect mental health; so too "awareness of environmental threats," worrying about climate change, the loss of cherished landscapes and species, could all produce anxiety, grief, stress, and despair (Clayton, 2020, p. 222). Clayton also emphasized "our interdependence with the natural world." Tending, or healing, the relationship between humans and the planet was "fundamentally an act of self-preservation" (p. 238).

Prior efforts to chart and study these relations between humans, other species, and the planet at the Center for Psychology and Social Change led from political and systems psychology deep into depth psychology (beyond even the limits of Robert Jay Lifton's groundbreaking work).

Center researchers saw the “nested human systems” generating the policies “threatening the future of the planet” issuing from “ancient, unconscious, and preconscious pattern of thinking, feeling, and behaving” (Center for Psychological Studies in the Nuclear Age, 1988, p. 5). After them came still more exploratory theorists: the revisionist archetypal psychologist and soul theorist James Hillman; Craig Chalquist, who moved from depth psychology into ecopsychology, terrapsychology, and enchantivism, and now teaches in East-West Psychology at the California Institute of Integral Studies; the sometime magician, phenomenologist, and psychotherapist David Abram who coined the term “the more-than-human-world” (Abram, 1996). Center researchers arrived at the idea that the planetary perils of nuclear war and environmental ruination were produced by flaws in human consciousness. Their quest to avert what Mack called the “psychological, moral, physical, and environmental collapse of the Earth” led further than most were willing to go—and apparently beyond what psychologists working for a “safe climate” have been able to redeem (Emery, 1995, p. 3). Revisiting this history, with its divergent threads in systems psychology and political psychology, and its diversion into ecopsychology and other alternative psychological streams, may help draw attention to the problem discovered by John Mack and the other researchers at the Center for Psychology and Social Change: global, integrative, positive psychologies dealing with the environment and its ailments would not succeed—would not ensure human survival—if they could not map the psychodynamics of the psyche and planet. They saw the need for a planetary psychology, a psychology which engages with the increasingly imminent planetary reality of human experience—and yet the search for such a psychology tends to lead where political leaders, publics, and psychological peers fear to tread.

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