Cybernetics & Entheogenics
From Cyberspace to Neurospace

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The term “Neurospace” I learned from the Kiev artist Vladimir Muzehesky, through Geert Lovink. What I immediately thought he meant by it was a comparison of that space which is posited as belonging to the computer with the neural space or the inner-body experience, that comes, for most of us, largely through psychedelic drugs—neurospace as the space of hallucinations, for example. I would like to compare and contrast, as they used to say in school, cyberspace and neurospace. There are similarities and differences.

I remember some years ago, when virtual reality suddenly appeared with a big whizbang on the scene, going to a conference in New York where Timothy Leary, God bless him, appeared with Jaron Lanier and couple of other cybernauts. Tim was wearing the goggles, he was on stage and he said, “Oooh, I have been here before.” So right from the start there was this connection set up between virtual reality and the LSD experience—or as some us prefer to call it “the entheogenic experience,” which is just a fancy way of not using the word psychedelic because it alerts the police. Actually, “entheogenic” means the birth of the “Divine Within.” I am able to use this term that is meaningful for me even though I am
not a theist in the strict sense of the word. I don’t think you have to believe in God to understand that there can be an experience of the Divine Becoming Within.

In fact historically—and, at least for me, experientially and existentially—that has been the most important aspect of the reappearance of psychedelic drugs in my lifetime. I am almost an exact contemporary of LSD: I was born in 1945, and Albert Hofmann was already cooking up various preliminary versions. Last summer I got to meet Hofmann, and he is a wonderful advertisement for the psychedelic experience. He is well over 80, and he is hale and hearty—got all his brain cells and is still working, eats like a horse, drinks like a fish. This is my lifetime we are talking about.

There is a historical question, in the history of religions per se, and that is: Where do psychedelics come from? Terence McKenna believes that human consciousness itself is a function of the psychedelic experience, specifically of the psilocybin mushroom. He believes that one day an ape took a shroom and became a human, because cognition appeared. Terence says that what makes us human is the psychedelic experience. I don’t know if I literally believe this; in any case, I don’t believe in any single origin for human consciousness. But it’s enlightening to think about the possibility that we may owe our difference from the other members of the simian clan to our ability to experience psychedelics in a certain way. If that were the case, it would be true that our entire experience of cognition—which historically belongs in the category of what is known as “religion”—would have begun with psychedelics. The entire psychedelic experience would be co-existent in time with human becoming. An interesting hypothesis; we can add it to all theories of human origins.

I like to think of palimpsests. In the Middle Ages they didn’t have much paper, so they would write one way on the paper and then would write another way on the same paper. Sometimes they would even write a third way. They were used to reading it this way. My approach to theory is a palimpsestic one: I like to pile up
theories one on top of another and hold up the whole stack up to the light and see if still any light is coming through. Think of it as animation gels, but with writing in a stack. Add all those theories, one on top of each other.

The positive way of looking at consciousness is that it is “us.” The bad aspect of it is that consciousness itself would seem to be a separation process. Georges Bataille spoke about this in an interesting way: he hypothesized that all religion concerns a memory trace of a time in which the human was separate from nature—from the animal, let’s say. And if you believe in evolution, this is just literally true. There was a time when we were apes of some sort. It’s at the moment of consciousness that this separation occurs. Suddenly it’s no longer a question of the animal experience and what Bataille calls the “original intimacy.” We are now taken out of the matrix and plunged into cognition. Religion in this view begins immediately after this moment, because *religio* means to relink, to link up again. What we’re trying to do with all these religious and philosophical forms is to try to link up with the original intimacy, which we lost when we began to experience cognition.

If Terence is right, then cognition begins with drugs, and then the next step would be to take more drugs to try to recover what one had lost. So, in this reading, human consciousness and human religion, which are so closely related, would have always been involved with psychedelic plants. Here we come up against a problem in anthropology, which I have only recently become aware of. As anthropologists look at the most “primitive” societies that we can find—that is to say hunter-gatherer tribal societies—these societies don’t seem to have much to do with psychedelics. According to anthropologists, psychedelic plants occur in human history with agriculture—so, at the very most, 12,000 years ago.

Agriculture, the age we are still in, is at most 1% of the whole human story. But if you go to South America and compare the hunting tribes and the primitive agriculturalists, who grow a bit of subsistence vegetables, do some hunting and fishing—without
strong leadership, very egalitarian—it is in these groups that we begin to see the psychedelic plants emerge as a cultural phenomena. It immediately struck me that there is something wrong here. Why should agriculturalists know more about wild plants than the hunters and gatherers, who in fact depend on the wild plants? They depend at least 70% on gathering, and only 30% on hunting. The gathering, which is usually done by women, is much more important economically than the hunting, which is usually done by men. The men think that hunting is much more prestigious, but it is economically less important. The hunters of course know about all the plants, but they have not necessarily ritualized it yet: they have not made a cult of the psychedelic plant.

Agriculture is the only radical new technology that ever appeared in the world; what it amounts to is a cutting into the earth. If you read any anthropology about Native Americans, you will find that when the white Europeans arrived and tried to force the tribes into agriculture, the tribal people always say the same thing: “What, you want us to rape our Mother, the Earth? This is perverse. How could you ask human beings to do this?” Agriculture immediately appears as a bad deal to these tribes. There is no doubt that this technology leads inevitably and fairly quickly to social hierarchies, separation, class structure, property, and religion as we understand it—a priest class that tells everybody else what to do and how to think. It leads, in other words, to authoritarianism and, ultimately, to the state itself.

Economy, money, all the misery of civilization, we owe to agriculture. Before that, you have two million years of hunting and gathering, the beautiful cave art, a world that looks suspiciously utopian, a golden age by comparison with a lot of the problems that agriculture brings about. In some sense, agriculture is fall from grace. I don’t want to be a reactionary, a luddite—I am just simply pointing out something that is very true and obvious, but it took a long time for civilized human beings to realize this. In the 1960s, the anthropologist Marshal Sahlins discovered that the hunt-
Is it fair to make this comparison? Yes, to the extent that entheogenesis and cybertech are both concerned with information and therefore with epistemology. In fact, we could call both of them "gnostic systems"—both are implicated in the goal of knowing that emerges from the gulf that seems to separate mind/soul/spirit from body. So the entheogenic version of this knowing, however, implies enlarging the definition of the body to include neurospace, while the cybernetic version implies the disappearance of the body into information, the "downloading of the consciousness." These are perhaps both absurd extremes, images rather than political situations; they are also potent myths, powerful images.

We need a politique here—not an ideology but an active cognizance of actually persisting situations, as clearly as we can grasp them in our modeled, stoned condition. We need a strategic sense of where to apply the nudges of our material art, the little martial, Zen moves, whereby even a weak person can win a battle. Whereby even we, despised marginals, could actually have self-empowerment and thereby influence on history. All of this leads to a vision of amusingly apocalyptic nonsensical self-importance, like "Neuro-hackers vs the New World Order" Well, it’s at least a nice idea for a science-fiction novel.

From this point of view, Sahlins pointed out, it is absolutely incomprehensible that anybody would ever give up hunting for agriculture. Ever since I read that book Stone Age Economy I have been figuring out why—why did we give up this Garden of Eden kind of situation? Of course the hunter knows starvation, but the hunter doesn’t know scarcity; that only comes into being with economy. The hunter’s life can be miserable—it can be too cold, too hot, too naked, he can be wiped out by the polar bear, whatever—but the one thing the hunter does not have anything of is the miseries of civilization.

If we are going to talk about the positive features of civilization, let’s remember that they are only serviceable for 10% of any given population, in other words, the property-owning elite. For everybody else, civilization is a fucking awful deal. It turns you into a serf or a slave, into the human sacrifice. We know that cannibalism belongs to agriculture, not to the hunting tribes. I like bread—I’m not about to give up bread. What I am trying to point out to you with this exaggerated attack on agriculture, is that agriculture is a very severe technological break. It is as if you drew a line: on that side there is wild forest, and on this side there is culture, humanity and, ultimately, civilization. On the clear side, we cut into the earth, we make straight lines, we know the technology of seeds. The calendar is the first ideology, in the sense of false consciousness, because only farmers could invent it. Industry is a minor epiphenomenon of agriculture, from this point of view. Agriculture is the one and only important technology that has ever been invented and that calls for a complete reevaluation of the human relation vis-a-vis the natural world, the world of plants and animals.
As a result of this entire new relationship, of this novelty, there will be an entirely new interpretation of the psychedelic plant. The entheogenic, magic plant will now emerge in a religious context—whereas before it might only have been a question of the individual knowledge of an individual gatherer. Now, suddenly, there has to be a cult of the entheogenic plant. Because agriculture is so traumatic for human society, it necessitates having a living, shamanic, magical relationship with plants. Before, plants were like other beings, now they are strange spirits that grow in the forest. Actually, one anthropologist wrote a fascinating book on tobacco as a psychedelic plant in South America: the very first agriculture would have been the growing of psychoactive plants, and that’s why human beings might even become farmers, to ensure a nice supply of tobacco or mushrooms or whatever. A friend of mine once said, “Yeah, everything is psychotropic.” Any substance that you can take into your body will bring about a transmutation. I don’t care if it’s water, food, air—it’s all transformation through substance.

It is not true that agriculture discovered psychedelics. I can prove, on the basis of mythology, that hunting society knew it very well. All myths concerning psychedelic plants always say that we learned about the plants from the wild people from the forest. One example: the Buiti-cult from northwestern Africa, which is based on ibogaine. They claim that they got it from the pygmies. Suddenly we seem to see for the first time the appearance of the psychotropic plant, whereas before it was simply one among many psychoactive things in a world that was entirely psychoactive, it’s now the one special substance that will allow us to recover that original intimacy. It will make us better than conscious, it will give us a beyond mere consciousness, which in a sense will be a return to that original intimacy of nature.

It’s fairly clear that all the great neolithic societies had some kind of cult of soma—the Sanskrit word for the psychoactive experience. The Rg-Veda, one of the oldest books of humanity, is all about the understand their “machinic consciousness,” that it is not necessarily evil. I could talk about the psychedelic experience as an imaginal machine. My quarrel with machinic consciousness comes when it posits that the body is evil and that the mind is good. And do not forget that the Catholic Church loved Descartes. This Cartesian consciousness we now think of as machinic, modern, and scientific, was at one time hailed by the Catholic Church as a true religious philosophy.

Neurospace also involves hallucinations. You think you are in the Palace of Memory, but you aren’t. You’re just sitting in your room, stoned on acid: you’re in an imaginal space, just as with cyberspace. And yet, where is this event taking place—but in the body? Neurospace is a space of embodiment. Cyberspace is a space of disembodiment. I don’t want to sound like a moralist... We can add terms like “complexity,” “chaos,” or “the karmic web of jewels.”

The latest developments in machine consciousness have a “Deleuze-Guattarian” aspect of subversion, as with the Internet—activism—with a certain psychedelic flavor. While “drugs” are produced out of a “second nature” that is nothing if not machinic. The whole “drug crisis” is very much a crisis of machinic consciousness—and heroin and cocaine are very much machine products, just like LSD. However, an oppositional aspect also appears, a “second psychedelic revolution”, a dialectic of re-embodiment (“neurospace”) as opposed to the tendency toward false transcendence & disembodiment in “cyberspace.”

One of the great “rediscoveries” of this new entheogenesis is the dialectical nature of ayahuasca or yage—that is, that organic DMT can be “realized” in combination with an MAO-inhibitor like harmine, and that plant sources for these two substances are globally diffused, widespread to the point of ubiquity, impossible to control, and free. Preparations require only low kitchen tech. Neo-ayahuasca, unlike computer technology, is not a part of capitalism or any other ideological control system.
aspect. I personally am getting more and more pessimistic, the trajectories all seem to end in a reduction of our autonomy. The Internet is either going to be another crisis-solving device for global capitalism, or it will vanish or be relegated to a minor communications medium, a good deal less important than the post office. The are only a very few corners left for beautiful agitation. We can no longer expect to win this particular battle of the paradigm war. I don't think that this technology, any more than any other technology, is going to be the fix that will bring us freedom and glory. It is not the solution; it isn't even the question anymore, much less the answer. I would prefer to see the question enlarged to include neurospace—because cyberspace, conceptually, is a form of disembodiment.

As a historian of religions, I see that the tragedy of the human story is the separation of mind and body. Since Mesopotamian times, religion has always been an attempt to escape the body: it becomes more and more gnostic, in the sense of hatred of the body. If you want to hear some marvelous gnostic, all you have to do is to listen to some of the enthusiastic advocates of the Internet. The people who really believe that you are going to transcend the body, download consciousness, escape from the corpse. It is immortality through technology, transcendence through machinic consciousness. It is the same of pie in the sky when you die that the old anarchists used to criticize about religion. The Internet, in this aspect, is simply the modern version of religion. Cyberspace is our version of heaven.

These myths do not go away. This rationalism turns out to be another irrational cult, just another ideology, another form for class consciousness. The problem of reembodiment, therefore, is the only religious, intellectual, and technical question we need to ask ourselves. The body is both the mystery and the key to the mystery at the same time. Cyberspace doesn’t happen in the body. The “Body without Organs” is a phrase from Deleuze and Guattari—and they are strangely ambivalent about the moral aspect of this body. I un-
in which bread and wine are turned into a cannibal feast, and in the “soma function,” which means that everything is psychotropics. As one of the Sufi poets said: “A drunkard will never become wise, even after a hundred bottles of wine, but a wise man will become intoxicated with one glass of water.”

Think about Rabelais, for example. He devoted the last chapter of his book to what he called the “Herb Pantagruelion” and it’s clear to any modern reader that he is talking here about marijuana. So the psychedelic knowledge was not even lost, not even by the time of Rabelais. It was handed down on a nonliterate level—by wise women, country doctors, witch doctors, and peasant mothers who knew about plants. The knowledge has become occult, it’s a secret. Rabelais is playing with the fact that he is knowing something that you don’t know. The knowledge was never lost because no culture can persist without some opening towards non-ordinary consciousness. You have to have some escape valve to civilization, even if it is mass psychosis. There has got to be a way out.

The idea of the transformation through ingestion of entheogens or psychedelic plants still was not quite erased even in the High Middle Ages. The knowledge has been condemned to hell. The psilocybin mushroom was always here, it never went away, but it was hiding—I am talking like Terence now, let’s just take it as a metaphor—it was hiding because nobody respected it, nobody needed it. It was not because Wasson brought the spores out on his boots in 1956 that suddenly magic mushrooms were all over the world again; it was because some paradigm shift occurred at the same time. If Wasson hadn’t done it, someone else would have made the discovery. As Robert Anton Wilson says “When it is steam engine time, it’s steam engines.”

The rediscovery had already been going on since the nineteenth century when people like Baudelaire, Rimbaud, and DeQuincy, or the Romantics, who got into hashish and opium. They learned about it from the Islamic world. Once again, in a very occult and hidden way, these were poètes maudits—damned knowledge, in the protocols. And there is a new generation: don’t worry, the kids are alright. LSD is a dangerous drug, it destroys some people, but life is a risky business. If there’s one thing I hate, it’s the word “safety.” We live in a civilization of safety, in which we are eventually cocooned from all danger, that is to say, from all experience. What we are left with is a vegetable plugged into a computer, who never leaves the room, like a hideous vision of a William Gibson novel. We would be well advised to rediscover risk.

The new round of psychedelic work one can find in the work of the Albert Hofmann Foundation and in the spread of acid in Eastern Europe—all part of this “second psychedelic revolution,” which I very much link up to the Internet, this dialectic response between the plant world and the machine world. The antagonism between cyberspace and neurospace is one thing—but there is also an analogy. Somehow, cyberspace is hallucinogenic, or it was thought to be. They both involve a visionary inner space. It is like saying that LSD is like the atomic bomb, “it blew your mind.” It has this negative side to it as well.

Let us be clear: cyberspace is happening outside your body, you might move your body, seeing these bad animations moving around you. Did virtual reality fail already?

Somebody said today that virtual reality failed because it was already virtually experienced through the media. Save your money and hear about it on television—that’s enough. It is very conceptual, one of those futures that never happened and never will. And don’t forget that cyberspace is much more than only VR. The really important Net is not the Internet, but the international banking network. There, one trillion dollars is being moved around each day. “Money went to heaven,” as my friend Gordon uses to say. Money that refers to money that refers to money, etc.—the most abstract concept humanity has ever developed. Compared to this the Internet is nothing, it is a tiny corner of electrocommunications.

Nevertheless, the Internet is interesting to me because it seems to have a liberatory potential—we want to find out it’s psychedelic
were plant consciousness that responds to the machinic consciousness. It is such a beautiful metaphor—you don’t have to believe in the elves, it’s all human consciousness, ultimately. You don’t have to believe in something supernatural to explain this. So around the mid-twentieth century, technology begins to shift away from an imperial-gigantic frame to a more “inward” dimension, with the splitting of the atom, the virtual space of communications and the computer. And it was around that same time that the really serious psychedelics begin to show up—mescaline, psilocybin, LSD, DMT, ketamine, MDMA, etc. etc.

The paradigm war that’s now breaking out is one measure of an antagonism between cyberspace and neurospace, but the relation cannot simply be vulgarized as a dichotomy. This brings us up to the so-called “second psychedelic revolution”—just another battle in the same war. From one point of view, we lost the War on Drugs in the sixties, it was crushed and driven underground again. What Leary and Huxley dreamed of, a transformation of society through this experience, did not occur. Or did it? Now we know that the CIA was deeply involved in spreading LSD around the world. On Wasson’s second trip to Mexico there was a CIA-agent in the group. They all had a wonderful time, except one person—guess who... They were interested in the bad-trip side of things—certainly also a psychedelic experience. The CIA attempted to monopolize LSD, to control its distribution, they funded virtually every research project. They were interested in brainwashing. The sixties owe just as much to the CIA as they do to the Learies and the hippies. There was this complex web of good and evil, smart and stupid, all in mix of smoke—fractal patterns influencing each other, in which every jewel reflects every other jewel. That is the secret history of the sixties.

Through the seventies and eighties things looked fairly grim. The “second psychedelic revolution” we now have involves some new drugs like ibogaine and a new, more careful scientific approach. We have all learned to be careful where the funding comes from and known by damned people. Then there is Antonin Artaud, who went to Mexico and took peyote; or Ernst Juenger, Mircea Eliade, C.G. Jung, Walter Benjamin, Ernst Bloch—they were all experimenting with drugs. We know about Aldous Huxley because he wrote the first book in English. So when the psychedelic revolution happens, it is already an old story.

The invention of LSD, around 1945–47, is somehow emblematic to me. It is, in fact, the very first synthetic psychedelic drug; and the remarkable thing about it is that you need 200mg or even less. That’s nothing. It takes the whole story of the psychedelic experience into a new, much more technical world of modern science. Before, it is the primitive world of the plants. There is a reason for this. In the beginning, I have hypothesized, drugs first appear in human history because they are used in a religious way in agricultural societies, and the use and discovery of psychedelics is somehow a response to a technological development. This technological advance makes more poignant, more violent our separation from that original intimacy, from that experience of pure animal consciousness. So that is it technology itself that causes the recognition, on the part of early agricultural societies, of the cultic and religious aspect of these plants. Now we are here, a good deal later in human history—and there is the first interesting development in technology since agriculture.

It could be that, around 1945, we see things...instead of becoming more and more massive—suddenly become more dematerialized. (The atomic bomb dematerializes matter in a very radical way.) A very spiritual experience, on the one hand, and the computer, on the other hand—which, as we know now, was destined to bring about the “information economy.” You cannot eat information, so it isn’t really an economy, and it never will be—but there is nevertheless something to this expression. There is a truth behind the bullshit, there is this dematerialization, a revulsion against the heaviness of the body, a disembodiment of production. We know that computers are supposed to be a great spiritual event, even though
it is still a machine; it is not a heavy machine, a simple machine, an on-off switch.

Of course, we will not overcome the economy of production through this. Someone still has to make shoes, has to grow food—and it is not going to be us! We aren’t going to get our hands dirty with that anymore. Let the Mexicans do it, while we will inhabit this marvelous gnostic space of pure information. We have sent our filthy polluting factories to India, to Bhopal, to Chernobyl, so that we can be clean, so we can be the “cyber class.” No matter what you think about the liberatory potentials of the computer, we must also face up to this fact that there is a disembodiment going on. Suddenly you ain’t got no body anymore—it’s analogous to the disembodiment that the atomic bomb brings about when it hits you. Is it a coincidence therefore, that in this precise same two years, LSD is synthesized, mescaline, MDMA, plus the rediscovery of the mushroom... There is a very interesting link between technology and the psychedelic experience.

Probably the occultation of psychedelics climaxes with industrialization and with the sneaking substitution of machinic space for organic space as a principle of psychic ordering. Even agricultural consciousness is still organic consciousness: it has to do with the earth, with plants and animals. It is a very ordered, gridwork consciousness, but it still is organic. But as we get toward the “Satanic mills” (Blake) and the English working class of Engels, machinic space has become the ordering principle. It is not the plow that creates space anymore, it is the production line that creates psychic space. So Victorian puritanism and imperialism must represent the public repression of the unconscious by a rigid sobriety based on a mind/machine model that is the isolate and commanding cogito. If you wanted to find one period of human history when there really was a complete amnesia about the psychedelic experience, it would be the nineteenth century, around 1830–1880, when us civilized folks not only forgot that there was something like the psychedelic experience but denied it.

As a culture, we like to laugh at primitive tribes—for example, those who are shown photographs of themselves and cannot recognize them. But in 1876 a French scientist fell by accident into one of the paleolithic caves. Later, in his diary he wrote that there seemed to be some scribbles on the wall. He could not see that it was art, he was just as blind as the pygmy who is blind to the photograph. Suddenly, a few years later, people could see it as art. What allowed T. S. Eliot to say that ever since Lascaux, Western art “tumbled from the staircase”? What allowed Picasso suddenly to see African masks, the French expressionists to see Japanese art, the hippies in the sixties to hear Indian music? For the colonialist British who visited India, the music for them was like the “whining of the mosquitoes—how can they stand it?” The Brits could not hear it as music. My parents’ generation could never hear Indian music as music: “What’s that buzzing noise? Are you kids stoned again?” That is what I call a paradigm shift of cognition.

At the very moment when entheogenesis—that is, the birth of the Divine Within—reappears in the West with the late Romantics as a subculture, as “occult history,” the conditions were being set up for this paradigm shift. We are still basically undergoing it. The only thing that could even pretend to suppress this shift of consciousness, would be the Law, as in the War on Drugs. But our law is a machine law, a gridwork, clockwork law, and it is obviously unable to contain the fluidity of the organic. That is why the War on Drugs will never ever work. You might as well declare war on every plant. So public discourse is approaching breakdown over the question of consciousness. The War on Drugs is a war on cognition itself, about thought itself as the human condition. Is thought this dualist cartesian reason? Or is cognition this mysterious, complex, organic, magical thing with little mushrooms elves dancing around. Which it is to be?

The War on Drugs is a paradigm war. Each refinement in machinic consciousness will evoke a dialectical response from the organic realm. It is as if the mushroom elves were there; it is as if there