LSD, Mind Control, and the Internet: A Chronology

The Cerebral Inhibition Meeting, sponsored by the Josiah Macy Foundation, organized by Frank Fremont-Smith. Gregory Bateson, Margaret Mead, and five others members of the (later) Cybernetics Group attended. Meeting focused on "physiological mechanisms underlying the phenomena of conditioned reflexes and hypnosis as related to the problem of cerebral inhibition."

Long Island Biological Laboratories research project, headed by Harold Abramson, established in part with Macy funds, and with support from the War Department. Abramson was then a Major in the Technical Division, Chemical Warfare service.

- 1945: Vannever Bush's "memex." Bush directs the work at Los Alamos, where John von Neumann is one of the few scientists with full knowledge of the project's purpose. von Neuman later helps to select the target sites for the bomb-drop in Japan, becomes a critical theorist of the hydrogen bomb, and a principal strategist of MAD, the war-game based cold-war military strategy. He also puts in critical work on the idea of a general-purpose computer, helps to develop ENIAC, and became one of the organizing forces in the Cybernetics Group. A consultant to Standard Oil, IBM, Atomic Energy Commission, Air Force, Los Alamos Labs, and the CIA, among others. Also central to the development of the idea of neural nets, the conceptual forerunner of the internet.
- 1946: First meeting of the conference on Feedback Mechanisms in Biology and the Social Sciences, later dubbed the Cybernetics group.
- 1947: Project Chatter--Navy program focused on mescaline and other substances; sparked by reports of amazing results in the Soviet Union with "truth drugs." (Senate Report) This project ended in 1953.

Around this same time, a German researcher named Hoffman synthesizes LSD and experiments with it on himself.

Formation of the RAND corporation by the Air Force, institutionalizing the applications of mathematics to war. John von Neumann becomes a consultant for RAND.

1948: Invention of the first general-purpose computer, in England, by FC Williams (de Landa)

Founding of the World Federation for Mental Health (Mead, Frank, Fremont-Smith, Macy funding, with others): "to some who feared communist world revolution, world mental health seemed a welcome liberal alternative ideology." (Heims)

late 40s: Development of transistor at Bell labs by Shockley

1950: Project Bluebird (later became Project Artichoke): goals were to find out how to condition agency personnel against interrogation, to investigate interrogation techniques, memory enhancement. Office of Scientific Intelligence coordinated with Technical Services division of the CIA; program continued until some time in the late 50s.

1951: Sandoz pharmaceuticals, a Swiss company, agrees to an exclusive contract with the US Government to deliver 100 grams a week of LSD, and not to provide any to communist countries.

1953: Project MKULTRA initiated at the CIA, at the suggestion of Richard Helms, then an assistant director. Project continued at least until 1963; almost all records of the project were destroyed, at the direction of Helms, in 1973, when Senate investigations of the CIA began closing in on this subject. MKULTRA was specifically designed to explore the use of mind- and behavior-altering substances as part of global strategic intelligence warfare. MKULTRA, in its final phase, "involved surreptitious administration [of LSD] to unwitting non-volunteer subjects in normal life settings by undercover officers of the Bureau of Narcotics acting for the CIA." (Senate Report).

Harold Abramson proposes to the CIA an \$85,000 study of the effects of LSD on unwitting hospital patients. Funding for this project was funneled through the Macy Foundation.

Scientists working with SOD (CIA) administer LSD to one another; one of these, Dr. Olson, is permanently affected and later jumps out of a window (?) in a Washington DC hotel while under the care of a CIA handler. Harold Abramson is the attending physician. A year later, Abramson publishes the first of several articles dealing with the effects of LSD on Siamese fighting fish. Abramson was an allergist and pediatrician. He was also responsible, during the 1950s, for turning on many of the Cybernetics group to LSD,

including Frank Fremont-Smith, head of the Macy foundation and organizer of the LSD conferences (first of these held in 1959).

1954: Lily Pharmaceuticals, with CIA funding, discovers how to synthesize LSD, ending US dependence on foreign supply.

late 50s: Paul Baran at RAND corporation begins to develop a communications system capable of withstanding a nuclear war.

CIA arranges cut-out contracts with The Geschikter Foundation, the Josiah Macy Foundation, and the Society for the Investigation of Human Ecology, for human-subjects tests on LSD.

The Army Chemical Corps. administers LSD to 1000 American soldiers ("volunteers") who then participated in a series of tests concerning battlefield performance. 95 "volunteers" were subsequently tested to evaluate the potential of LSD as an intelligence weapon. These tests were actually hidden from the CIA.

1959: Gorman annex at Georgetown built with a CIA wing for testing human subjects. Geshickter Foundation is the cutout; Dr. Geshickter's foundation funded LSD experiments on terminally ill patients and on federal prisoners. Geshickter's foundation funneled more than 2 million dollars to other Institutions, many of them universities, from the late 50s until the early 70s.

Macy-funded first international "LSD therapy" conference.

1960: Invention of the Silicon chip by Jack Kilby

The Army chemical corps.' Project Third Chance and Derby Hat, involve the involuntary testing of American military personnel and foreign nationals, respectively, at overseas sites. These projects were also (unsuccessfully) concealed from the CIA.

mid 60s: Ted Nelson coins "hypertext"

1968: First annual symposium of the American Society for Cybernetics. Symposium Proceedings entitled "Purposive Systems."

Mead, from symposium proceedings: "I have just lived through a conference where I found myself wishing nostalgically for the dear old days of the late

1930s, when the only people one had to worry about were communists who had clearly defined goals which were different from your own..... But in this recent conference there were groups of young people whose only goals was to disrupt, who called meetings and then discussed in public such questions as whether they should stay in the conference and subvert it or walk out and get more publicity. When one asked what their aim was, they had no answer, only a loose rationale of the desirability of disrupting all the establishments, even the ones they had themselves created...."

Doug Engelbart introduces computer researchers at a conference near San Francisco to the graphical user interface (computer screen with windows), and to the mouse, transforming the "computer display into the surface of contact, the interface between human and machine. At the same time, Engelbart's "augmentation laboratory" (ARPA funded) began to use the computer as a means of human-to-human interaction, with primitive electronic mail, collective journals, and group interaction. (de Landa)

1969: First node of ARPANET is installed at UCLA

1970: The Mansfield Act prohibits DARPA funding of projects without direct military applications.

1971: Migration of people interested in interactive (vs. batch-processed) computing to the new Xerox PARC. PARC subsequently perfects the mouse and windows, develops bitmapped graphics, assembles the first personal computer, the ALTO. These products never reach market through Xerox, but spin off into the work of hackers.

1988: Morris' internet worm paralyzes the internet, including RAND.

Notes:

Emmanel Mesthene, Harvard University, "How Technology will Shape the Future," from "Purposive Systems" (1968):

"Social consequences are surely not uniquely and univocally determined by the character of [technological] innovation, but they cannot be entirely independent of that character and still be *consequences*. What the advent of nuclear weapons

altered was the military organization of the country, not the structure of its communications industry; and the launching of satellites affects international relations much more directly than it does the institutions of organized sport."

Herbert Anschutz, Consulting Scientist, German ministry of defense, "Psychocybernetics of Intelligent Behavior," from "Purposive Systems":

"It is interesting to note that social systems which do not receive new information from the outside must have a constant eneidy content [that is, a constant stimulus-response quotient], and the equivalence point of those systems is characterized by an extreme value of Shannon's information content or redundancy....in every case, learning means an increase of redundancy. If there is no further possibility of increasing the redundancy by external communication or internal data processing, nothing more can be learned."

David Hawkins, University of Colorado, "The Nature of Purpose," from "Purposive Systems":

In an essay published posthumously in 1952, the American Engineer-novelist, Hans Storm, undertakes to contrast two principles of human workmanship. One he calls the principle of design, and the other, by a "slightly bastard etymology," the principle of eolithism.... The designer must first know approximately what he wants and how it is to be used. Next is a choice of building material which must be of known, and as far as possible, of uniform properties. This certainty as to what his objective is and this uniformity of materials are essential to the whole process.... Storm wishes to challenge an assumption that comes with the principle of design in our society, namely that this principle is basic and universal....To challenge this assumption, Storm, a professional designer himself, puts forth an alternative, a wholly different principle of workmanship for which he borrows the term eolithism.... An eolith is literally a piece of junk remaining from the Stone Age....accidentally adapted to some end and, more importantly, strongly suggestive of that end. We may imagine the person whom the anthropologists describe so formidably by the name of man, strolling along in a stonefield, fed, contented, thinking preferably about nothing at all--for these are the conditions favorable to the art--when his eye lights perchance on a stone just possibly suitable for a spearhead. That instant, the project, the very idea of the spear, originates.... [The designer] ust know what he wants and, even before the design begins, he must decide on his material. The fashioner of eoliths, on the other hand, must have a continually open mind about materials and he must be very adaptable in the matter of ends of what he wants. If the eolith defies the use it first suggested, then, perhaps, there is another use equally interesting and worthy. The essential limitations of the principle of

design lie in the givenness and fixity of goals, and the need to eliminate variety and heterogeneity from the means and materials; they are thereby reduced in any significance or value they may have, *except* in serving those given ends. A characteristic of eolithic craftsmanship is that it never goes twice the same, and therefore, uniform procedures, theories of design, and so forth, are of very little use.