



Project Outer Limits
Paper Number 1
Summer, 1980

A Rationale For Looking Into The Outer Regions of Human Potential

by

Doris S. Lyons

and

Ronald D. Stadskev



Alabama's First University

Institute of Higher Education Research and Services
The University of Alabama
University, Alabama
35486

FOREWORD

For some years now, the Institute has been active in exploring ideas and using processes designed to help people discover and use their potential. “Potential”, during this period, has meant a capacity for improvements in such dimensions of life as self-understanding, goal setting, and relations with others.

Work in this area has had direct and powerful consequences for teachers, educational specialists, researchers, administrators, and students—all persons engaged in the higher education enterprises. They all work more effectively as they become more self directing and more self-confident as individuals. To further interest in human development, the Institute has served as a state center for the use of the Human Potential Seminar. Hundreds of students, faculty, and staff in Alabama and elsewhere have enjoyed the benefits of this humanistic approach to human development.

Now, Project Outer Limits, a relatively new endeavor, takes another and different step into the complexities of human potential. In what ways can learning be made more efficient or more effective? Can we learn concepts, skills, or facts in ways elusive to our current ways of knowing? Can we “Laugh our way to good health,” for example, as did Norman Cousins? And if he did so, can others similarly harness energy to realize learning objectives?

Project Outer Limits is an activity of the Institute, born out of our scholars' curiosity and quest for understanding. It serves to focus staff efforts on the frontiers of knowledge and learning. This position paper by Doris Lyons and Ron Stadsklev illuminates some of the issues at the heart of our concern—and is meant to encourage thoughtful reflection.

Thomas Diener
Director

PREFACE

To set the stage for what Follows, this brief saga highlights the origins of Project Outer Limits. We have a personal history of interesting exceptional, extraordinary even, human performances. But how does one activate the mechanisms to bring about exceptional human performances?

We perceived the **Human Potential Seminar** (HPS), developed by Jim McHolland of Evanston, Illinois, to be a step toward expanding human potential. The Institute of Higher Education Research and Services became the Alabama Center for HPS, and we, as certified trainers, have conducted HPS(s) during the last four years. As we led others to increase their self-motivation, self-determination, self-actualization, and empathetic regard for others, we found we benefited. Our horizons expanded, our curiosity about the “possible human” intensified, and our resolve to become explorers began.

Through our explorations, we have discovered multiple variations and intensities within the human potential movement. Much of the HPS content is based on the early work of A.H. Maslow's concept of self-actualization (the third force). In his later years, Maslow perceived human potential far beyond self-actualization, calling it the fourth force (transcendence). In every field, current research indicates human potential is, if not unlimited, certainly far beyond conventional expectations.⁴ To explore human potential, we must be willing to look beyond current ideas. Today, there is an explosion of research studies on biofeedback, meditation, left/right brain functions, altered states of consciousness, extrasensory perception, psychokinesis, and many other activities largely outside the conventional paradigm of science. We wish to examine the widest possible range of these activities to determine the implications and applications for education. In this way we hope to make some contribution toward enabling men and women of all endeavors to enjoy and participate in a truly meaningful existence.

Doris S. Lyons
Ron Stadsklev

POSITION

Doubt, but do not deny; point out by the severest criticism what are considered fallacies in my experimental tests, and suggest more conclusive trials; but do not let us hastily call our senses lying witnesses merely because they testify 'against preconceptions. (Author unknown)

when we developed the first descriptive materials for Project Outer Limits over a year and a half ago, we anticipated there existed “outer limits” to human potential and that they held important implications for education. But 20/20 hindsight shows at least two fallacies in our thinking.

Fallacy one: ***There are clearly defined limits of human potential.*** Researchers, such as Alyce and Elmer Green at the Menninger biofeedback laboratory; Carl Simonton and Stephanie Matthews-Simonton at the Cancer Counseling and Research Center, Ft. Worth; and C. Norman Shealy, founder of the Pain and Rehabilitation Center, LaCrosse, Wisconsin have convinced us otherwise. These persons' research verify the human body's capacity to respond to signals from the brain in ways not thought possible. Examples include the body's capability to alter body temperatures, regulate heartbeat, and control pain signals.

In addition to these five persons, numerous others have been actively researching and documenting many different examples of human endeavors. They all share a common theme--human potential. Similarly, their common focus is what is possible and actually being demonstrated by certain human beings. Across-section listing of these persons includes:

Barbara Brown - researcher and author on biofeedback

Fritjof Capra - theoretical physicist at the Lawrence Berkeley Laboratory, author, and physics lecturer at the University of California, Berkeley

Marilyn Ferguson - editor-publisher of Brain Mind Bulletin and author .

Jerry Fletcher - policy analyst on education, HHS, and author

Jean Houston - researcher, lecturer, author and co-founder of Foundation for Mind Research

Stanley Krippner - humanistic psychologist, author, educator, and former director~researcher of the Dream Laboratory of the Maimonides Hospital, New York 4

John Lilly - medical doctor, psychoanalyst, author and probably best-known for his research on dolphin-human relationships

Margaret Mead - anthropologist, author and elegantly articulate spokesperson for those who would research and expand the present paradigms of science

Karl Pribram - medical doctor, author, brain researcher, and supporter of the theory that the hologram is a model for the human brain

Harold Puthoff and Russel Targ - physicists, researchers in the Electronics and Bio-engineering Laboratory of Stanford Research Institute International, authors, and probably best known for research on remote viewing

Elmer Green of the Menninger Clinic elaborates upon the subject of what seems to be the *as yet* undefined limits of human potential. In giving some background on why he changed careers, after 16 years, from physics used in guided missiles to bio-psychology and neuro-anatomy, Green states:

In the late 1930's I met an Irish Sufi, Will J. Irwin, who not only could do things with his body that were biologically impossible, but he taught me to do some of them. As a result, by the end of the '40's I was convinced that the body-almost all of the parts of the body-would do what they were told, if you knew how to tell them. ¹

Fallacy two: Outer Limits is a misleading figure of speech. It somehow implies “out-there-ness!” (external to the human, the environment, planet earth, to the universe?). More rightly, we have come to appreciate that expanding human potential may center around exploring “inner space” as reflected in subatomic particle research, brain research, and neurophysiological and neuropsychical research. All of these and much more account for the mounting data supporting the rather elegant notion that mind is busily orchestrating brain/body functions, often without our conscious awareness of the complex symphony our mind, brain, and body hold in concert a continuing performance, if you will. In other words these are the “inner-spaces” wherein the processes take place within the human being rather than impacting upon the mind and body from the outside.

To further illustrate the concept, consider the words of Willis Harman an engineer by training, a futurist well known about the world, and an associate with the Stanford Research Institute. With the following story, he elaborates on the creative processes shared by all humans:

I have several friends who have trained themselves to ask their creative process for answers to problems in image form. One of these persons is president of a large industrial corporation. He became president partly because he introduced very novel inventions into the business of the

industry. He needed a new kind of furnace for melting magnesium. While sitting in his living room one Sunday afternoon, he mused almost aloud: "I surely wish I had a design engineer who could design a new furnace for this purpose." He heard a voice ask "How about this?" and drifting into the room came a three dimensional model—the complete furnace. He made some notes, took down some sketches, and took it in the next day to show to his design man who asked "Where did you get this idea?" The president said, "You wouldn't believe me if I told you." His employee said, "Well try me." So he described the—situation and the design person said, "I'll build it as fast as I can. I know it'll work because that is how I get all my ideas." We don't really know how to handle some of these things in this society. But there are hints. In these unconscious processes there is a tremendous wealth we could draw upon.

Harman continues by asking the listener to consider still more provocative evidence of the capabilities of the human mind:

Robert John, the Dean of Applied Science at Princeton University, had a very interesting idea. He said through the history of society there have been reports of the effect of mind on the physical world. There are many accounts of this in the Bible. But there are many more recent instances also of these psycho-kinetic phenomenon. People who seem to be able to use their mind to make some sort of interference out in the physical world. Now of course we usually hear also the cries raised about fraud, illusion and so on — but nonetheless John said: "Let's see if it's possible the mind can have effects outside the human body as well." But just as with some of the effects inside the body, we don't know that we know about these things until the feedback is provided. So if I tell you that there is an ashtray on the table over here and if you focus your mind on it you can move it - slide it off the table onto the floor, you smile tolerantly and say that-you don't believe you can do that. Maybe Uri Geller or somebody, but not you. Nonetheless, it turns out in this experiment that if you provide the feedback of a very, very slight motion - something of the order of a millionth of a millimeter, if you °can detect that very slight motion - then it turns out you can move the ashtray. In fact, we all apparently know how to create such effects remotely from the human body by the power of the human mind. Now that simply does not fit into the conventional scientific paradigm. One of many that doesn't fit. This particular illustration is so striking because it appears that anyone having a little determination can walk into the laboratory and demonstrate this ability.²

Green, Harman, and others challenge our initial notions of outer limits of human potential and out-there-ness. Presently, we are filled to the brim with provocative discoveries. Initially, we had some awareness of indications that we humans have far more potential than we generally exhibit. We were aware of some research activities aimed at the mind, brain, and body connection, but we didn't fully

appreciate the extent or breadth of investigations that appear to have implications for education.

If we are to rally to positive actions that may bring about conditions to improve the quality of living for all people on planet earth, we must bring new knowledge to bear on the educational processes. Edgar Mitchell, former astronaut, sums up this urgency. In the dedication of a book compiled after he returned from Apollo 14 Mitchell writes, “This book is dedicated to the potential in humanity which can bring a new age of understanding , cooperation and peace.”³

Mitchell further elaborates on the need for altering our perceptions and our efforts to bring about equality for all humankind with these quite personal revelations.

For me, seeing our planet from space was a moving event with some of the qualities traditionally ascribed to religious experience. It triggered a deep insight into the nature of existence—the sort of insight that radically changes the inner person. My thinking—indeed, my consciousness—was altered profoundly. I came to feel a moral responsibility to pass on the trans-formative experience of seeing earth from the larger perspective. But further, the rational man in me had to recognize the validity of the non-rational cognitive process.

Obviously we cannot send everyone to the moon in the near future. But we can provide information and experiences of another sort that will serve the same purpose and provide the same perspective. Moreover, we can do it in a way that brings objective reason closer to subjective intuition and thereby help to lessen the unfortunate gulf between these two modes of knowing. We can do this because, as I indicated earlier, inner-and outer-space research are converging. The result will be an expansion of awareness and a step toward developing higher consciousness in the race.⁴

In view of all we have written to this point, we take the moderate position that educators have a rare opportunity to move away from and beyond the purely rational, conservative, and traditionally scientific stance, which has been thought to result in all goodness and wisdom. Further, educators have an obligation (in view of new research findings) to challenge the more traditional assumptions about cognitive processes and learning as identified by Charles T. Tart. The assumptions Tart invites us to recognize and then challenge include:

1. Reasoning is the highest skill possessed by man;
2. Developing the logical mind, one's reasoning abilities, is the highest human accomplishment;
3. Knowledge is a hypothesis, a concept in the mind, and there is no direct, certain knowledge of anything;
4. The extension of our basically sound knowledge and cognitive processes is the way to create knowledge and wisdom;
5. Learning is a matter of taking in sensory impressions and applying cognitive processes to them.⁵

Today's realities prompt a reassessment of long-held assumptions. For example:

1. In China, reports indicate that students are able to know what is on the printed page by putting a book under their arm;
2. At Stanford Research Institute (SRI) people are able to record(describe) in controlled laboratory experiments what they “see” at a location many miles away;
3. In Bulgaria, students are able to increase their learning rate of foreign language words with the use of music, relaxation, body movements, and other innovative-instructional techniques;
4. Dolores Kreiger validated a technique termed “therapeutic touch” which when used by nurses in working with hospitalized patients resulted in physiologically positive conditions--as measured by increased hemoglobin count;
5. John Vasconcellos, California legislator, teaches a course titled “Holistic Politics” in the State Capitol in Sacramento as part of a masters degree program at Antioch University Center for Holistic Studies, San Francisco;
6. Norman Cousins, editor of Saturday Review, used humor to bring himself from grave illness to a condition of wellness. In his words, “I laughed myself well1;”
7. Valerie Hunt, physical therapist and kinesiologist at UCLA, can actually measure the distinctive brain wave forms which validate colors seen by psychics during their observation of auras.

There are numerous assumptions, which while not so strongly tied to learning theories are, nonetheless, inseparable from the gestalt through which educators function. Because most of them are the products of our culture, educators find it difficult to be separated from them. Tart, reminds us that “every action we undertake and every thought we have rests on an assumption...”; however, he notes that the assumptions he discusses “...have almost never been taught as assumptions.”⁶ To better understand the monumental shift that must occur before a significant change will be evidenced in educational systems, let's take a look at some of the assumptions undergirding beliefs of our culture. Tart identifies and discusses 78 assumptions within 16 categories, with tongue-in-cheek, in making his point that these are seldom taught as assumptions. Granted Tart seemingly over states these assumptions, but they are still worthy of consideration. We have selected four as examples:

The Nature of the Universe

Assumption: Physics is the ultimate science, because physics is study Of 'the real world. Since the universe is nothing but physical matters and energies operating in a space-time framework, human experience is then in some sense ephemeral and not real.

The Nature of Man

Assumption: Man is completely determined by his genetic inheritance and environment. It is certainly felt that the general outlines of a given individual's life should be predictable to a very high degree of accuracy. (Therefore) Free will is an illusion we have.

Assumption: Psychological energy is completely derived from physical energy, as expressed in physiological processes in the body. All our energy, all our-feelings of aliveness or deadness, tiredness or ability to do, come from the metabolism of our food and stored food products within the body.

Altered States of Consciousness

Assumption: Our ordinary state of consciousness is generally the most adaptive and rational way the mind can be organized and virtually all altered states off consciousness are inferior or pathological. Psychologists give some lip service to the idea that there might be “creative states” that seem to be good for geniuses to use in their work, but there is considerable ambivalence about the degree to which those “creative states” border on the pathological.⁷

It is not easy to ferret out and then challenge assumptions and beliefs that have served us well. The comfort and seeming protection of accepted notions cause many, when faced with provocative research findings, to say, “even if what you say is factually correct, I don't want to hear about it.”

If educators are to educate for the future, they must be informed participants in present and forthcoming scientific and social educational controversies. Educators need to review the research findings of genetic effects on intelligence and right-brain, left»brain development. Further, they would do well to relate the findings of brain research to the present state of society. The crux of the. Imperative facing us is no more eloquently stated than by Colin Blakemore when he concludes his thesis in *The Mechanics of the Mind* by stating, “The brain. . . struggling to understand the brain is society trying to explain itself.”⁸

We conceived Project Outer Limits because recent developments in science definitely challenge many conventional views of reality and traditional learning experiences. Educators must be aware their philosophy, rationale, and instructional methods accordingly. While many of these developments and examine are unaware of these developments, others are unwilling even to consider the new findings for fear of troubling their world view. Educators must be willing to open themselves to new knowledge, however startling. The important areas of investigation include the data produced from research on brain functions and brain, mind, body interrelationships. They are found in the literature on brain research, new age consciousness, human potential, trans-personal psychology, andm1nd,body education.

It is our hope that through Project Outer Limits we may survey the field,discovering what is being accomplished in the human potential movement about the country and then to contribute to it in a specific fashion by engaging in the following activities.

Categories of Activities

In Project Outer Limits we are actively involved with:

1. Identifying and contacting centers, organizations, and human resources representative of the many activities concerned with human potential; e.g., brain, mind, body connections, psychic investigations, trans-personal psychology, and holistic life styles;

2. Linking persons having particular interests and needs with those having the capability of answering these needs and interests(networking);
3. Facilitating seminars and workshops to inform educators, students, and others about the brain, mind, body revolution;
4. Developing a “quest group” to maximize potential for self-growth, using the knowledge and techniques found in our contacts with persons researching the multiple varieties of expanded consciousness;
5. Presenting and supporting presentations at national and regional conferences where discussions of the brain, mind, body revolution and human potential expansion have maximum application for education;
6. Securing support to carry on our research projects and developmental programs for improving the educational process;

Activities and Involvements for the Near Future

Project Outer Limits will be concerned with very specific developmental and transferable outcomes. Projected activities with implication for future, outcomes are in addition to the present ones outlined above. As a result of identifying, contacting, and receiving information and written materials from resources nationwide, we plan to compile at least three types of publications

1. A Handbook for educators who seek information to develop new ways of learning based on brain, mind body instructional integration;
2. A glossary of terms associated with the mind, brain, body revolution and human potential fields;
3. A directory of human resources, curriculum materials, and centers located nationwide (perhaps worldwide) and available to potential users.

Through these publications, Project Outer Limits would serve as a clearing house and the nexus for human potential movements and educators concerned with actively seeking ways to increase their effectiveness.

FOOTNOTES

1. Taped from a conference, "The Holistic Perspectives in Education & Health" Asheville, NC.: Light of the Mountains, Sponsor, October, 1979.
2. Taped from conference presentation, "The Church in Future Society." Minneapolis: The Lutheran Brotherhood Colloquium, Sponsor, January, 1979
3. Dedication on copyright page, Edgar Mitchell's Psychic Exploration: A Challenge for Science, John White, ed., New York: Capricorn Books, 1976.
4. Ibid., pp. 314-35.
5. Tart, Charles T. (ed.), Trans-personal Psychologies, New York: Harper and Row, 1975, pages 88-102.r».
6. Ibid., pp. 61 and 65.
7. Ibid., pp. 67, 71, 74, 80.

BIBLIOGRAPHY

- Blakemore, C., The Mechanics of the Mind. New York: Cambridge University Press, 1977.
- Green, E., (taped conference presentation), "Holistic Perspectives in Education and Health." Asheville, N.C.: Light of the Mountains, Sponsor, 1979.
- Harman, W., (taped conference presentation), "The Church in Future Society." Minneapolis: The Lutheran Brotherhood Colloquium Sponsor, 1979.
- Mitchell, E., Psychic Exploration: A Challenge for Science, John White, ed., New York: Capricorn Books, 1976.
- Tart, C., ed., Transpersonal Psychologies. New York: Harper and Row, 1975

SUGGESTED READINGS

- Brown, B., New Mind New Body. New York: Bantam Books, 1974.
- Capra, F., The Tao of Physics. Berkeley: Shambhala, 1974.
- Elseley, L., The Invisible Pyramid. New York: Charles Scribner's Sons, 1970.
- Ferguson, M., The Aguarian Conspiracy. Los Angeles: J.P. Tarcher, 1980. 9
- Krippner, S., Song of the Siren. New York: Harper and Row, 1975.
- LeShan, L., The Medium The Mystic and The Physicist. New York: Viking, 1974.
- Masters, R. and J. Houston, Listening to the Body, New York: Delacorte Press, 1978.
- Masters, R. and J. Houston, Mind Games: The Guide to Inner Space. Now York: Dell Publishing Co., 1972.
- Murphy, M. and R. White, The Psychic Side of Sports. Reading, Mass., Addison-Wesley, 1978.o
- Polanyi, M. The Tacit Dimension. New York: Doubleday, 1966.
- Puharick, A., Beyond Telepathy. New York: Anchor Press/Doubleday, 1973.
- Roberts, T. and F. Clark, 'Trans-personal Psychology in Education Fastback #53, Phi Delta Kappan Educational Foundation, Bloomington, Indiana, 1975.
- Samples, B., The Metaphoric Mind: A Celebration of Creative Consciousness. Reading, Mass.: Addison-Wesley, 1976.
- Singer, J., Androgyny: Toward a New Theory of Sexuality. New York: Anchor Press Doubleday, 1976.
- Smith A., Powers of Mind. New York: Ballantine Books, 1975.
- Targ R. and H. Puthoff, Mind-Reach. New York: Dell Publishing Co., 1977.