The Smith of the Gods

40 - « We Owe It All to the Hippies! »

400- In Silicon Valley, the Geeks were carrying the Digital Utopia. This technical evolution that is the World Wide Web, spectacular as it may be, cannot be the sole source of the utopias with which computers were associated. That such a machine could be set on a desk and manipulated by an individual does not thereby make it a « personal » technology. That groups of people exchange via a network of connected computers does not necessarily imply that their online interactions partake of a logic of « virtual communities ». On the contrary, in the workplace, the networked desktop computer can become a powerful lever to bind the individual even more closely to his or her company. Within the home, while the same tools allow schoolchildren to download the contents of public libraries, they also transform the living room into a digital supermarket, an opportunity seized by stores in order to collect all kinds of personal information on these potential consumers. Despite the promises of a utopia in the making haloing the emergence of the internet, nothing doomed the computer, connected or not, to flatten organizational structures, to further the individuation of human beings or to work toward the creation of tightly knit communities despite geographical dispersion. Why then were computers and networks the engine of dreams of a distributed ad-hocracy, of a free and egalitarian marketplace, and of a more fulfilled « Self »? Where had these dreams taken shape? And who enlisted these computing tools as standard-bearers? To answer these questions, we must return to the history of that extremely influential group of journalists and entrepreneurs of the San Francisco Bay Area: Stewart Brand and the Whole Earth network. Between the late sixties and the late nineties, Brand built a network of people and publications that initiated a series of encounters between San Francisco’s bohemian circles and the nascent technological crossroads of Silicon Valley. From 1968, he brought together the actors of both worlds in the pages of one of the most representative works of the era, the Whole Earth Catalog. In 1985, he reunited them within an electronic conferencing system that would become the most influential of the decade, the Whole Earth Lectronic Link, or WELL. From then on, and until the early nineties, Brand and the other members of the network, among them Kevin Kelly, Howard Rheingold, Esther Dyson and John Perry Barlow, became the most quoted figures for illustrating a countercultural vision of the internet. Finally, in 1993, they all took part in the creation of Wired, the magazine that, more than any other, would extol the revolutionary dimension of the emerging digital world.

401- If we tell their story, that of the military-industrial culture of research, which made its appearance during the Second World War, and that of the America of the counterculture, whether erudite or popularized, it is depicted using terms that appeared within the movement itself: a culture antithetical to the technologies and social structures that nourished the Cold War state and its arms industry. From this point of view, the forties and fifties are often seen as a dark period, shaped by rigid social norms, hierarchical institutions and the permanent pressures resulting from the nuclear face-off between the United States and the Soviet Union. The following decade, for its part, would have sprung up in a great Technicolor whirl of political protest and personal development aimed largely at overthrowing the military-industrial bureaucracy of the Cold War. The persistence of the military-industrial

complex, together with the perpetual growth of big-industry capitalism and of consumer culture, is explained by saying that the authentically revolutionary ideals of the generation of ’68 were somehow integrated by their adversaries, recuperated, so to speak. The intellectual and technological production of research in the United States held enormous interest in the eyes of the « New Communalists ». And while the hippies, whether from Manhattan or Haight-Ashbury, condemned the arms industry in its entirety along with the political process at its origin, they were none the less avid readers of Norbert Wiener, Buckminster Fuller and Marshall McLuhan. The New Left and the New Communalists shared the idea that technological bureaucracy represented, at best, the threat of a psychologically painful, drab adult existence, and that at worst it would bring about the extinction of the human species. For the New Left, movement politics made possible the overthrow of this bureaucracy while allowing one to experience in one’s own intimacy the solidarity of common engagement and the possibility of living an adult life that keeps its emotional charge. For the New Communalists and a large part of the countercultural movement, cybernetics and « General System Theory » offered an ideological alternative. Like Norbert Wiener twenty years earlier, a number of members of the counterculture saw in cybernetics the prospect of a world built not on vertical hierarchies or top-down flows of authority, but around loops, circuits of energy and information. These circuits paved the way to a stable social order whose foundations would be not the alienating chains of command of the military and economic worlds, but the flows and ebbs of communication. Brand subscribed to the idea that LSD, peyote and psychotropic drugs could alter and sublimate perceptions. As this idea made its way, Brand began to frequent the Merry Pranksters, those fervent adepts of the trip in every sense of the term. The Pranksters had first met around Ken Kesey’s house on Perry Lane, near the Stanford campus. Soon after Kesey’s stay at the Menlo Park veterans’ psychiatric hospital, familiar as he was with pharmacopoeia and chemistry, Kesey took to bringing LSD home. A small group then formed: a handful of Stanford writers, the artist Roy Seburn, author of the Magic Bus’s paint job, the psychologist Richard Alpert, a professor of psychology at Harvard University who had studied the effects of psychedelic substances, the guitarist Jerry Garcia, and also Page Browning, initiator of the happenings and the Acid Tests. All had come to party on various occasions. In less than a year, Kesey had gathered a new tribe, with Page Browning and Gurney Norman, survivors of the Perry Lane gang. In the fall of 1964, he and the Pranksters painted that old school bus and set off for the East, the first leg of what would become the legendary tour described by Tom Wolfe in the pages of « The Electric Kool-Aid Acid Test »; Brand was not part of the expedition. He was, in Wolfe’s words, « the thoughtful, moderate wing of the Merry Pranksters », the height of irony coming from the man who would later betray the movement by selling out to the financiers of « Wall Street ».

402- Fred Turner tells us: « This space made up of all these communities in turn became a network forum. A space where members of the different communities gathered, exchanged ideas and legitimacy, and in doing so produced new intellectual frameworks and new social networks. In using the term network forum, we build a bridge between two important concepts from the fields of the sociology of science and technology: that of the « trading zone » developed by Peter Galison and that of the « boundary object » coined by Susan Leigh Star and James Griesemer. Network forums function as a trading zone inasmuch as they are spaces in which representatives of several disciplines gather to work and elaborate contact

languages in order to collaborate. And yet, in Galison's view, and in that of the anthropologists who inspired him, trading zones are first and foremost physical places, laboratories for instance, in-between places. In one study, Star and Griesemer submitted the idea that a media artifact could also be used for collaborative purposes. They showed that scientific work required collaboration between representatives of a large number of sub-disciplines. They found the means to collaborate while keeping their individual reflexes tied to their original field of study, in part thanks to the creation and circulation of « boundary objects ». In other words, « objects that are found in several intersecting social worlds and satisfy the informational requirements of each ». For Star and Griesemer, this type of object includes organized and indexed collections of objects: maps, diagrams, standardized forms (Semiology of Graphics, Jacques Bertin, EHESS edition) and objects whose boundaries are traced collectively by all the members but whose content could be analyzed differently by each of them. A network forum presents at once the singular properties of the trading zone and of boundary objects. Like the boundary object, it takes the form of a medium, such as a catalog or an online discussion system, around and within which individuals exchange and collaborate without giving up their own network of filiation. But like the trading zone, it is also a space in which new networks can be created, not in order to generate a new social fabric, but with a view to work to be accomplished. Within a network forum, in the same way as in a trading zone, contributors make unprecedented rhetorical tools with which they can express and facilitate new collaborations. Network forums are not confined to the world of media alone. Think tanks, conferences and even open-air markets can be the supports of this type of forum when one or several entrepreneurs bring together members of multiple networks, allow them to communicate and collaborate, thus facilitating the simultaneous formation of new networks and new contact languages. However, network forums structured around a medium, like the Whole Earth Catalog, are at once born of these new languages and the very space of their development. In the final instance, the forums themselves often become the prototypes that give concrete form to the collective analyses around which they were built. The Whole Earth Catalog would play each of these roles, first for its contributors and its original readership within the communities. The first issue of the CoEvolution Quarterly gave pride of place to an article by Ehrlich, « Coevolution and Biology of Communities », which sketched the broad lines of the theoretical framework of his work. Brand, however, regarded coevolution as a phenomenon broader than a mere biological theory; it was a metaphor derived from a scientific approach, from which it kept the legitimacy, for a new way of living. This metaphor owed less to Brand's readings in contemporary biology than to those tinged with mystical cybernetics of a former anthropologist, psychiatrist and biology researcher, Gregory Bateson. Like the ideas of Buckminster Fuller and Norbert Wiener that had presided over the creation of the Whole Earth Catalog, Bateson's cybernetic vision literally permeated the CoEvolution Quarterly. At the end of the sixties, Fuller and Wiener had proposed a view of the use of tools that accorded with the return to the land that characterized the young generation; for the start of the following decade, Bateson's analysis of the world itself as a system, and of its inhabitants as elements potentially able to influence that system, was in phase with the return of the New Communalists to the heart of settled America. In Bateson's vision, as in Brand's, the former counterculturalists and the rest of society would at last have to coevolve.

403- « We are as gods and might as well get used to it. So far, remotely done power and glory, as via government, big business, formal education, church, has succeeded to the point where gross defects obscure actual gains. To deal with these dilemmas and to honor those gains, a realm of intimate, personal power is developing – the power of individuals to conduct their own education, find their own inspiration, shape their own environment, and share their adventure with whoever is interested. The Whole Earth Catalog lists and promotes tools that support this approach ». Self-sufficiency does not deserve to be lived in any way, ever. It is a charming, sylvan extension of the fatal American obsession with privacy… It is an effing lie. There is no isolated Self that can be dissected. Ever since two organisms coexisted, life has never been anything but an affair of coevolution. Life perpetually enriches itself with life. We can merely ask ourselves which kind of dependency will have our preference. That is where our only choice lies. » A second wave emerged in the sixties with the publication of « Observing Systems », a collection of essays written by Heinz von Foester. The latter, who later became a faithful subscriber to the Whole Earth Catalog and a friend of Brand's, proposed to include observers as part of the systems they observed. In Foester's analysis, and later in the work of a small number of other cyberneticians, the observer and the system were inseparable. In view of this chronology, Gregory Bateson belonged to the first wave of cyberneticians. In 1942, shortly after conducting field research in the South Pacific and marrying his colleague Margaret Mead, he took part in a colloquium organized in New York by the Macy Foundation on hypnosis and conditioned reflexes. There he met Warren McCulloch and Arturo Rosenblueth, and listened to the latter's presentation of the concept of feedback he had just developed in the company of Wiener and Julian Bigelow. As Steve Heims has shown, the physical and social sciences had until then concentrated on circular patterns in Einstein's general theory of relativity; most scientists thought that circular patterns of causality could not be modeled or verified mathematically, and therefore could not be studied. However, the analysis of causality that Rosenblueth was developing was not only totally unprecedented, but could also be apprehended through traditional mathematical methods, as Mitchell Feigenbaum thought. In 1946, as soon as the Second World War was over, the Macy Foundation convened the first of some ten meetings meant to explore these hypotheses and a few others running through cybernetics. Bateson's theory of an immanent mind also allowed its adepts to reconnect with the feeling of taking part in the preservation of the planet. In « Steps to an Ecology of Mind », Bateson indicated that while the immediate causes of what appeared as an imminent ecological crisis might be technological and social in nature, its primary cause was epistemological. In an essay entitled « Effects of Conscious Purpose on Human Adaptation », he stressed the idea that individual consciousness was permanently monopolized by processes of individual learning and cultural exchange. These processes shaped the relations of the human being to nature and offered the individual an opportunity to modify it. In 1972, Bateson indicated that what nature needed most at that point was to be preserved. Over the previous centuries, certain « self-generating entities of development », such as large corporations, governments and empires, had transformed the individual human being into a dehumanized creature. He hypothesized that each individual could recover his humanity and act in a more humane way toward the planet as a whole if he became aware of his level of integration into the natural and social systems that surround him.

404- The individual mind is immanent but not only in the body. It is immanent in pathways and messages outside the body; and there is a larger Mind of which the individual mind is only a sub-system, a Mind more comparable to God and perhaps to what some people mean by « God », but which remains immanent in the entirely interconnected social system and planetary ecology. Through cybernetics, Bateson explained, human beings could finally admit that the individual was nothing more than a « servo-system coupled to its environment ». The idea of a separation of the individual mind from the body, or even from the vast world, was nothing other than a relic of the industrial era, or even of the pre-industrial era, of human civilization. The sixties, steeped in pagan innocence and idealism, live on and continue to exert their fascination on today's kids. Casting an eye over the archive images of Woodstock, one wonders: where have all those illuminated teenagers gone, avid for orgasms? They scattered across the whole territory and remain dormant, like perennial plants buried deep in the earth. But their mutation-born nucleotides have spawned a whole new generation of devilishly intelligent mutant rascals, and it is in them that we must place our faith and the power.

In contact with Norbert Wiener, Buckminster Fuller and Marshall McLuhan, John Perry Barlow had converted rather late to the power of digital technologies, but he was nonetheless an old hand at mysticism and LSD. The son of ranch owners in Wyoming, he had been raised in a Mormon, Republican-party spirit. He had not been allowed to watch television before the age of 11, and when he could, he mostly watched televangelist programs. At 14 he was sent to a Catholic school and, ironically, that is when he began to have faith. In the late sixties, while attending Wesleyan University in Connecticut, he regularly took part in the activities of Timothy Leary's group at Millbrook, in New York State. His faith resurfaced at the end of his first acid trip. « The feeling that there was something sacred in the Universe animated me once again », he later recounted. But this sacred presence could not be contained in any particular dogma. Barlow turned instead to the mystical inclinations of Pierre Teilhard de Chardin and the cosmic vision of Vernadsky, the Jesuit priest and the enlightened geochemist whose works he had discovered while at university, and to Gregory Bateson, whose « Steps to an Ecology of Mind » he had read in the early seventies. In their works, and later in those of the biologists and chaos theorists, Barlow glimpsed what he called « an underlying grammar of nature ». The material world had become for him a polymorphous amalgam of living forms, each penetrated by a certain energy. While the forms themselves might fluctuate, the energies remain, circulating without interruption, articulating the world. In this sense, for Barlow as for Bateson, « the mind was a space » – in other words, mind and material world were both systems constituted and perpetuated by the circulation of heteromorphic energy, mirror images of each other. And in Barlow's experience, if not in Bateson's, LSD had been a portal giving access to this understanding. On February 8, 1996, John Perry Barlow declared the independence of cyberspace.

405- Norbert Wiener published « Cybernetics » in 1948, the result of the recent evolution of computer technology, information theory, and « feedback » processes. At the same time were published the information theory of Shannon and Weaver and the game theory of Von Neumann and Morgenstern. Wiener developed the concepts of cybernetics, feedback and information far beyond the field of technology. He generalized them to the biological and social domains. The dangers of this evolution are alas manifest. The new cybernetic world

does not concern itself with man, considering him a subject of exploitation and experimentation in the transhumanist spirit from which springs the resentment of the oppression of the « System ». Man there becomes replaceable and sacrificeable. In the « Great System », man must become a button-pushing idiot or a trained idiot, that is to say, narrowly specialized or a mere piece of the machine. This is a principle of systems called « progressive mechanization ». The individual is transformed into a cog dominated by a few privileged, mediocre and mystifying leaders, who pursue their own interests under the cover of ideologies. Whether we envision the positive growth of knowledge and the beneficial control of the environment and society, whatever we envision in the evolution of systems, the specter of the « Brave New World » hangs over us, and recalls to us Prometheus's solemn warning about the responsibility of men with regard to their technological power. This holds intensive work in store for us, work that Ted Kaczynski has begun for us and which we must see through.