

The Ethnobotany of Shamanism

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The first thing this afternoon is that I'll bring in some books to show you, 10 or 15 source books that will help you in researching any aspect of this, whether you are interested in it academically or for personal spiritual growth. It's very important to be informed. This is an area where it's very hard to bluff it, because on one level it's a branch of medical science. What we're talking about is folk pharmacology, and you really should understand certain things about pharmacology, certain things about physiology, because your life may come to depend on it in some situations. It's not casual; you want to be able to assess risk and make intelligent choices.

I'll say just a little bit about my own interest in all this, or how I got into it. I don't know, I mean one creates a false history when you look back into time to try to explain how you got to where you are, or at least I do. Trying now to understand how I came to be involved in the psychedelic experience, it seems to me that what it really requires is a love of the peculiar, of the weird, the bizarre, the outré, the freaky and unimaginable. I don't give great credence to astrology, but I am a double Scorpio, so I'm told that this kind of thing predisposes one for 12th house activity.

Several times in my life I've gone through these kinds of revelations where everything seemed to change so profoundly that I could hardly recognize who I had been before. I noticed this happening the first time around the time I was 7 or 8. Nature and the imagination seemed to be the precursors to involvement in the psychedelic experience, so I was a rock hound, a butterfly collector, a rocket builder, a connoisseur of explosives and all of this sort of thing. While my peers were off playing little league baseball I was back in the hills digging out trilobites and tracking down moths and stuff like that. Then science fiction was a tremendous stimulus to my imagination, because it seemed to say that anything you can imagine is fair game, anything that you can conceive of can be treated as a reality. I was also raised in a Catholic household, so my whole thing was to build cynical resistance to the spirit. I was an atheist, a Marxist, an existentialist, a rational materialist — a pain in the neck, basically.

In all of that, somehow I began reading Aldous Huxley, the social novels: *Antic Hay*, *Chrome Yellow*, these comedies of manners of British academic society. I was 12 or something, but I always drove myself to read beyond my level. This led me to *The Doors of Perception*. I had read *Brave New World*, which is an anti-drug dystopia, a nightmarish world of plastic never-grow-old people who take tranquilizers every time there's a hint of any deep emotion or any kind of anxiety. The motto was, "A gram is better than a damn!" and you could for a quarter, anywhere, get one of these pills that just put you right back into being happy and cooperative. So Huxley, who was a very concerned person, very interested in the fate of 20th century society, went from this dystopic vision of drugs to *The Doors of Perception* and *Heaven and Hell* in which he describes experiments with mescaline that totally turned him around and convinced him that these medieval mystics that he was so fond of — Meister Eckhart, William Blake and San Juan de la Cruz and so forth — were actually describing the same reality that he was getting into.

So I wanted to pursue this, and this was 1962 or something, I was about 14 years old. Then a few months later there were stories in the newspaper that morning glories were being abused for their psychedelic effect. There was a bindweed that grew locally, so I went tearing out and gathered half a peanut butter jar of this wild morning glory and took it home and ground it up and took it. Of course nothing happened, but in the hour before it failed to come on I sat quietly and fearfully and examined my mind from that point of view for the first time in my life. In other words, from the point of view of watching it to see if it was changing in some unpredictable way. Actually, although the morning glories were totally inactive, in that hour of watching I did observe some interesting false positives that would come and go for a few minutes.

Then a few months later I got my data a little more together and learned that it was a certain species of morning glory and that you had to buy the seeds from a seed company. Then I discovered what it was, though not the full-blown psychedelic experience. By this time I was in southern California going to school, and a friend of mine and I would go out into the Mojave desert and grind up low doses of these morning glory seeds, because we didn't know what a dose was, really, or what actually was supposed to happen, because if you read Huxley it's pretty high-flown language, it's all about radiance and significance and existential validity flooding into the rose. Well, once you're looking at a rose and posing the question, "Is existential validity flooding into it?" you don't have anything to measure it about. We would go out into the Mojave and take these morning glory seeds and observe shifts in the apparent significance of things. Everything would appear somehow more pregnant with potential meaning. Then, in fact, if you would close your eyes in that situation there would be the beginnings of hypnagogia: drifting lights and undulating colored patterns, grids and laceworks, all these things which are the preconditions for the psychedelic experience.

It wasn't long after that that I went to Berkeley in the fall of 1965, and LSD was available a few months later, DMT was available. I was just stunned and have never lost that sense of profound astonishment that such things could

exist. I mean, DMT seems to argue — convincingly, I might add — that the world is made entirely of something that, for want of a better word, we would have to call “magic.” Things are not what they appear, not *at all* what they appear. What we call reality is some kind of utterly provisional construct that if leaned upon too hard can just fly to pieces before your startled eyes. Then the question is, “What are the implications of this? What lies behind it?” So I, as most people do, looked to tradition for some kind of guidance about what this was, and read Jung and read Mircea Eliade and saw parallels, but not a clear congruency.

What I saw in the iconography of Tibetan Buddhism seemed to me to bear certain kinds of parallels to the hallucinations that I had by that time glimpsed in LSD states. So I studied the Tibetan language, went to Asia, and learned that the iconography of Tibetan Buddhism is a rip from the pre-Buddhist shamanism of Tibet, which has been there since the Stone Age. Buddhism only entered Tibet in the 7th century with Padmasambhava, and all the iconography was taken from the autochthonous indigenous shamanism that was there. I didn’t find in these yogis and lamas what I was looking for, which was direct experience of these realities. Tibetan Mayāhāna seemed tremendously sophisticated in its analysis of states of mind, but operationally it was not coming anywhere close to what these psychedelics were able to deliver. Because I was fortunate enough to have wise and well read friends, I knew that this tradition was alive in the Amazon. I went from Nepal to India throughout Malaysia, Thailand and Indonesia, ostensibly making my living as a professional butterfly collector but also using that as an excuse to go to these extremely rural and tribal situations and observe what was going on. I concluded that it was far in the past or far removed, that it was something that had retreated to the status of a myth in most cultures.

Then in late 1970 I went to the Amazon and very quickly, through using mushrooms and through using ayahuasca, learned that there it is accessed, the traditions are alive and the attitudes were simpatico with my own. There were not lineages, you didn’t have to pledge eternal fealty to some character. They were exploratory in their approach, they were open-minded, everybody admitted that nobody knew what was going on with it. Yes, they could cure, yes, they could balance their societies and act as paradigms of behavior to other members of their tribe, but what these shamans really liked to do was get together and puzzle over what the hell it is, and how can it be? They were like scientists, they were like explorers, they didn’t have a myth that encompassed it. They were technicians of myth which they presented back to their societies, and this is something that is very important to realize about shamanism as it is being packaged and sold in this society.

A shaman is primarily a theatrical entertainer. They are not putting on the show for themselves, but in this society people actually become actors on their own stage. I maintain from spending time with them that the shamans do not believe in the powers of magic words, crystals, healing darts, and so forth and so on. They manipulate these things the way a stage magician manipulates rabbits, hats, saws and boxes with women inside them. They understand what

it's for and how it works, and these things are manipulated to create an effect on other people, but the shamans understand that the real magic is the magic of sign, symbol, and language, and that by manipulating cueing, by manipulating expectation you can lead people to a fundamental confrontation, not only with themselves but with the Other.

It is no easier for an Amazonian Indian to come to terms with these things than it is for a native of Manhattan. Ultimately, this coming to confront the Other is coming to confront the mystery of being. Not as a phrase, "mystery of being," we all give lip service to that — the mystery of being is everywhere, it's in the trees, the stones, the elevators, the life of the city, the life of the country, everything is radiant with the mystery of being — this is some kind of gloss. What I'm talking about is the mystery of being as existential fact: that there is something that haunts this world, that can take apart and reduce every single one of us to a mixture of terror and ecstasy, fear and trembling. It is not an idea, that's the primary thing to bear in mind, it is an experience.

As we went around this morning a surprising number of people spoke to it as an experience. This is what makes the great distinction between the shamanic, pragmatic approach and what I called last night the political ideologue approach: that we are not working here from theory, our theories are the weakest part of what we say. What we are working from is the fact of an experience which we need to make sense of. Now, most of these Other-oriented experiences, which are hard to keep track of or make sense of, cannot be commanded freely. They are more in the realm of: you are traveling in a foreign country and you contract a terrific fever; you fall into a vision and you have deep awareness and realization about the nature of life. This is not an experience that can ever be repeated; or you're alone in a wilderness and you confront a flying object in the sky which seems to trigger strange bursts of thought in yourself; this cannot be repeated and triggered on command. So only in the context of the psychedelic experience and the willed decision to act can you enter this arena of repeatedly going to meet the experience of the Other. It is a very, very bizarre enterprise. It is not that if we do it enough times, we will understand it or become comfortable with it. It is not in its nature to be understood, and it is not in its nature to accommodate itself to us. Rather, it's that we have discovered another dimension, almost in the same way that Europeans discovered another world only 500 years ago.

In 1992 we will celebrate the 500th anniversary of Columbus' discovery of America. Now, notice that when Columbus set out from Spain there was a large body of intelligent opinion which believed that he was sailing over the edge of the world. Literally, that he was sailing out of mind. Instead, what lay at the end of that voyage was real estate, immense amounts of real estate, and we have come to terms with that and in fact now inhabit what 500 years ago was not even on the maps. It was in the unconscious; now it is the center of the global economy. In the same way that these European navigators began to have this intimation that the world was a wrap-around — that's what it means to say that the world is round, it means that you can get back to where you started from by going away continuously — in the same way, I think we are on the brink of

discovering that you can start in three-dimensional space and time, move off in a linguistic vehicle, and find your way back to the place you left from. This means that what we call three-dimensional space and what we call the imagination actually have a contiguous and continuous transformation from one into the other, and this is big news. This entirely goes against our Cartesian expectation of thoughts inside, world outside, objects outside, perceptions inside. This is actually nothing more, this inside-outside thing, than an artifact of European languages, and yet we take it to be how God made the world, basically, because we are so embedded in our language that we literally cannot cognize reality without it.

We cannot cognize reality without our language, but in the psychedelic state somehow this happens. Somehow syntax is replaced by hypersyntax, linguistically-moderated and modulated perception is replaced by perception in the raw; not coded and sculpted and sifted for culturally validated meaning, but rather just the full hit. This is tremendously disorienting, but it is also tremendously liberating, because that's the full deck. That's when you have full command of the options available within the matrix. If you play the cultural game it's like playing only with clubs, or playing only with the red marked cards. You have to play with a full deck, and that includes this prelinguistic surround in which we are embedded.

Why is it so emotionally charged for us? In other words, why can the shamans go into this dimension and heal or divine, see into the future, or, in a sense, see into the past, by discovering who stole whose cow, or who is sleeping with who, all these things that shamans are concerned with? What is this ground of being that we discover by dissolving the cultural machinery of cognition? I think it is simply reality unpackaged for a historical epoch. In other words, reality uncompromised by the need to be culturally efficacious and useful. This is precisely what we need to throw light on our culture crisis, because the models that we have used to sanction information that is culturally useful have given us information which is toxic. We have actually created a toxic relationship between ourselves and nature. We have pursued avenues of questioning, the feedback from which has given us an overpopulated, polluted, ideology-obsessed, unresponsive planet.

One of the things that's so striking about shamanism in the native context is the absence of mental illness, the absence of serious neurotic patterns of behavior. This is because this translinguistic reality is allowed to work its will through shamanism, is allowed to regulate the society. In other words, our model of how society works is that we are at war with nature and we must push it back, seize a beachhead, fortify our position, dig in — these kinds of metaphors, metaphors of capture and control — while the shamanic approach is that we must communicate with nature in order that nature can communicate with us, in order that we may know what should be done. Shamanism as classically practiced is hunting magic, weather magic, healing magic. In other words, ways of getting into the evolving of state-bound system-patterns within nature. Weather, we would presume, can to some degree be predicted by looking at past weather states. Hunting can to some degree be predicted by looking at

the migration and movement of game in past situations. So shamanism then becomes a kind of mnemonic exercise, where by keeping track of what has happened you can build up a model of what will happen. Originally this was done through great mnemonic feats of memory, like the Yugoslavian folktale singers or the Homeric epics or the people who sang the Edda. These were works of hundreds of thousands of lines that were passed down virtually without change over millennia.

There's a strange phenomenon, at least in the evolution of cultures and perhaps more generally, which is that every step into freedom contains within it the potential for greater bondage. Here's an example of what I mean by that: women in charge of the gathering phase in hunting-gathering cultures developed language, I believe, because they had great need of the ability to make fine distinctions. In other words, here you have 50 grasses, small herbs, shrubs, roots, fruits, berries, seeds, inflorescences. Some of these things are poisonous, some of these things are foods, some grow in the spring, some in the fall, some along the river courses, some on the hilltops, so forth and so on. A great many descriptive dimensions come to bear on this, so consequently I think that women are to be held responsible for the evolution of language, in order to discuss the extremely important matter of what is good to eat and what is not, where do you find it, how do you preserve it, what do you combine it with and so forth and so on. Men, on the other hand, who were in charge of the hunting — because of the different body type and bladder capacity and so on — the premium there was placed on silence, stoicism, being able to stalk and for days make no noise, possibly, and to just sort of integrate into this silent kind of thing.

This same kind of freedom which binds occurred in the shamanic effort to steer culture by mnemonic means, because eventually even the greatest of the shamanic memory artists were overwhelmed by the amount of data, by the size of the epics, by the sheer length of these genealogies, so then symbolic notation is brought in. Shamanism turns into scribe-craft, signifying magical forces turns into writing down their names, and there is a tremendous binding, a compression, a limitation of freedom because the strategy of freedom became too successful. This reaching beyond ourselves is a process that is continuous. We transcend a state, we then lock ourselves into the transcendent state, it becomes defined by its own set of limitations and we move beyond it. This kind of bootstrapping mechanism has been at work throughout the evolution of language, throughout the evolution of shamanism.

Now we have come to a similar kind of bind having to do with the bankruptcy of analytical analysis and rationalism, which has led us to a pretty complete mastery of inert matter, but when pushed into the quantum realm, suddenly contradictions begin to multiply and impossible conclusions force themselves upon the investigator. What this means is that rationalism has simply reached its limit. There is no reason to think that it doesn't have a limit. It was just the inflated fantasy of the 17th century that thought that God's mind must work like the mind of a watchmaker. In fact, what with chaos theory and catastrophe theory and numerous other non-equilibrium partial differential

processes in nature, we now know that nature is extremely unpredictable, highly variable, not subject to analytical understanding except in very limited domains.

This understanding that quantum physics has brought the physicists and that the psychedelic state has brought the people who pursue that has not fed back into the mainstream of society. We're still living in a male-dominated, object-dominated, subject-other kind of world model, a world model inherited from the 18th century even more than from the 19th century. Well, is it going to kill us? Is it too late? What can we do about it? This is what I talked about last night, about the Archaic Revival as the notion of making a sharp left turn away from the momentum that the historical vehicle wants to follow, which is thanatotic, don't kid yourself. You cannot have three religions stacked up on top of each other, stretching back 4,000 years, pursuing this monotheistic vision which ends in an apocalypse without building a tremendous morphogenetic predilection for the apocalypse.

Our demonic investigations into matter have lead us to create the machinery to produce the apocalypse. It was interesting, somebody said of the Reagan administration — this was when James Watt was running around saying that we didn't have to save the trees because Jesus was coming anyway, so it didn't matter — someone said, "The jerks want to be in the Bible," and that's precisely the historical situation. In other words, every petty potentate from Frederick Barbarossa to Ronald Reagan has secretly believed that they were living in the time of the Antichrist and would participate in the scenario of the Book of Revelations. This is psychosis if you meet it in a person; if you meet it in a culture it's called religious piety and conviction. It has been going on so long that it has actually created a very narrow neck in the historical process that cannot be avoided. We now have no choice in the matter of business as usual; there will not apparently be business as usual. There will either be an apocalyptic destruction of the planet, a kind of Ragnarök, a Götterdämmerung, a complete storm of fire brought on by the eruption of the psychotic mythologies that have driven the matter-centered, monotheistic, male ego culture, or there will be a plucking of victory from the jaws of that defeat and not an apocalypse but a kind of cultural millennium, a complete breaking out of the pattern into something else.

Some of you may know Riane Eisler's work *The Chalice and the Blade*. If you haven't read this book I recommend it to you — for psychedelic people, for feminists, for people concerned with the state of society, this is certainly an important book. What she's saying is that it is not true that the story of the human race is the story of a pendulum swing between matriarchy and patriarchy, each with its own flaws. Rather it is that human beings have always lived in an equilibrium style partnership society, except that during the last 8,000 years this pattern has been disrupted by the rise of the male ego, the suppression of the Logos-like connection to nature and a certain evolutionary path taken in the epigenetic coding of information, in other words, the phonetic alphabet. The phonetic alphabet, which has no reference to the icon of the things expressed, is utterly cool, utterly unable then to give you any feeling of engagement with what is being described. This gives permission for analytical

science and the detachment of rationalism and the sorts of philosophies that have created the tremendous split between head and heart that characterizes the political systems of the last several hundred years.

This thing which the shamans are contacting, which we can call another dimension, hyperspace, the collective unconscious — whatever it is, it is the ground of our becoming. The only way to unhitch ourselves from the ego is to open pathways of communication to this invisible field of intentionality in which we are embedded. This is a very difficult task because the culture in which we live denies that this thing even exists. If you start saying that you feel the heartbeat of the planet, or that you are in resonance with the local ecosystem, or still worse, if you say that you hear the voices of elves and fairies, this is automatically psychosis. You have to be observed, sedated and cured because you are participating in a model of reality that is not consensually validated. Nevertheless, I think that what we're trying to do with meetings like this is empower this particular meme, empower this idea. I can't remember who developed the idea of memes, but it's basically the notion that ideas compete with each other the way animals and plants compete in an ecosystem, that ideas adapt and spread, occupy niches, defend territory and redefine environments, and so my mention last night of the woman who said to me, "I thought I was crazy until I heard you speak," for me that is really the nugget of this work and the most satisfying kind of comment that anybody could make.

What has happened since the 1960s is that the straight people all went off together — and by this I don't refer to sexual preference, I use "straight" in the earlier sense — they all went off and became very weird together, with their golden Mercedes and their Picasso ceramics and all that. The freaks all went off and became strange alone, each apart in our own way, because community was shattered, affinity groups were suppressed, people went all kinds of directions. Now the people who went through the '60s, approaching or in their 40s, have had 20 years to see how they like that kind of alienated aloneness, and so this morning as we went around I heard many people saying that they had done these things in the '60s, but not for a long time, and now they were returning to it. I think this is because it finally dawns on you that this may be the only shot you've got at it. Reincarnation is fine, past lives are fine, but we're all getting daily older and we don't know where we came from, what lies beyond the zygote, and we don't know where we're going, what lies beyond the pine box. Who can say?

Out of the incredible mystery of whatever the universe is, a microsecond of opportunity against impossible odds has sprung into being. We are embedded in that moment of opportunity, so what are you going to do with it? Are you going to sweep up around the ashram for 30 years and then decide that that was a mistake, or are you going to just give yourself over to the arms of holy mother Church for a lifetime? I mean, people do this. You cannot escape making some kind of commitment to something. Nobody gets through life without being asked to sign up, either in their own club or somebody else's. The mushroom said to me once, in the way that it does when it delivers these aphorisms, it said, "You must have a plan. If you have no plan you will become part of somebody

else's plan. You either have a plan, or you are part of somebody else's plan."

I think people are waking up to the fact that we must use what works. When we went around the room someone talked about yoga and how the psychedelic gives the experience on demand, but are we ready, and how do you gain skills? This sort of thing. To my mind, the goal is not the psychedelic experience, the beginning of the path is the psychedelic experience. So if yoga promises that after 20 years it will deliver you to the beginning of the path, then there's something seriously wrong here. The psychedelic sets you at the beginning of the path and then people do all kinds of things with it.

I am amazed; I feel that there is more variation in how we deal with this than in almost any other phase of human activity, because some people seem to have almost no self-reflection. I've noticed that it also touches sexuality. I don't know how many of you have ever encountered the *Penthouse Forum*, but this is where people write into Penthouse and detail these astonishing, unpredictable sexual exploits — threesomes, foursomes and twelvesomes that just fell upon them — and whenever I have some occasion to read these things, what is amazing to me is that these appear to be descriptions of the behavior of an alien species. There is no self-reflection on, "What does this mean?" "What does this mean that I get stuck in an elevator and end up copulating with twelve stockbrokers?" It's just accepted as how it is. Well, you get this same thing with psychedelics, someone says, "Oh yeah, in the '60s I took psychedelics. Wow, it was really strange, all these colors and voices," and apparently there is no self-reflection, no realization that this is actually happening to you. This is happening to *you*; therefore the implications must be fairly central. Then other people immediately get it, they say, "My gosh, this plant, this pill shows me that reality is at least a thousand times larger than I thought it was. It showed me that I don't know who I am, where I am, what I am, or anything else." I don't know what it takes to instill that in people; maybe intellectual self-reflection.

One of things that is so puzzling about shamans when you actually deal with them in the field is that they are not like the other people in the tribe. The other people in the tribe are very tribal people. In other words, they have all the curious cultural limitations of people in every culture. They think you smell funny, they think you look funny, everything you do is amusing, they stand around in small groups giggling and pointing. The shamans, on the other hand, are nothing like that. They accept you totally as a person. They make no cultural judgments — you don't look funny, smell funny, so forth and so on — because they are what I call extra-environmentals, they are deconditioned from the assumptions of their own culture. So they may be the Witoto shaman, but the Witoto shaman is less Witoto than any other Witoto, because the Witoto shaman operates in the context of Witoteness embedded in the larger reality.

I think what we need to do when we try to revivify shamanism in our own lives is to recover the profound reality of what it's doing. Sometimes I have flashes when I'm giving these talks of how different it is to be stoned than to talk about being stoned. I mean, here we sit in our cotton underwear, with our schedules in front of us; the mundaness of it is so all-pervasive. We could be discussing Gnosticism or a political action project, but we're discussing instead

something really appalling, I think. We're calmly discussing the fact that there is another world overlapping our own and very few people will even admit the fact. I always think of a wonderful B-movie I saw when I was a kid where there's a dinosaur in the swamp, and it's set somewhere in Mexico, and the typical *campesino* is sent by the *patrón* of the ranch to gather firewood in the jungle, and he of course encounters this extremely large rubber reptile roaring around, and then comes back to the ranch and is pointing back in the woods, and is completely inarticulate trying to say, "A creature from the id, a beast from another dimension is rampaging around in the forest." They just dismiss him as, "These peasants, they believe anything. You can't trust them for a moment." This is the sort of situation we're in.

The extraterrestrial invasion that so many people anticipate, or the extraterrestrial contact that so many people hope for and that sells so many cheap newspapers is well underway. It's simply that the words we have to describe it are utterly inadequate. So words like "extraterrestrial invasion," "contact with an intelligent species," "end of history," "migration into hyperspace," these are pathetic signifiers of what is actually happening to us. What is actually happening to us is pretty darn hard to wrap your mind around. We are caught in a vortex of conrescence and compression that was set in motion at least as early as the melting of the last glaciation. We are reaping the fruits of 10,000-50,000 years of sowing of the fields of mind. It is being dropped into our laps for us to create human-machine interfacing, control of genetic material, redefinition of social reality, reengineering of languages, re-visioning of the planetary ecology. All these things fall upon us, and for us to be worthy of it, for us to make sense of it, for us to be anything other than victimized by the 20th century, we need to reach back into time and to anchor ourselves with the transcendent mystery which is somehow tied up with our own being, somehow present on the planet, but mostly a large list of unanswered questions.

We don't know what is going on on this planet. We don't know why there is life here, whether it's an accident or somebody's plan. We don't know why intelligence is here: again, accident? Plan? If plan, whose plan? If plan, for what? If plan, where are we in the plan? We all tend, when we abandon ourselves to cultural values, to focus in so tightly that we lose the big picture, and if psychedelics are anything, they are a zoom lens back to the broadest possible point of view.

Audience: I was curious about what you were talking about with extraterrestrials and not having the appropriate language to really discuss it, and your view of what's going on.

It changes for me all the time. I don't have a point of view, and my primary job is not public speaking or writing but exploring. When I first started taking mushrooms, and throughout the '70s when we wrote the *Mushroom Grower's Guide*, I held several opinions, but my most strongly held opinion was that it actually is an extraterrestrial. Just no shit, flat out, it is an extraterrestrial. What's surprising to me is that a single mushroom trip of a certain sort could

probably put me right back there again. Getting it worked down to Gaia, or the Overmind of the species, is a kind of process of coming down from the real unassimilable context of the experience. It's like an extraterrestrial. I would certainly say this: if extraterrestrials appeared over Washington and Moscow tomorrow it wouldn't make this any less mysterious or puzzling. In fact, the extraterrestrials might turn out to be mundane; this is not. It speaks: this is the most astonishing thing for me to get used to. I mean, the visual hallucinations, somehow I can work it around that these are floods of imagery set off from deep structures of the brain and dumping of memory banks, but that it can just address you in real time and say, "Terence..." and then proceed to blow my mind.

Now, several things may be happening here. The only time when we have the experience of focusing on an incoming message, decoding it in real time, and responding to it immediately is when we have a conversation with someone. So if you find yourself responding to a message in real time, your brain automatically thinks you're having a conversation. "If it looks like a duck, if it walks like a duck, it must be a duck. So here I am, listening and responding to someone speaking to me in English, therefore this must be a conversation." There are physical arguments for viewing the mushroom as extraterrestrial. First of all, what is psilocybin? Psilocybin is *O*-phosphoryl-4-hydroxy-*N,N*-dimethyltryptamine. Of all the indole compounds in nature, only psilocybin is hydroxylated at the 4-position. If you were to design a computer program to search the life forms of earth for evidence of extraterrestrial origin, one of the things that you would tell this program to do is to look for unusual molecules that have no apparent cousins or relatives among other organisms. Well, here is psilocybin, hydroxylated in the 4-position. Nothing else on earth is; a material argument for its origin outside of the terrestrial ecosystem.

A slightly different argument that would see the mushroom as extraterrestrial is to look at its style, for want of a better word. What is a mushroom? First of all, they reproduce by spores. Spores are the most economical biological unit imaginable. They can survive the radiation levels of interstellar space. They can survive for aeons under conditions very close to those encountered in deep space. The mushroom spore falls into an ecosystem and it immediately undergoes cell division; a fine, thread-like network full of neurotransmitters begins to spread itself through the soil. It's very closely analogous to the neural network of a higher animal, including a human being. We're accustomed to thinking that an extraterrestrial would bear the imprint of the evolutionary situation in which it came to be. In other words, if it evolved on a low-gravity planet it will be tall and thin, if it evolved in a methane atmosphere it will have an exotic body chemistry and so forth, but that's because we ourselves have possessed the knowledge of how DNA works for only about 40 years. It's reasonable to assume, I think, that if an intelligent species gets 1,000 years of study of DNA that they can design themselves to be however they care to be. In fact, if you think of the mushroom from that point of view, I think that we might chose that kind of an adaptation if we could have any form we wanted, because it's very non-invasive, very humbly insinuates itself into a situation and grows essentially

on waste material in the soil, yet when it sporulates it can actually cross the boundary of outer space.

Great economy, great artistry, tremendous Zen-like aesthetics seem expressed in the mushroom if you view it as a designed piece of work rather than an object in the environment. Then finally, of course, the major argument for the extraterrestrial origin of the mushroom — but it's an insider argument — is the content of the experience. Number one, it says it's an extraterrestrial organism and it has the data to back up the claim. It can show you movies of desert worlds, jungle worlds, high-pressure, high-gravity, methane worlds, planets whose cores are helium-4, worlds where you don't know whether you're inside an organism or inside some kind of piece of machinery, whether you're under the surface of a planet, literally things which our minds just stop in the presence of. To me, that's really the interesting thing about the mushroom. It can be as friendly as it needs to be and can even reassure you with a Disneyesque burlesque of dancing flowers and pirouetting pink elephants, but once you are comfortable with it, and enter the dialogue, and begin to get to know it, getting to know it is an appalling experience. You can say to it, "Show me a little more of who you are for yourself," and then a veil is lifted and your jaw just drops. Then you say, "Show me a little more of who you are," and, "That's enough of who you are for yourself!"

Then you wonder, while this thing is talking to me, how engaged is the mushroom by me? Is all of its attention focused upon me when I'm talking to it the way all of my attention is focused back on it, or is it like a multi-user computer system, is it able to simultaneously deal with huge numbers of organisms? What is the relationship of psilocybin to the inner life of the mushroom? Is it stoned all the time? Why is it so important that these indole compounds get lodged in the nervous systems of mammals? It's almost as though it's a symbiotic relationship, that the mushroom does not truly live its life unless it is taken, unless its unique molecular component can find its way into the synapses of a self-reflecting higher animal. Then what are we for for it? You can ask these questions.

One reason why I think people have had trouble confirming the animate and intelligent quality of the mushroom is that you must ask. You don't just take psilocybin and sit there because it won't do it, but if you take psilocybin and call it in some sense, whatever that means — invoke, call, try to visualize — then it will begin to come toward you and lift these veils, and this world of zany, pun-like, hyperdimensional intelligence that is revealed is as strange as an extraterrestrial would be. This is, I guess, the final content of evidence for the extraterrestrial origin, the fact that it just seems so different from anything one could conceive of or imagine. I mean, you cannot, in one of these volleys of hallucination, convince yourself, "This is only me, these are my memories, or these are distorted transforms of past experience." I was trained as an art historian to have an eye for stylistic difference and cohesion of a set of aesthetic canons, and it just blows my mind. There is more art locked up in these things to be viewed in a single hour than the human race has produced in 10,000 years, art of a compelling, weird, breathtaking, awesome quality that just breathes in

every pore of itself, “This is the Other, this is not you. Don’t be deceived, my little primate friend.”

Audience: This thing about popular culture digs into that, because if you look at the movies that came out between 1952-1962, how many of those sci-fi movies were about spores from outer space and plants coming down? These were from very straight people who hadn’t taken psychedelics at all; maybe they were tuning into what was about to come, 10 or 15 years later.

Well, I think, and I am so far as I know pretty alone in this opinion, that a very small percentage of information is able to tunnel backward through time, that there is a very small counterflow to the forward movement of causal efficacy. One of the things that shamanism is about is going into that hyperdimensional place and picking up this thin signal from the future and tuning it in. This is why prophecy and seership and all of that has to do with states of ecstasy and intoxication. One way of viewing all religion and all spiritual metaphor-making is as an anticipation of the future. These Western religions have these apocalyptic transformations built into them almost as a self-fulfilling prophecy; in other words, they believe that the world is going to end because the world *is* going to end. Since the melting of the glaciers, people of sufficient sensitivity have heard through a vast wall of stochastic noise the thin, reedy broadcast station of the true vision of the future.

This seems to be one of the things that you can do with these psychedelics, tune this in. It’s a cliché, and I’m sure you’ve heard it, that artists are society’s antenna for change, that artists are supposed to be somehow more sensitive than the rest of us and they pick up the new design forms, the evolving aesthetic canons and then translate it into society for the rest of us. Well, that gains a little more bite if you substitute shaman for artist, and realize that this may not be a metaphor, it may not be simply because they pursue bohemian lifestyles and are willing to accept poverty for a life of free thinking and so forth. That isn’t what’s allowing an anticipation of the future; what’s happening is that there truly is an anticipation of the future. Visionaries like William Blake or the author of Revelations are actually people who, by virtue of some fortuitous confluence of circumstance, space, time and genetic constitution, are able to draw these messages out. What is startling is that apparently this is fairly ordinary in psychedelic states, that in fact one way of thinking of psychedelics is that you begin to move through time when you put them into your life. I don’t mean while the trip is happening, I mean ever after. If you’re living with a 1960s-style mind and you have a strong psychedelic experience, you will come down with a 1970s mind, or perhaps a 2040-style mind. Mind is a temporal style, it’s like clothing. This is what McLuhan understood, you see, that we dress ourselves out of the closet of ideology.

“Ladies and gentlemen, we are floating in space,” that we’re living in. We, as a culture, must conventionalize and believe that today is whatever it is, November 5th or 6th, 1988, but some of us are living in the 21st century and some of us are living in the 18th century. The goal is to try to move all this

forward. It's funny, certain themes that have emerged in the Western mind are, in fact, very psychedelic. One of them is the notion of progressivism, which is a pretty Western idea and quite psychedelic. It's the idea that things are getting better, or that things *can* get better. Most societies look backward toward a paradigm of a past paradise and all effort is toward recovering this paradise. We are the only people who have this faith in progress, and it's quite strong in us, so strong that we barely question it. I remember the first time I was in Karachi, Pakistan, I was being hauled around the city in a rickshaw drawn by a guy with bare feet. It was a human-powered machine, and he spoke English, and we were scoring hash and this and that and we got to know each other, and he said, "In Pakistan we understand what is wrong with the world," and I said, "So what's wrong with the world?" He said, "Progress, that's what it is! We have to stop progress!" which for me was quite a revelatory idea.

This thing about time, though, is very interesting and operates on many different levels. Ultimately, I think what the psychedelic experience may be is a higher topological manifold of temporality; that the reason it is so puzzling and so familiar, so alien and so exalting is that it is, in fact, mundane. It is in fact just us, but us sectioned through some higher spatial dimension. If, for instance, you think about magic for a moment, let's think about the major identifiers of the magical act, such as psychic surgery, where your hand is plunged through the wall of the body cavity of a human being and a tumorous organ is taken out and no wound is visible. A typical form of folk magic, much discussed, I'm sure you're all familiar with it. Another form of magic, stage magic in this case: a word is written on an envelope, the envelope is locked in a box and the blindfolded magician is able to tell the audience what the word is in the envelope in the box. These things are miraculous and we cannot conceive of how they could be done, but if you allow the possibility of a higher spatial dimension, then these things become trivial because it means that the body is open. There is a way that, from the point of view of this higher spatial dimension, the inside and the outside of the body are on the same side, so no problem is posed by removing this organ. Likewise, from the point of view of a higher spatial dimension the locked box is open on one end, the end that is intersecting that dimension, so the way you read the message is that you just go over and look, it's completely trivial.

A way to make this cogent for people who are now thoroughly confused is to recall Edwin Abbott's fantasy *Flatland*, where he imagined a world of two dimensions where a house was what in our world is called a blueprint, and that was all you needed. You could live in the blueprint, because you could walk in and once you had closed the door, no one in Flatland could come through that blue line and get at you. Of course, to those of us in three dimensions, we just lean over and look at the blueprint and put our thumb on the inside of the Flatlander's living room. From his point of view, from out of nowhere an enormous thumb has magically appeared in his living room. Well, this shows how perfectly mundane situations on one level appear to be absolute violations of natural law on another level. This is happening very much in the psychedelic experience, because the mind is the cutting edge of the evolving event system.

Audience: Can you talk a little bit about the idea of the period that we're in with the apocalypse as some kind of transformational event, and how your experience in altered states has lead you to believe or feel that there is some hope for changing that?

I think it's clear that we're in a race between apocalypse and breakthrough. I suppose breakthrough is the dark horse. Everything seems to be set up to favor apocalypse, it has the inside track, although very few people would own up to saying that they personally would want to die. So why is it, if none of us really want to die, why is the overwhelming global cultural image one of inevitable catastrophe? I'm very optimistic, I really think history was for a purpose. I would not have not had it; I think it was useful and that we must have learned something very important. What we learned that was so important, I'm not sure, but probably when we need it we'll have it. Maybe we need atomic weapons because a large object will be detected hurtling toward earth, and if nature had not split off the monkeys 100,000 years ago and evolved intercontinental missile thermonuclear weapon delivery systems that we could use to destroy that asteroid, then all life on earth would die. So what appears to us as madness, our own dedication to the release of larger and larger amounts of energy for no purpose other than to destroy ourselves, is suddenly rescued from pathology and shown to be this tremendously foresightful thing: "Thank God we did this, because otherwise we'd all be dead and everything else would be dead." I don't seriously believe that, but I do think that we must have learned something very, very important.

Perhaps cybernetics comes in here; perhaps this exoskeleton of mnemonic material that allows us, essentially, to freeze and record our entire culture. Everything is going into the databanks. One way of thinking about what's going on is compression of information, and history represents a compression of information magnitudes more accelerated than the evolution of life. Then 20th century history represents an even greater information compression, information finally compressed to such a degree that it's like the singularity inside a black hole. A black hole has at its center a place where the equations don't sum, in other words where it doesn't make any sense. The only conclusion you can reach is that at that point of so-called infinite compression or singularity, another universe bursts into being somewhere else in a greater and vaster cosmology, and then the energy equations balance. It's as though mind is undergoing this kind of gravitational collapse, and information is being compressed to such a degree that eventually it will not all fit in the present, and then the information begins to move off into the only dimensions available to it, which are the past and the future, exactly as you fill a glass with more water than it can hold. Once it has more water in it than it can hold, the water begins to flow down to the sides and out into the larger domain; and so I think that people who try to use history, which are usually male egos and male-dominated institutions, are actually tremendously frustrated. We don't see it that way because to us it looks like they win every battle because they win every election, but because

they win every election, it is their job to manage this situation. It's a case of, "You want it? Here it is!" and they have not a clue as to how to manage it. Their thing is all about the headaches of ownership; our political point of view is pretty much about the headaches of disenfranchisement.

I think that there is some kind of event ahead of us in time, on the order of 20-40 years, that is casting an enormous shadow back through the lower-dimensional slice of being which we call history, so that religions, mystical visions and the visions of revolutionary leaders are a response to flickering intimations of this transcendental object that is pulling intelligence out of the organic matrix of life on this planet in a process that is occupying 50,000-100,000 years. It's extremely unusual, what's happening. A process that creates a series of self-transforming bootstrapped steps in a period of 100,000 years means it's a unique kind of phenomenon, there's never been anything like it on the planet. What it is leading toward is hard to say, but I know that its values are the values of life, connectedness, primacy of experience and caring, and it is using the historical process to wire us all together in some way. Control mechanisms are spreading through the society at an enormous rate.

One of the horror fantasies of the 1950s — when this conservative, straight, crew cut point of view was really at its height — one of the fears of the future that people would just toss off off-handedly was that in the future machines would take over and run everything, and this notion of the control of the planet wrested from the sure hands of noble human beings and instead betrayed into the power of calculating automatons was a great science fiction theme of the '50s. It's interesting how impartial computers are. They are not ideologues, they are managers, and remember, I said that the struggle was between the shaman manager and the ideologue politician. So I think that the cybernetic matrix is a tremendous tool for feminizing and radicalizing and psychedelizing the social matrix. I see computers as entirely feminine. People have a reaction to this because they think that, because men spend a lot of time around them and seem obsessed with them, that somehow it isn't feminine; but men have always been obsessed with the feminine. I think it was D.H. Lawrence who said, "What life is really about is men keeping women from ever suspecting how truly obsessed we are by them."

I think that this linking-together, feminizing, cybernetic thing is part of the anticipation of this object at the end of time. What seems to be happening is that we are all flowing together. We keep talking about unity, globalism, completion: well, you're going to get what you ordered. I think what it means is that probably the dear individual — which, don't be fooled, is a soft description of the male ego run rampant — the democratic individual, the citizen, this notion is in fair peril to be replaced by "the person," which is a much more nubby kind of concept. The person is not an interchangeable part, the citizen is. The citizen is a model of society based on the industrial revolution of the 18th century, but the person is a harking back to a pre-print model. This is being set loose; it's what the hippies were, essentially. What they were trying to evoke was this "do your own thing" idea, but there's a paradox here: the "do your own thing" idea is somehow leading to this vectoring toward a unified

cultural state where everybody is involved in everybody else. It's alright that it's paradoxical, because there's no reason that it should be reasonable.

Audience: I wonder if you could address the difference between the LSD experience and the mushroom experience, if there is a difference, and also your feelings about marijuana as an altered state.

I speak only from my own experience, of course, but to me the LSD experience seemed more psychoanalytical than psychedelic. I mean, I was in my early 20s when I encountered LSD, maybe I had more "stuff," as they say, to deal with, but it was not a reliable visionary drug for me. It caused me to have funny ideas; it seemed mostly to be a thought thing, but not a visual thing. Somehow in my education, somewhere along the way I had picked up this bias in favor of the visual channel, so I wasn't satisfied with LSD. I wanted those things that Havelock Ellis describes, "Jeweled ruins and phosphorescent maidens in diaphanous gowns howling demon songs beneath a violet moon," not funny ideas. I worked pretty diligently at it with LSD and I found that my most satisfying LSD experiences were while smoking hash, and that then really did do something interesting with it, it sent it skittering off in these wonderful visionary directions. These things do have characters, and this is something probably worth talking about in this group. At low doses, everything seems like everything else. In other words a little mescaline, a tiny amount of LSD, a little bit of MDMA, a tiny tad of psilocybin, all of these things simply register as wired, arousal, eager to hear what's being said and follow the thread of the argument and absolutely fascinated by what's going on, no matter what's going on. As you raise the dose, the character of these things begins to appear.

For instance, psilocybin is, to my mind, in many ways the most anomalous, because, number one, this thing about how it speaks; it *does* speak. None of the others do. The others, you may occasionally in years of fiddling get a sentence or two, but the mushroom is just voluble, it just comes on and raves, and people have said to me, "It really *does* rave!" It's not a calm, go-with-the-flow rap, it's a rap about planetary destiny and the next ten million years and the last ten million years. It's this trumpet blast, Cecil B. DeMille, hyperreal rap. Then something like ayahuasca, which is this thing that these shamans use in the Amazon Basin that's based on DMT and monoamine oxidase inhibitors, you take that and it's about the rivers and the jungle, and these people and their humility and dignity, and your humility and dignity, and the earth, and plants, and life, and water and sunlight. It's this totally earth-bound, terrestrial, life-affirming thing, and it does not speak. It's an eye, and its language is visual, and after an ayahuasca trip you just feel like your eyes are literally bulging out of your head. I mean, you've spent 6 hours looking, not really doing anything else but looking. Then something like datura has this watery, magical, forgetful, kind of witchy, occult quality. It's shadows, shadows, and a peculiar quality of erosion of your own attention. No matter who you are, you find yourself wandering through empty colonnades under a sky pregnant with the possibility of rain. It's this strange, de Chiricoesque kind of landscape. DMT has another

quality, it seems to convey you into a world of utter outrage where all linguistic, sensory and analytical machinery is just brought to a screeching halt.

It's important to learn what you like and to learn what you can put up with. I said to someone at a recent weekend who takes mushrooms quite religiously and quite regularly, "Does it ever get easier?" He said, "No, it never gets easier. Each time what I pray as I go into it is, "Please let me be able to stand a little bit more!" Finally, it is the real mystery, so the only way your relationship to it can end is by you averting your gaze, because no human being can gaze into it endlessly. It is what it says it is: it is the Other.

Audience: I just want to follow up on that question a little bit. Stan Grof describes LSD as a non-specific amplifier, and by that he means it amplifies that which already exists in the psyche. He uses this metaphor that LSD serves as a sort of a telescope or microscope, in that itself it does not produce the experience, but it enables you to have an experience that is already there *in potentia*, latent in your psyche. I was wondering if you could comment on that, since you just described the various psychoactives as having a character. So would you disagree with his framework, or would you say that the various telescopes are tinted with a certain lens? How would you reconcile that?

Well, at the beginning of your question you characterized LSD. It's that it is a non-specific amplifier, but of the contents of the personal unconscious and the sensorium. What people notice about LSD is either what's right or wrong with themselves, or how freaky the world is. A bug, a drop of water, it can be anything, but you discover the strangest things on LSD and they're real things: relationships of reflections and windows... It basically seems to be a tremendous amplifier of attention and analysis of the input of attention when directed into the outer world, and when directed into the inner world it's an analytical tool for looking at the past history of the individual, which is what I call the personal unconscious. The thing that always puzzled me about enthusiasts of LSD was that they claimed that beyond this lay what they call "the white light," which they put great store by, and put all kinds of Buddhist associations to. I don't know if I've ever had the white light experience. As I go deeper into strong psychedelics what happens is that multiplicity proliferates; there is not a simplifying, there is a further and further complexifying. I was talking to someone at Ojai Foundation about this and they said, "But surely, beyond all this there is some kind of simplification and unity," and I said I wasn't sure, that maybe it's just an infinite *samsaric* ocean in all directions and all dimensions forever. Ketamine comes closer to providing a no observer, nothing observed kind of state, but you can't do much with that. You can have it, and there is, of course, with the dropping of all boundaries, a feeling of release.

What I am interested in is bringing back artifacts to share with the tribe, and I've accepted that they will come in the form of either things that can be painted or things that can be said. Since I'm better at the saying than the painting, I work like that. Stan is a good friend of mine, we've talked about this over the years. I just can't confirm his maps of the psyche, I don't see those

states occurring along a continuum the way that he says they do. I think it's much more chaotic. If his categories work to facilitate psychotherapy then that's good, because that's what he's interested in. In other words, I see his maps as very, very provisional and useful for navigating but I doubt that when we get the final maps, if we ever do, that they will bear terrifically much resemblance to that. I think he would agree with that; we're not at loggerheads about this. Anybody who works with psychedelics, their ultimate position is that, "Hell, we don't know."

This afternoon I thought we would do some operational homework and academic referencing. One of the most important things about all of this that we've been discussing is to get the information straight, to be as well informed as possible. It's as important to be well informed in this area if you're going to do it as it is to be well informed about procedures in skin diving if you're going to do that. What I thought I'd do at the beginning of this afternoon today, apropos of this idea that people should inform themselves about what's going on — though you can't find out everything, you can find out a lot more than most people know. It's amazing to me the number of people who would pay a couple of hundred bucks to come to a weekend with a person like myself to learn about psychedelics, when a couple of hundred bucks would get you quite far in a bookstore, and the public library is a marvelous resource for this stuff.

I hauled some titles off my own bookshelf and I'll go through them, this is by no means all. I simply chose books that I thought were either important to the field or that I felt would be fairly easy for someone to obtain if they wanted to look into these matters. This one some of you may know, this is probably the easiest to obtain and the most compendious. It's *Plants of the Gods* by Richard Evans Schultes, who is professor emeritus of botany at Harvard. This is basically the distillation of his life's work. It's filled with pictures, it has all kinds of information arranged in this kind of table form where you can look up a plant, get a notion of what it looks like, what family it belongs to, what its chemical constituents are and so forth, and it has a very good bibliography and chemical appendix. So this is around and highly recommended. If you want to go slightly deeper than that book goes, this is the academic version of the same book, this is *The Botany and Chemistry of Hallucinogens*. This is the bible of this field. It lists virtually the state of the art circa 1980, and it has a compendious bibliography. This book, though it's from an expensive academic press, is highly recommended. If you had to have just one book on hallucinogens, this would probably be the one to go for. It's also by Richard Evans Schultes and Albert Hofmann, who some of you may know as the discoverer of LSD and the man who first characterized and synthesized psilocybin.

From a slightly more countercultural point of view, this is the revised edition of the *Psychedelics Encyclopedia* by Peter Stafford, who some of you may know. Again, this is an effort to be compendious. No one of these books should be taken as gospel; you want to get it from several different sources before you conclude any given fact as true. This book is published by Tarcher in L.A., I think this is a fairly easily obtained book. This is the second edition and he's going to do a third edition, and he's very good about keeping up on the

literature. This is an interesting book.

Then for those of you who are more inclined to pharmacology and neurophysiology, this is a fairly hard book to obtain but in a way it's never been surpassed. It's called *The Hallucinogens* by Hoffer and Osmond, and there was never a revised edition after 1965. It discusses a lot about LSD and psychotherapy, and also has all kinds of strange information that was never again mentioned in the literature, that was just sort of dropped out. You can read here, for instance, about the hallucinogen dimethylacetamide, where you drink eight fluid ounces a day for five successive days, and then the onset of hallucinations begin that are supposedly quite spectacular; it's just that the notion of drinking eight fluid ounces of this bizarre chemical compound is not too appetizing. Then for sort of the state of the art in one book is Solomon H. Snyder's book *Drugs and the Brain*, and it doesn't simply address hallucinogens, it talks about all kinds of drugs. It explains the mechanism of drug activity, the notion of the lock-and-key activity of the drug molecule to the synaptic cleft. It gives you a short, basic course in neurology, and Sol Snyder is one of the giants of psychopharmacology, Albert Lasker Award winner, so forth and so on. Here's another book somewhat along the lines of Snyder's book, this is one of the most recent books written on hallucinogens. The editor is Barry Jacobs, *Hallucinogens: Neurochemical, Behavioral and Clinical Perspectives*, and as my brother said, "All of the uninteresting perspectives are covered here, very thoroughly and in detail."

What these books are good for, besides whatever they say, is that they contain excellent bibliographies, so tracing a particular problem you go to these books and then they direct you to the journal articles that give you what you want to know. Most of the literature of psychopharmacology is in journals which you will never, as a layman, encounter unless you go to medical libraries and attempt to see these things, things like *Lloydia* and *Acta Neurologica* and the *Journal of Psychopharmacology*. Some of these journals cost as much as \$200-300 a year to subscribe to, so if you don't want to do that, the bibliography directs you to the articles you need, and you just go to the med library and xerox them out.

This sort of bridges the gap between pharmacology, sociology and anthropology. This is Brian du Toit, *Drugs, Rituals and Altered States of Consciousness*. Let me see if I can make a quick identification here. I think this is actually *Banisteriopsis rusbyana*, which is a rare admixture plant that contains DMT but has the lanceolate leaf end which distinguishes it from *Banisteriopsis caapi*. Probably could do 10 years for the book. The publisher on this one is a weird one, Balkema of Rotterdam, so it's a Dutch publisher.

Then sort of moving out of the realm of pharmacology and psychology and into the specifically anthropological stuff, this is one with a number of various contributors, *Alternate States of Consciousness: Multiple Perspectives on the Study of Consciousness*, edited by Norman Zinberg of Harvard. This deals not only with shamanic drug usage but the heroin subculture, and a number of different things. Urban drug cultures are discussed as well. It's mostly a sociological perspective here. Moving into the more specifically anthropological stuff,

here's my favorite one. Before he got into drumming, Michael Harner edited this book, *Hallucinogens and Shamanism*, Oxford University Press, available in paper. A number of writers contributed to this, there are about four articles on ayahuasca that you just will not find anywhere else, articles on peyote, a wonderful article by Henry Munn called "The Mushrooms of Language," just a classic article on mushrooms. This is highly recommended.

A sort of similar book by a different author is *Flesh of the Gods: The Ritual Use of Hallucinogens* by Peter Furst. He's an anthropologist who made his reputation among the Huichol in Mexico. This has articles by Wasson, Furst, Doug Sharon, William Emboden, Fernandez, Reichel-Dolmatoff, the usual names in this ethnobotanical field. This is a specific guide, *Hallucinogenic Plants of North America* by Jonathan Ott. The interesting thing about this is that it's pretty compendious, meaning that there are things discussed here that you just won't find discussed anywhere else, probably because there are so few hallucinogenic plants in North America. This guy really had to scratch to produce a book about it, but this is useful for that. Similar but more broadly-based is this book *Narcotic Plants*, terrible title, by William Emboden. This book has a lot of visuals in it. Why I value this book is because he has a more liberal definition of psychoactivity than most people do, so consequently his species lists are longer than anybody else's. If somebody asks you about an obscure plant — is it psychedelic or not? — this is where I look first, because he seems to list many things that nobody else has ever discussed. He teaches at Cal State; some of you may know him, I don't.

Here's another one of these anthologies of writing about psychedelics, also by the same author as *Flesh of the Gods*, *Hallucinogens and Culture* by Peter Furst. Again, this has articles on mushrooms, on the discovery of LSD, on ayahuasca, on cannabis and tobacco, the biochemistry of consciousness, shamanism as the ur-religion, so forth and so on. It seems like every one of these authors then goes on to edit a book of their own favorite essays. Here's another one, *Hallucinogens: Cross-Cultural Perspectives* by Marlene Dobkin de Rios, who is a woman who has done a great deal of work on ayahuasca. She published a book called *The Visionary Vine* and another book called *Ayahuasca: Mestizo Curing in an Urban Setting*. Basically a sociologist, she's also at Cal State.

This is sort of the granddaddy of all of these anthologies, a very interesting book, hard to get but fascinating. It's called *The Ethnopharmacologic Search for Psychoactive Drugs*, and it was the name of a conference that was given in San Francisco in 1967. The plan at the time of the conference was to have it occur every year, but it never occurred again because of course everything was made illegal the next year and this faltered. To show you to what degree the government was of two minds about psychedelics, it says on the frontispiece of this book, "Sponsored by the Pharmacology Section, Psychopharmacology Research Branch, National Institute of Mental Health, United States Public Health Service, U.S. Department of Health, Education and Welfare," and it was published at government expense. This is in fact a technical publication of the National Institute of Mental Health. Wonderful bibliography, extremely interesting discussion of DMT-containing snuffs, an article on the psychophar-

macology of nutmeg that you just won't find anywhere else, articles on kava and an article on the history of research into psychedelic plants that goes clear back to the medieval herbalists. The last time we were in the Amazon we christened our expedition, in honor of this book, The Ethnopharmacologic Search for Cold Beer; because there ain't any, and it becomes an obsession. It's so strange what you miss. I don't even drink beer, so what do I care? After ten days in the jungle, all anybody could talk about was the possibility of cold beer, and it was still four weeks away, so...

Then for somebody who really is serious, or technical, or plotting an expedition or a research project of some sort, this is really a pretty amazing book. It's dull as death, because it's essentially listings from the herbarium sheets at the Harvard Museum Botanical Library. It was put together by Siri von Reis Altschul, who was one of Schultes' graduate students, along with Ara Dermarderosian and Marlene Dobkin de Rios, some of the few women who have made significant contributions to this field when it was firmly in the hands of dominator male types. Anyway, this book is called *Drugs and Foods from Little-Known Plants*, and they're not whistling Dixie when they say "little-known plants." You look through this and some say "hallucinogen" or "reported hallucinogen," and this touches foods, one of the things that's not part of our concern here. One of the things that's so frustrating when you do ethnobotany is to realize that people can be starving in environments where there are many food plants, but they don't utilize the food plants because they've accepted the values of a capitalist economy. Because the foods cannot be trucked to market or have a short shelf life, they are called "pig food," and nobody will eat it. Time and time again in the tropics, I would come upon a plant that I knew to be edible and proteinaceous, say to my informant or guide, "What's the story on this?" "Food for pigs, people don't eat it," but you know that they are buying canned tuna fish and spam from the priests at the mission. So this is a way in which people's folklore and folk heritage is distorted.

Then a book by a good friend of mine, and if any of you are interested in ayahuasca, or plan on going to South America where you may encounter ayahuasca, this book, *Vegetalismo: Shamanism Among the Mestizo Population of the Peruvian Amazon*, this is a lovely book. This is about the people that I spent most of my fieldwork time with. You just cannot read this book without coming away with a sense of the depth and complexity of the ayahuasca worldview: its healing classifications, the power allies, the admixture plants, the magical songs. It's by Luis Eduardo Luna, who I know has lectured and shown his films here at CIIS. He's an excellent person, a very good friend of mine, to my mind probably the person doing the best anthropological work on ayahuasca in the world right now. The publisher, in case you want to try to track this down, is Almqvist and Wiksell International, Stockholm. If any of you are just dying to have this book, order it from Lux Natura, we have three copies left.

This is the last one that I was going to mention, because this could have been the title of our weekend. This is *Psychedelic Drugs Reconsidered* by Lester Grinspoon and James Bakalar. Lester Grinspoon managed to find his way into

Herb Caen as a name freak when he published a monograph on the dangers of excessive cocaine use. Basically, this is a very reasoned presentation of why psychedelics should be reconsidered for therapy, the case for them, the case against them, the nature of the hysteria that placed them off limits. He has also written *Marijuana Reconsidered*, and is a very nice person and leading the fight to decriminalize drugs for research. So that's all the books that I brought in to show you; they are, as I say, by no means all. The only resource that I would mention for the serious student of these things that I didn't bring in is: nobody should try to deal with this subject without being aware of what's called the Harvard Museum Botanical Leaflets. These are a series of leaflets that have been published since the '30s by the Peabody Museum in Boston. So write to the Harvard Museum Botanical Garden and say you want a list of the leaflets. They cost between \$1-4 a piece. They deal all of Schultes' papers; all kinds of very hard to recover information is available there. There are about 180 of these reprints on all aspects of all psychedelics and some non-psychedelics as well.

It's important to have this information, to have it at your fingertips. The compartmentalization between areas of knowledge that impinge on this always amazes me. I mean, you get psychologists who don't know what an MAO inhibitor is, you get people combining things without knowing how drug synergies work. You get people just not informing themselves on the importance of set, setting, dosage, psychic predisposition, so forth and so on: all vital matters that can impinge on how an experience develops. If you can take the time to inform yourself you will feel much more sure of what you're doing, and that in itself can alleviate confusion and negative reactions.

So then I thought what I would do is sort of go around the world and talk about these things a little to give you an idea of what is available, what's on the menu.

Audience: Could you explain the difference between psychoactive, psychotropic and psychedelic?

Psychoactive means exactly what it implies, that you can detect this compound as a higher cortical experience, that's all. To my mind a higher cortical experience is a shift of mood, depression, elation, acute hearing, sensitivity to noises: all of these things could be classed as psychoactive reactions to a compound. Psychotropic is a word that I've never been very fond of and it sort of came in late. Psychedelic, which is a fairly maligned word, but was coined by the psychiatrist Humphry Osmond, means simply "mind-manifesting," and I like that because it is phenomenologically neutral. Some people have tried to push the word "entheogen" for these things, meaning literally "god-inducing," but to my mind this carries a huge amount of ideological freight that we may not wish to buy into. Maybe it's god-inducing, maybe it isn't, but psychedelic — meaning mind-manifesting — is pretty good, and then if all of these make you uncomfortable you can just fall back on a completely phenomenological description and call them "consciousness-expanding drugs." I certainly don't consider alcohol a psychedelic, but clearly a psychoactive. Marijuana is one of these

things that's so widely variant, both in how people react to it and how strong it can be. I would call MDMA a psychoactive drug, not a psychedelic drug.

I use the word "hallucinogen" a lot, and a lot of people don't like that, even people in the field. They say, "Hallucinogen seems to imply that it's an illusion," but not in my mind, I don't hear that. I'm fascinated by hallucinations. To me that is the sine qua non that you're getting somewhere. I guess that's just my philosophical biases, but a hallucination is such an extraordinary concept, isn't it? To see something which isn't there. I don't mean to misread a surface, so that you think it sticks into the room when in fact it sticks out of the room or something like that, I mean seeing something that *is not there*. Then that divides into two classes: seeing an ordinary object which is not there — I think this is what most people think a hallucination is: "Here is a bicycle. Is it real or not? The drug-crazed victim cannot tell," — but most hallucinations are of things which can only be hallucinations, because that's what they are. They have this aura of the unexpected and the Other, the intrusive alienness.

People have claimed to me that they have seen objects which are not there which are completely ordinary. That is more typical of accounts of datura users, people who take high molecular weight tropanes, such as occur in jimsonweed and those kinds of things. My brief experimentation with that is that it's what I call a deliriant, rather than a psychoactive. When you take datura you are so messed up that you literally lose all discrimination: you can't tell exactly where you are, you can't tell thinking about being somewhere from being there. Well, you're in no shape to undertake a spiritual quest if you're that discombobulated. What I like are the things which do not destroy what I call core functions. In other words, there is still an evidence-gathering, observing mind left intact, and the disruption of perceptual input, if you want to put it that way, is pretty much confined to the visual cortex, and then to the metaphor-forming capacity that is relating to the visual cortex; but I don't like things which confuse you, which impair judgment.

Audience: What about *Salvia divinorum*?

That's an obscure one about which not much is known, although in the past year they've learned the absolute chemical characterization of the psychoactive compound, which is called salvinorin A. More work has to be done. Anthropologists who have taken it with Indians in Oaxaca describe a very intense experience. When we grew it in Hawaii and took it exactly the way these people said to do it, it was an experience, but it was not clear whether it was psychedelic or merely so physiologically active in such a complex way that you couldn't tell exactly what was going on. The impression which was not mine, but Kat's and a beloved dean, they both experienced flow. They described the experience as though you were lying in a dirty ditch with this cold fluid flowing from the top of your head to the bottom of your feet, and where this kind of cold, clammy fluid encountered energy obstructions in your body, it would wash them away. It was a kind of vertigo with nausea; it was a complex experience, but it was not largely mental, it was more a re-visioning of the body

image. This is another one of these things where no research has been done. It isn't illegal, but you're not going to do your career any good to get tangled up with this, so consequently it's pretty much left alone. Salvorin A is extremely unstable and breaks down within 12 hours, so that indicates that it's probably a polyhydric alcohol or an isoquinoline or something like that, it's not an indole.

Audience: Wasson talked about "entheogen" versus "hallucinogen," and his theory was that a hallucination is something that isn't there completely. He thought that the experience on *soma* or the mushroom is something that you are actually experiencing, so it's not a hallucination, it's real.

Yes, that was what he said, but if you actually look at the etymology of the word "hallucination," what it has come to mean in English is a delusion, but what it really means in the original language is "to wander in the mind." That's the meaning of hallucination, to wander in the mind. Well, that's a pretty good operational description of what's happening, and then when you add in the visual component, it's hard for me to imagine how someone could undervalue hallucinations if they had had them. These guys were very frustrated with seeing this thing turned into a social hysteria, and Wasson at the time expressed great unhappiness with Tim Leary's approach, and hated going to Mexico and seeing these mushroom villages invaded by graffiti-covered vans of filthy freaks from southern California who were disrupting the local ecology.

It was a kind of proprietary approach: this thing belongs to anthropologists, to specialists. Wasson was very reticent to assess his own work. Some of you may have seen Bob Forte's interview with him in that psychedelic issue of *Revision* where Forte asks him, "How do you assess the historical impact of your work?" and he said, "I'll leave that to others to decide." He didn't want to deal with the question of the potential impact on his own society. He really looked at it as this exotic, foreign kind of thing. These guys were cautious, this first generation — Hofmann, Wasson, Schultes — these guys are not stoners by any means. Their approach is cautious, and their psychedelic experiences in a lifetime can be counted on the fingers of one hand. I'm not sure that they ever realized the size of the tiger whose tail they had seized.

Audience: The DMT and the toad, whatever it is, how is that extracted?

Well, I haven't had the good fortune to be present at the milking, so I really couldn't say. I gather that you put pressure on the back of the neck in two places and this exudate emerges, exactly where I'm not sure, and probably decency should scarcely inquire. Then it's dried on sheets of glass and scraped up and packaged and so forth.

Let me start through this and give you a notion of what is available. Whenever you talk about the distribution and cultural usage of hallucinogens the first thing that you come up against is a curious unsolved problem in botany. No one knows why this is, and we would be grateful if somebody could figure it out, but for unknown reasons there is a tremendous concentration of psychoactive

plants on the South American continent. The South American continent has more known hallucinogens than the rest of the planet combined. Why is this? After all, the climaxed tropical rainforests of eastern Indonesia are at least as species-rich as the Amazon Basin, and yet not a single powerful hallucinogen is known with certainty from the Old World tropics. All kinds of suggestions have been made: that actually there are psychedelic plants common throughout the tropics of the Old World but the cultures have lost contact with them and forgotten them, and hence our anthropologists have not discovered them, or something in the soil of South America — very improbable theory. I was talking about this once in a workshop and somebody raised their hand and said, “No problem. Obviously that’s where the spaceships landed.” Good! Well, we’ve solved that problem, now we can move on.

North America is extraordinarily poor in hallucinogens, perhaps the poorest of all continents, so that the psychedelic phobia that Europe created against paganism was completely reinforced, or at least not eroded, by the colonization of the New World or of North America, because there were no plants here to challenge that. The North American Indians tend to ordeal as a shamanic vehicle, the Sun Dance thing which some of you may be familiar with, or sonic driving, which is worldwide in shamanically-oriented cultures without drugs. You should know that not everyone agrees with me that psychedelics are the sine qua non of shamanism; that’s what Wasson thought, that you don’t have shamanism unless you have psychedelics. If you have people calling themselves shamans and not using psychedelics, then they are cut off from the older level of tradition, and through ritual, drumming, ordeal, starvation and flagellation they are creating near-psychedelic or pseudo-psychedelic states.

Now, a brilliant and respected commentator on comparative religion like Mircea Eliade, who I quote whenever it suits my purpose, totally disagreed with this and said no, what he called “narcotic shamanism” — which means psychedelic shamanism; the choice of the word tells you that the guy had a problem — “Narcotic shamanism is decadent shamanism,” and the flagellation, the starvation, the ordeals and the drumming is the real shamanism, and it’s only when the tradition is abandoned and decadent that a culture will turn to drugs. I maintain that this is nothing more than his Western cultural bias operating. He was a Romanian who became an academic in Paris. Also, in his youth he was pretty infatuated with yoga, and they will insist to you that drugs are an inferior path. However, any of you who are scholars of yoga should know that all yoga is based on the *Yoga Sūtras of Patañjali*, 2nd century Hindu, Vedic commentator, and Patañjali specifically says, “There are three paths to the goal of yoga, and they are control of the breath, control of posture and light-filled herbs.” It says it right there, stanza six of the *Yoga Sūtras of Patañjali*. It’s never discussed again, basically. In the entire exegesis of the yogic literature, the third path is never mentioned. Is that because it’s a secret tradition, or what? I don’t know. When you go to India seeking these yogis practicing these higher yogas, what you find are a bunch of guys smoking as much *charas* as they possibly can, and the notion that you could do it without that just gets a long laugh from everybody down around the burning ghats. They deal with it

on a practical level.

Moving out of drug-impooverished North America, or psychedelic-impooverished North America, where there are more than 20 species of indigenous psilocybin-containing mushrooms but, and this is interesting, no evidence whatsoever for tribal or traditional usage. In other words, in this Northwest Coast Indian complex — the Tsimshian, Tlingit, Nootka group — there's no reason to believe, other than our own predilection for romantic fantasy, that these people were using mushrooms in pre-contact times, and yet the mushrooms were there. The complex that we're most familiar with as a North American hallucinogen is in the Southwest of the United States: *Lophophora williamsii*, the peyote cactus. Now, the interesting thing here is that we cannot find archeological evidence of peyote use that is particularly ancient. Peyote use in the Southwest appears to be less than 500 years old. Before that, what we find in Indian graves of the Tarahumara and so forth are the seeds of *Sophora secundiflora*. *Sophora secundiflora* is a highly poisonous legume that contains cytisine. This is an example of what we call, not a psychedelic, but an ordeal poison. In certain parts of the world this approach to spiritual growth has been taken, most notably on the island of Madagascar off the coast of eastern Africa.

What is an ordeal poison? This is a plant where you take it and you are so convinced that you are dying that you have an experience of self-abandonment, getting straight, surrender, and then you live and you're fine. You are absolutely convinced that you are dying, your heart pounds or fibrillates, or you convulse, or you fall into deep coma, or you have tetanus in the limbs and then you recover. Well, anybody can tell you that this is a kind of psychedelic experience, because you're so damn glad you lived that you see everything in a new light. You can be kind to your children, love your wife and tolerate your relatives. People say, "It made a new man out of him!" Well, yes, because he came so close to dying that he shed neurotic behavior patterns, but this is not a true psychedelic.

What we're assuming is that about 500 or 1,000 years ago, sometime in that span, the *Sophora* cult was replaced by the peyote cult, which came from a much smaller usage area. Then, also in southern California, there were what were called the *toloache* religions, religions of datura intoxication, initiation of young men by intoxicating them with datura and leaving them in the wilderness to fend for themselves. Again, this comes close to being an ordeal poison, although it also has psychoactive properties, but so confusing, such a deliriant that it bears no relationship to the true hallucinogens which, with the exception of mescaline, I believe all fall into the category of the indoles. Now, mescaline is not an indole, it's an amphetamine, closely related to MDA and MDMA, but it is a true hallucinogen at fairly high doses. The indoles, which are this structurally-related small family, they seem to me to be the true visionary ecstatogens, and I will mention as I go through the list which ones are indoles and which ones are not.

A kind of parallel phenomenon to the peyote cult of the Southwest is in the deserts of northwestern Peru. There are very large columnar cacti in the genus *Trichocereus* that contain mescaline, and they have been used for a long time, a lot longer than peyote. We have Moche ceramics dated to before 1,000

B.C. which show a Peruvian design 1,500 years old. In central Mexico we come upon the first of these large centers of hallucinogenic use, in the cultural area in which the Olmec arose and were subsequently succeeded by the Maya, who were subsequently subjugated by the Toltecs. The plants that were in use in those situations fall into two pretty well defined categories: first of all, psilocybin-containing mushrooms of several species, and second of all, morning glories of at least two types, *Convolvulaceae* which contain LSD-like alkaloids active in the milligram range that are highly visionary. There is considerable evidence in the Codex Vindobonensis and in some of the Mayan ceramics that this was a culture that made a very important place for hallucinogens, and that it was the privilege of the priestly class, and that their obsession with calendrics and astronomy and this sort of thing was also somehow intimately connected to their interest in the psilocybin mushrooms. Again, one of these botanical puzzles: here is a cluster of 10 or 15 species of mushrooms in central Mexico, and a culture builds itself around them. A similar cluster of species on the Northwest Coast, the culture seems to totally ignore and have no use for, and nowhere else on earth are there clusters of species of psilocybin mushrooms with a long history of use.

Naturally, the export of cattle throughout the warm tropics has allowed the coprophilic mushrooms, the mushrooms which grow on manure, to be spread throughout the warm tropics. Then in places like England and France you get the occurrence of the diminutive psilocybin mushrooms, *Semilanceata*, but again, only the most unconvincing evidence of traditional use. I mean, I am Irish Celtic, I would love to have somebody come up with a bunch of evidence that ancient Celtic and Druidic art and magic was somehow related to mushrooms, but to date the efforts have been unconvincing to any skeptic. It may still be there, perhaps in heraldic devices. Someone should go back and study the escutcheons of the families of medieval Europe; and you do find, for instance, the Morelli family, a noble Italian family with mushrooms on the family coat of arms, and other families in France whose names escape me.

Let me say a little bit more about the morning glory complex, because it's very interesting. LSD, discovered by Albert Hofmann in 1938, comes from ergot, comes from an organism called *Claviceps purpurea* which is a smut which grows on ergot. A humbler organism you could hardly imagine. This is basically "Yuck!" That's how you would describe this organism if you were to come upon it. It looks like a mistake, because it's just an amorphous, slimy, black mess growing on certain cereal grains. One of the fascinating questions to these chemists once they discover a new compound is to try to figure out, "Does it occur anywhere else in nature?" Some plants, some fish, some something, and then you can form theories and judgments about evolutionary relationships. So Albert Hofmann, the discoverer of LSD, was amazed when carrying out analytical work for Gordon Wasson on magic morning glory seeds that had been sent to Wasson from Schultes, he discovered the same compounds or very closely related compounds as he had synthesized to make LSD. I'm going to slightly jump around here now and say that in India, there are 13 species of morning glories in a different family — not in the family *Ipomoea* or the family *Turbina*, which are the Mexican families, but in the family *Argyreia* — of morning glo-

ries which contain these ergotamine-like compounds. This is the Hawaiian baby woodrose. Again, the interesting thing is that there is no evidence that ancient India, with its obsession for altered states of consciousness, ever utilized any of these Asian morning glories, so this would be something that somebody would want to look at.

Audience: Probably you would not be able to get any hardcore data on the use of mushrooms in Arthurian times, but I was delighted to note in *The Mists of Avalon* that when Morgaine was supposedly banished, one of the fairies of Avalon left her some mushrooms to accompany her on her journey.

Well, Marion Zimmer Bradley lives in the hills of Berkeley. We can assume that she's fully installed and hooked into the myths of the counterculture, but it would be great. Someone told me that they went to the island of Iona, where the Book of Kells was supposedly composed, and they said that there were mushrooms everywhere, that to be there is to be inescapably confronted with mushrooms; and yet there is no tradition, no mention. This is where Saint Columba came and reintroduced Christianity into England in the 900s. Christianity had died out in England; it was only in the advanced Celtic civilizations on the fringes of the British landmass that the Christian tradition was preserved.

Audience: The deterioration of the etymology of hallucinogen into a delusional, romantic meaning kind of catalyzed my mind going into how mythology has devolved into "a lie." If you look up the original meaning of mythology, it means "the mutterings of eternity," *mytho-Logos*, and this whole thing with Avalon being that place between the worlds that one went to, the mythical part, and Glastonbury was sort of the other place where all this Christianity existed. When I was in a mushroom experience one time in a circle, and I was a recovering Catholic trying to find out what my mind was all about, this one man, this shaman student from the Amazon, he said, "If you eat these mushrooms you're going to be excommunicated, because the Christians will tell you that once you eat the mushrooms you are doomed forever to hell, Satan, and the devil." Well, it's bullshit, you've got to be kidding. Where would that come from? Maybe the Christian control looked at these people, their paganism and everything, and just wiped out their connection with the other world.

It's very interesting that when the Jesuits arrived in Mexico and talked to the Indians and found them eating these mushrooms, they said, "What do you call it?" and they said, "*Teonanacatl*," and when they got their lexicons out and got that pieced together, what *teonanacatl* means is "flesh of the gods." Well, the center of the Catholic mystery is the Eucharist, a sacrificial meal where a small wheat wafer is believed to be transubstantiated into the body and blood of the son of God. So then to place the psychic experience which follows upon a good Holy Communion next to the psychic experience which follows upon a good dose of mushrooms, clearly these guys said, "This is competition we don't need, we're going to wipe this out," and it is interesting. Think about this for a

moment. We grow so inured to these religious forms; think about the notion of instituting at the center of your religion a rite where you eat your god, and that is what is happening in Christianity. It suggests that this sacrificial meal idea, which can be traced back even to pre-Exilic traditions in Judaism, is probably a memory of a relationship to some kind of psychedelic experience of some sort. I think institutions will inevitably substitute a rite or a ritual for the real McCoy, because then priests can control the pipeline to God and the parishioner can approach with offerings. If everybody can have a pipeline to deity then the whole priest scam is put out of business.

Audience: Has Buddhism substituted a ritual for the experience and then empowered the priests? In other words, has the process that you are describing in Christianity happened in Buddhism?

Buddhism is a heresy on Hinduism. It was Hinduism that did the dirty work for Buddhism. By the time Buddha came along, priestcraft was an ancient tradition in India. I'm sure many of you know the *Rigvedas*, which are these tremendous outpourings of poetry which these Indo-Aryan people created as they came out of Central Asia and into India. The *Rigvedas* are entirely devoted to the praise of a mysterious plant, *soma*. The ninth Mandala of the *Rigveda* says, "*Soma* is greater than Indra, *soma* is greater than Vishnu." It just lists the entire pantheon and says, "*Soma* is greater than all of these things." By the time Buddhism is getting rolling, *soma* is a suppressed ancient tradition and the *soma* sacrifice, which is still being done, is being done with inert materials. If you want to read on this then read Wasson's book on *soma* and notice how it traces back to *haoma*, which is a yet older strata of religious ritual practice that was Zoroastrian and Iranian in origin. It's very clear that what we're talking about here is an intensely psychoactive plant and there's great argument about what it was. Buddhism, because of the long historical record in the East, arises entirely within the historical context, so the suppression of the plant connection was in the earlier stratum of Hinduism.

OK, we discussed the central Mexican complex. It has minor components such as were mentioned here, *Salvia divinorum*, and there are others not chemically well understood but also not widely or regularly used, but then as you pass down across the Darién Gap and into South America proper there is just an explosion of available psychoactives. Not only the tropane complex of the daturas, which now reemerge in the subgenus *Brugmansia*, the arboreal daturas which we see around town as ornamentals with huge, pendulous, hanging white flowers. All of those tree daturas, with yellow, orange, red, white or purple flowers, originated in a very constrained area in the Andes and have been used for shamanic purposes for a long, long time. Also, coca is endemic to that part of South America — it occurs nowhere else in the world naturally — but more interesting from my point of view are the tremendous proliferation of DMT cults and options based around two pharmacological approaches: one, you orally ingest DMT as the same time as you orally ingest an MAO inhibitor. MAO is monoamine oxidase: this is the enzyme system that oxidizes monoamines, that

makes them harmless. Monoamines are this whole family of drugs we're talking about, and many other things as well. If you don't have any monoamine oxidase in your body, then monoamines just stick around because the machinery to degrade them is inoperable. So, there are what are called MAO inhibitors. This means that you take this compound and it causes the monoamine oxidase in your body to be bound, it can no longer do its work. DMT ordinarily would be destroyed in the gut, in the upper gastrointestinal tract, but if you inhibit all the MAO in the upper gastrointestinal tract then the DMT is conveyed into the bloodstream, can cross the blood-brain barrier and initiate a psychedelic experience. This is the strategy of ayahuasca, also called *yagé*. North of the Caquetá it's called *yagé*, south of the Caquetá it's named in the Quechua language *ayahuasca*.

This is a really fascinating thing for many reasons. First of all, this begins to look like the world's first truly designer drug. Notice what's happening here: all these other things I've been talking about — peyote, mushrooms, datura, cannabis, what have you — are single plants that require very little preparation. Basically, find it, eat it: that's the way you prepare it. Ayahuasca is very different: it's composed of two plants, neither of which is active except in combination with the other. So somebody figured this out. This may not sound like such an accomplishment until you stand in the Amazon Basin and look around you, and realize that we're talking 50,000 species per square mile and 50,000,000 square miles, so how did anybody ever figure out that you take the leaves of the little bush and the bark of the woody vine, and combine them in these proportions, and boil them and concentrate it, and then you have this fantastic psychedelic drug? The only way that I can imagine is that somebody told them. My experience is that these plants talk. This does not make sense to the rational and discerning mind, but nevertheless it is possible for one plant to lead you on to another.

A perfect example of this is actually in the chemical literature. Melvin Bristol was a student of Schultes in the late '60s and he specialized in the *Brugmansias*, the arboreal daturas, and he went to the valley of the Sibundoy, and there they actually add the datura to the ayahuasca. He took this ayahuasca, and while he was on it the ayahuasca entity showed him a plant. He kept seeing this plant and he couldn't get it out of his mind, and the next day after they came down from the trip he was collecting in the forest with Indians and he came upon the plant, the exact plant that he had seen in his vision. Well, he thought that was pretty strange, so he made extensive collections of this plant, took it back to Harvard, analyzed it and it was in fact psychoactive, it did contain psychoactive alkaloids. So we are tiptoeing over the surface of some kind of mystery. We maybe can bring ourselves to accept that a voice could speak on mushrooms telling you that you should be kinder to your children, or love your mother, or not be so hard on yourself, but it's a real leap for us to believe that a plant could tell you, "You know that plant over there? Analyze that sucker!" In other words, real information, not information subject to personal interpretation.

The whole of the Amazonian narcotic complex, as it's called in the old

literature, is based on activation of DMT by one strategy or another. Either by drinking this “ghastly beverage,” as the literature calls it, this psychedelic beverage, ayahuasca, or as you go east into the lowlands, the ayahuasca complex is replaced by what’s called the snuff complex, and it is based around a number of species of myristicaceous trees. The *Myristicaceae* are the same family as nutmeg occurs in, although nutmeg is an Old World member of the genus. Several members of the *Myristicaceae* contain DMT in the inner bark exudate, and these Indians go out before dawn — before the first rays of sunlight strike the tree, because when that happens this resin retracts — and put their hands on both sides of the tree to determine the coolest side, and strip the bark from that side of the tree. Then they take these long strips of bark back to the village, burn a fire and let it burn to coals, and then spread the coals out; lay these long strips of bark on the coals with the “wounded” side up, the clean inner side up, and this orange resin will be forced out of the bark and onto the surface. Then you can go along with a scraper of some sort, gather this stuff up, put it in a pot, cook it down, grind that in a mortar and pestle, and then you have a dandy paralytic arrow poison which can also be honked up as an outlandish hallucinogenic snuff.

There are many stories of these Yānomamō and Waika people going out on the hunt and honking up their supply of drug, just getting their poison arrows out and scraping off the points so the guys can get a buzz on and won’t have to go back to the village. It’s a very interesting complex, it hasn’t been very much researched by Westerners and the reason is easy to figure out why. Here’s how you take this stuff: you get with your buddy and you have a bamboo tube — maybe some of you remember this from *The Emerald Forest* — and you pack it with this ground bark exudate, then you hunker down in front of your friend, put the thing with the loaded end into your nostril, your friend takes a huge inhalation of air, blasts on the end of this thing and just drives this stuff up into your sinus cavities. Everything goes violet, you scream, you salivate outlandishly, you fall over backwards, and by the time you’ve gotten yourself together your friend has repacked the other side and is ready to give you that. Then you do that — it goes purple again, you scream, you salivate, you fall over — and then people usually say something like, “Good!” I’m sure you’ve seen the films about this. Napoleon Chagnon did a film, Juan Downey did a film; this is great filmic material. In these Waika villages, I wouldn’t want to say it’s a drug of abuse, but it’s certainly a recreational drug. Not only the shamans are doing this, but people are just doing it. You see people leaning against walls with a line of saliva coming out of their mouth and people just say, “Oh, he’s doing the *ipina*.” “Oh, OK.” People are in various attitudes of consciousness and unconsciousness. . .

Coca, of course; there’s not a whole lot to say about coca. It’s an interesting example of a psychoactive non-psychedelic. The minute you hit the Amazon rainforest they are so concerned that you’ve been misinformed about coca. They say, “Not a drug! This is not a drug! This is a food, this is a good food, this food makes you healthy.” There is some evidence that this is true, that cocaine bears very little resemblance to coca. Coca is not a spectacular experience.

What I found was that the way coca works is that you've been sitting with these people for hours and they're talking in Witoto or some language that you have no hope of understanding, you're just about ready to excuse yourself and go to your hammock, and they drag out the coca. The way you do it — this is another thing where people miss the point in South America, because they have no idea how much you're supposed to do. Imagine taking a tablespoon and going into a jar or a sack of flour and getting as much flour as you possibly can on a tablespoon. I mean a high-walled tablespoon; so you get that much coca, you bring it to your mouth and you put it in. It's dry as dust, and the trick is to slime it over, get it into your cheek and hold it there, all without a break in your conversational flow. For a honky, the main effort is not to strangle and disgrace yourself in this scene, because it's usually no women, you're in the longhouse with the men, and these guys are the authentic, bare-ass, scarified folks, and you're trying to fit in and choking to death on this wad of coca. Well, it dribbles down your throat and suddenly these people don't seem so bad, this place doesn't seem so filthy and you don't seem so tired, and maybe you can make out what they're saying, and maybe you'll just try out a little of what you've picked up on. Before you know it you're the life of the party, and then about 20 minutes later you think, "Maybe now I'll knock off," and then like clockwork they reach for the tin can again and send it around, and they will do this until it's all gone.

Let's see, which way shall we go? Let's jump across the water now to Africa. I talked a little about iboga; fascinating cult, very similar to ayahuasca in the social patterns that have arisen around it. The way ayahuasca is taken in the Amazon in the Mestizo populations that Luna is talking about is that people get together on Saturday nights in windowless sheds: about one third to have the trip, about one third because they have something physically or psychologically wrong with them that they want help from the shaman with, and about one third who are wannabes or just hanging in for the social occasion. In Zaire and Gabon where the iboga cult is operating, this same pattern exists. These things, ayahuasca and iboga in Africa, are the major forces resisting conversion to Christianity. They really are the native people's answer to the missionaries, and as such they act as a tremendous force for social cohesion. Outside of the iboga complex, in Africa we really only have rumors.

You will meet shamans from this place and that place, and they even have come and spoken at this school. They claim knowledge of extremely powerful plant hallucinogens but they won't cough up the name, or the species, or a sample, and until that's done you have to be very skeptical that these things are real. One of the things that was so interesting to me, and I mentioned it this morning, is how the shamans are like scientists. We would take ayahuasca with these people and sing and cure, and go through all these trips and hallucinations, and 6 or 7 hours later, as dawn was breaking and all but the most hardcore people had gone back to their huts, the assessing of the trip would begin. Inevitably people would say, "Well, this was pretty good, but I remember a time in Rio Yaguas when so-and-so made it, and it was like this and like this." In other words, amazing dope tales, amazing stories of other trips in other times and

places and what had been achieved, so these shamans were constantly engaged in the search for the perfect high. They were not set in a cultural pattern, they were experimentalists, always on the outlook for rumors of new plants, untried combinations, so forth and so on.

Returning then to the African situation, there is a complex of plants and suspect hallucinogens in southern Africa in use among the Hottentots, the aboriginal peoples of South Africa. In the family of the *Mesembryanthemaceae*, which includes the *Lithops*, the *Haworthias*, these little ground-growing things that look like stones, the so-called “rock plants,” some of those contain mesembrine. Mesembrine is an alkaloid of some sort, with unresearched psychoactivity but a persistent enough rumor of its use that it should probably be checked on. Then when you turn to the Eurasian continent, the largest landmass on the planet, you discover what I referred to before: this surprising poverty of hallucinogenic plants. You get the belladonna complex, the tropanes, you get the opium complex. Opium poppies are native to Southeast Asia and have been used by people in Eurasia at least as far back as the ancient Scythians; we have accounts in Herodotus which make that clear. In fact, there’s a considerable amount of Greek archeological material that shows opium diadems and opium poppies being used as ornaments by various goddesses, so it was understood that it was psychoactive.

Audience: Robert Graves suggests in one of his books that the ambrosia of the Greek gods was actually psilocybin mushrooms. Have you ever come across another allusion to that?

Yes, well it’s an interesting question, it has to do with Eleusis, and as you probably know, Eleusis was a major prophetic mystery site in classical and ancient Greece where every September a ceremony would be done, and the rule was that you could only do it once in your life, so you never got a second shot. Everybody in the Greek world would go at some point in their life — Plato, Aeschylus, Aristotle, the whole gang — everybody had this experience, and at the center of it something was drunk and something happened. There’s been great argument about what it was and what happened. Wasson and Hofmann and Ruck, who’s a classicist at Cornell, all wanted to argue that it was an ergotized beer. In other words, that on the Eleusinian Plain there was a kind of rye being grown which was infected with a strain of *Claviceps* that was mild enough that it was hallucinogenic without being convulsive or causing miscarriages or something like that. Because if you just go out and gather ergot smut, *Claviceps purpurea* — and you should be very careful with it, some of these ergot alkaloids can send you into convulsions and they’re fairly toxic — but it’s conceivable that a strain grew on the Eleusinian Plain that was made into a kind of beer that was then this hallucinogenic intoxicant, but Robert Graves, who didn’t have the kind of public relations machinery that Wasson had, had a different notion.

He claimed that the surviving recipes of the sacrament at Eleusis, and there were I think four examples of surviving recipes, all called for the same ingredi-

ents. Don't hold me to it, but I think the ingredients were barley, honey, water and something else, *haisa*, maybe. He pointed out that a recipe for beer in Greece would never specify water because you understand that water is part of beer, so he said that these words were code words, and that in Greek the first initial of these four words could be arranged to spell the word *μύκης*, *mykos*, which is mushroom, mucus. Part of the Indo-European language family believed that mushrooms are slimy. This is why the word mucus can be traced back to the word *mykos*, mushroom, *Mykonos*. Mycenae, in fact, means "the land of the mushroom," and so the role of mushrooms in generating the religions of early Greece is a completely unexplored area, it's never been fully thought through.

This is called an Ogham, by the way, where you take the first letters of the items of a list and the first letters spell out a secret meaning, and it was a favorite trick of Irish bardic poets, which Graves was very much into. Here's a great project for somebody: we need someone to prove that you can brew a hallucinogen out of *Claviceps* on rye. I mean, this ergotized beer rap is just a phrase until somebody puts the stein on the table in front of you. It would go a great distance toward trying to prove their case. Someone should go to the Eleusinian Plain and see if they can still find any cereal grains growing there, and if so, can they infect them with *Claviceps*, or is there *Claviceps* in the area? Now, there's a problem here: I understand there's an oil refinery where the Eleusinian Mysteries used to be practiced, but even in California one could at least take a step toward understanding this, because we have in California species of grasses called *Spartina*. There's quite a population of *Spartina* on the cliffs above the sea just north of Santa Cruz. Well, *Spartina* could support *Claviceps purpurea* as an organism, so why not grow *Spartina* and attempt to infect it with a mild strain of ergot which you could get from the American Type Culture Collection or something like that? See if an ergotized beer could be brewed. The absence of mushrooms in these places does not disprove the theory, because all of the Mediterranean has been drying out throughout historical times, and there are Greek vases and friezes which do show mushrooms in situations that are ambiguous as to whether or not they are being venerated or exactly what is happening.

I mentioned the *Argyreia* complex in India, that's the Hawaiian baby woodrose. That's an interesting one, and I'm always on the alert for these, because I'm interested in unclaimed indole complexes. In other words, why was *Argyreia nervosa* never utilized by anybody? It's extremely powerful, you only have to take 8 or 9 seeds, and you don't have to prepare it at all, you just chew it up and swallow it. How come there's no cult, no impact on the history of ideas? Well, we don't know. Those 13 species of *Argyreia* are spread from India down through Polynesia. It's called Hawaiian baby woodrose, but it was introduced into Hawaii 100 years ago, it has nothing to do with Hawaii.

The only major complex that I didn't discuss is the cannabis complex. This is one that is not an indole, and there are many anomalous things about cannabis. First of all, it's what is called a polyhydric alcohol, the only psychedelic polyhydric alcohol known to science. It's an extremely old plant. I mentioned last night the relationship of the metaphors of storytelling and weaving and lan-

guage, and of course hemp is a fiber plant. We find hemp mats that go back to as late as PPNB, Pre-Pottery Neolithic B. At Çatalhöyük there are hemp mats. Well, it's very unlikely, what with tossing waste from weaving into fires and the oiliness of the seed and so forth, that the psychoactive properties of this thing were not discovered. Cannabis originates in Central Asia, the original species is *ruderalis*. Then very early in prehistory it divided into the resin race, *indica*, and the fiber races, and then it was carried across the land bridge, presumably, into North America and that accounts for the *sativa* variant and so forth.

Herodotus describes, interestingly enough, that marijuana was used for thousands and thousands of years before it was smoked. One of the hardest things to wrap your mind around is the notion that until Columbus discovered the New World 500 years ago, no one in Europe had ever conceived of smoking anything. It was a New World cultural practice, and if you read Columbus' diary of when he landed in the New World, he was amazed. He wrote, "The natives drink smoke." That was the only way he could imagine it: "What *are* you doing?" Then, of course, it was less than 100 years before it was a major vice of the sophisticated raconteurs of Europe. Within 100 years of the introduction of tobacco into Europe, tobacco was being buried in the graves of Lapland shamans above the Arctic Circle. So the shamanic nature of tobacco was immediately recognized, even in the European context. Herodotus describes marijuana ingestion as a process somewhat like being in a sweat lodge and then pouring hemp seeds and hemp waste onto the hot rocks and letting it mingle with the steam in this closed space and deep breathing, but nobody ever had the notion of a pipe or anything like this. It's very interesting for many different reasons, and one is that it's a new use for the human body, less than 500 years old in European culture. At Non Nok Tha in Northern Thailand and in other Neolithic graves, they have found long bones, arm and leg bones with burned-out centers, and they don't know whether this was a marrow extraction procedure or if it was a chillum. A chillum is a ceramic tube, narrow at one end and wide at the other, and you pack it with hash and tobacco and then you hold it and inhale. It may be that smoking was known in Asia in Neolithic times but somehow died out in the preclassical period and had to be reintroduced from the New World.

Audience: Terence, do you want to comment about *Amanita muscaria*?

Yes, I'm glad you reminded me. *Amanita muscaria* is perhaps the Old World hallucinogen *par excellence*, at least in the opinion of Gordon Wasson and a lot of other scholars. The problem with it is that it's extremely difficult to get a reliable positive experience from it. The reasons for this are complex: first of all, it's geographically variant, it's seasonally variant, and it's genetically variant. So only if you have lived in an ecosystem virtually your entire life and have inherited the accumulated knowledge from the shamanic elders of your tribe are you going to know whether you've got a good one or not. Nevertheless, Gordon Wasson tried to argue that it was the ur-hallucinogen, the prototypic hallucinogen of prehistory used by these Vedic peoples who invaded India. In fact, he thought it was *soma*, and I had correspondence with him about it before he

died. I think that the *soma* question isn't settled and it could well have been a coprophilic mushroom associated with the dung of cows. After all, the role of cattle in Indian religion is very central, and in fact the role of cattle in early religion generally is extremely central.

I mean, you do not get goddess religion in the ancient Near East without cattle worship. Cattle and goddesses seem to go very much together, and on the other hand, the Dionysian-Mithraic complex is a bull cult, and it too can be traced back into time until it's just lost in remote antiquity. So, yes, that's the Arctic mushroom used by Siberian shamans, and it's been made the prototypic hallucinogen because Siberian shamanism was made the prototype of all other shamanism, only because some anthropologists somewhere decided that that would be a good idea.

Australia is again singularly poor in known hallucinogens. I always say in known hallucinogens, because somebody could go out into these places and come up with something brand new, something that we've overlooked. This is a great challenge for fieldworkers.

One last point that I want to make to sum up this geographical survey of what is available is to say that again another research frontier is China. There is very little evidence of any use of hallucinogens in China, and yet there are clues that mushrooms were understood, that other plants may have been used, the knowledge of which has been lost. The Cultural Revolution did a pretty thorough job on wiping out this kind of traditional Taoist shamanic data. A very simple way of focusing the problem is to say that there has never been reported from China a psilocybin-containing mushroom, and yet I'll bet that if a reasonably informed investigator were to go to southern China and spend no more than two or three months off the beaten path talking to country people, I'll bet you could come up with half a dozen psychoactive mushrooms with a history of folk usage, it's simply that the question has not been asked.

Well, we're not going to have a clear understanding of the historical development of Chinese thought and institutions unless we know what their relationship to the invisible world precisely was, and I think that the indigenous tradition of shamanism, which then became Taoism, which became the real substratum of Chinese religion while it weathered various late-grafted variants and foreign imports like Buddhism, but that native stratum of Taoistic shamanism hints very strongly that there was psychedelic usage of these plants in ancient China.

A couple of people expressed interest in this week that I'm doing at Esalen, so I might describe it a little bit. It's quite different from this, it's an in-depth involvement in the mathematics of the *I Ching* and then a theory that I evolved out of my engagement with that that has to do with the structure of time and analysis of history as a predictable phenomenon. It has no connection with psychedelics, other than that the entire thing was dreamed up under the influence of psychedelics, but it's a stand-alone idea. If I am able to control the group, I will keep it quite far from psychedelics except in moments of rhetorical desperation. If you are interested in the *I Ching*, don't let the word "mathematics" put you off. I am not a mathematician, and the best mathematicians aren't either. It's just a way of talking about it and doing analysis that was very

fruitful, so that's a five-day, from the 28th of this month to the 2nd of December at Esalen. A lot of people will be bringing their computers, there will be a lot of machine implementation people. It will go from Taoist scholars to assembly language programmers, and everybody will have more of a contribution to make than they suspect at the time.

Well, hopefully you turned some of this over in your minds in the time that we were apart. I certainly did, in the sense of trying to figure out what I had missed and whose concerns had not been met. What I came up with was your interest in the specifics of time, place and manner, which should certainly be covered because it's operational information.

Talking about the various visionary plant complexes that we talked about yesterday, each one of these things has a style and a set of demands that it makes on its practitioners. If you look at the ethnographic literature you then see how the people who have used these things over millennia have come to terms with them, how they have accommodated themselves to these things. For instance, in the iboga cult of Gabon, what is aimed for is that early on in the involvement in the plant, a massive dose is taken, and they say, "It splits your head open," and you never have to take very much again, because somehow a creode or a predilection has been created and then you are initiated into this. When you read the ethnographic literature it's hard to believe how much they say they are taking. There's a saying in Gabon — Bwiti is what they call iboga — "Bwiti begins at 60," and that means 60 grams. Even allowing for the fact that they're using fresh root and you might get a collapse rate of 50-75%, that still means they're saying that Bwiti begins at 15-20 grams, which from my own experience with this stuff I can tell you is not even a conceivable place to begin. That's not a strong hit, that's an impossible hit.

You have to know, pharmacologically speaking, the window of effective activity. Every drug, every compound has a profile which you can imagine as a linear spectrum. Below a certain amount it's undetectable, above that amount it becomes detectable, first as this CNS arousal that I mentioned yesterday and then as a full-blown psychedelic experience. At higher doses it begins to have toxic effects; all drugs are toxins. People often make the mistake of thinking that if you have a toxic substance and you take half of it, then it's not toxic because there is no register of its effects, but of course everything is incrementally toxic. Some things are very safe, have a great range of effectiveness well below the range where any toxicity begins to set in; other compounds are active as psychedelics at a level just slightly below the level where you're going to begin to have toxic effects. So you want to know what the profile is of the particular substance that you are thinking of taking.

In pharmacology, one of the parameters that they establish is an LD50, which is a fairly unpleasant concept which you should nevertheless be informed of. LD50 means lethal dose 50. This means that we have 100 mice and we give them an unknown drug; at the point where half of them die, that is the LD50 dose of that compound. There's an LD100 and LD10 and so forth. What you want is for the LD50 to be tremendously high relative to the effective dose. Now, the perfect or model compound in that case is, of course, LSD. LSD is active

at the 25 microgram range, 25 μg . A microgram is a millionth of a gram. It's well below a smidgen. The LD50 for lysergic acid has never been determined. It's never been found how much it takes to kill half of the test animals, so that makes it a tremendously safe drug if mortality is the only concern. Of course, what most psychedelic trippers eventually realize is that mortality is rarely at risk in psychedelic experiences; what's at risk is sanity. Being nuts is not as bad as being dead, but nevertheless it can spoil your entire day. It's very reassuring to have taken a compound like psilocybin, and having become totally convinced that you are dying, to remind yourself that the LD50 is 200 times more than what you took, and therefore it's impossible, and you merely have to discipline the hindbrain and take control of your fear and then you will be alright.

We've talked so much about hallucination here, and always because of my particular bent which I have unconsciously transferred to you we're talking about visual hallucinations, but all psychedelic explorers should be aware of the concept of what is called a cognitive hallucination. This is a much more insidious phenomenon; this is quite simply an out-and-out delusion. The commonest form of cognitive hallucination goes like this: you take mushrooms, an hour and 20 minutes into it it's getting mighty strange — this is especially a problem with first-timers — and you realize with the force of revelation that you didn't take psilocybin, you took a poisonous mushroom, and now you are going to die. This is an out-and-out cognitive hallucination which is as real as a belief, but it is not a disturbance in the visual field, it is a disturbance in the cognitive machinery.

A friend of mine had never taken mushrooms and was very concerned about how to do it and got the instructions from me — silent darkness, quiet room, stay sitting — and took them in his room in silent darkness. At about the hour and a half point he realized with a demonic chuckle that I had been kidding, I had been putting him on, and actually had told him to stay in his room because we were preparing a surprise party for him at the bar two blocks down the street. Chuckling to himself with this realization, he showered, dressed, went down to the bar, pushed open the door and said, "I'm here!" and the guy behind the bar said, "Oh, really?" Well, the trip got wilder from there, because in the wake of disconfirmation in one of these cognitive hallucinations people tend to become confused, paranoid and upset. You have to continuously track your mental processes and it's really good to stick with whatever rules that you've laid down for yourself. I actually apply this technique in my own life. If I get to the place where I cannot understand what is happening, I try to think back to the last moment when I did understand what was happening, and then do what I said I was going to do then, having given up on understanding it in the moment.

The practical fallout from this in terms of psychedelic research is what we call the "chained to a tree technique," which is where you just chain yourself to a tree, and providing you don't hang yourself with the chain, this cuts down the possibility of doing something peculiar. With psychedelics this doesn't tend to be a problem, but for instance with datura, the best intended and most together people lose it completely and then come back into it 12 or 24 hours later to just survey the swath of wreckage that they have cut through their own and other

people's lives. I had a friend years ago, a very diminutive, attractive woman who took datura with a couple of boyfriends, waited hours and hours, nothing happened. They finally decided to go to their homes. She walked them down the stairs, said goodbye to them at the top of the stairs — it actually happened in the Haight. That was the last thing she remembered until she came to on the 6th floor of the federal building in the San Francisco County Jail. The charge was assault on arresting officer, and the evidence was the officer's thumb, which had been bitten off. She was an Antioch PhD in medieval literature, so it happens to the best of us.

Audience: Can't you eliminate a lot of that cognitive uncertainty by having somebody with you when you do this?

Yes, you can. I'm only speaking from my own experience, and I may have an odd take on it, because God knows, I'm odd, but to my mind the ideal situation is to have the sitter two rooms away and to have a doorbell or the equivalent, because if the sitter is with you, you start to analyze the sitter. As someone once said to me in India, "Face is index of mind," and the sitter can just become an existential galaxy of possibilities, because you can read their history, their intent, their most secret thoughts — your belief in what are their most secret thoughts. People are conrescences of ambiguity that you don't want to get too tangled up with in that state unless you really are ready for the trip to take that particular direction. I don't know if it was in this workshop or the other night that I mentioned that I recall a trip I took with this English guy; it took me two weeks to get his voice out of my head. It just became like this accompaniment to consciousness, this stream of sort of understated English upper class gibberish on all subjects, and finally it retracted.

That's called becoming a victim of the transference. All psychotherapists are aware of this. The transference is when you get dragged into the other person's system of values or delusions. There's even a name for this in clinical psychology: it's called allophrenia. Allophrenia is schizophrenic behavior on the part of normal people in the presence of schizophrenics. This is a real problem. Your friend is put in the place, you go to see your friend to cheer them up, and your friend is not violently insane, but saying strange things, behaving in strange ways, and you, in an effort to relate to them, begin saying strange things and behaving in strange ways, and before you know it, the resident has to break in and escort you to the elevator because you're causing a problem in the ward. The transference is this phenomenon happening among people who are more or less psychologically healthy, but it can still be very disrupting.

I think the sitter should be there only if there's a three-dimensional emergency. I like the word "sitter," because it's operational, it tells what you should do. "Guide" is not such a pleasing word: this implies control, prior knowledge, hierarchy, so forth and so on. The best guide/sitter I ever knew was a wonderful old guy — he's dead now but I'm not yet ready to say his name in public — his style was that he read these paperback trash novels. He would just sit down with somebody, give them the stuff, and every once in a while they would fight

their way out of this ocean of hallucination to deliver some insight and he would just put down his book and turn to them and say, "That's nice, now go back to the music." This guy could get 600 pages in a situation where he was nominally in charge of a dozen people who were tripping. Non-intervention, I think.

Then there's the question of doing it with another person, meaning that the other person is going to be stoned too, and this has its own pitfalls and ambiguities. If it's your lover, your sexual partner, then in my opinion that's probably the best way to spend your time. If it's not, then the sky's the limit. You're going to learn more about this person than perhaps you were prepared to. Sometimes it's easy, it's no problem, everybody stays who they appeared to be before you took off, but sometimes the masks just start being hurled across the room in all directions and you don't know where it's going to leave you.

My approach, I guess, is one of two extremes. I sort of belong to the sensory deprivation school that says, "Lie down, shut up, silent darkness, music very judiciously if at all," and I always do it at night, which some people find strange, but night is quiet, the energy dies down. There is calm and still between midnight and 4 a.m. The other end of the spectrum is someone like Salvador Roquet, who gives you three drugs, plays heavy metal rock 'n roll, then you get to see the Auschwitz film. I'm not kidding; it is an effort, so far as I can tell, to drive you absolutely starkers. I would not submit myself to that. This same polarity exists in therapeutic theories. Some schools of therapy want you to lose it, want you to weep, lament, rend your clothing, throw yourself on the floor, kick your feet in the air. This is called "getting out your stuff," or "working through your stuff." What I find about this kind of thing is that it resonates too long. It doesn't feel like you've gotten clear of it, it feels like you have simply objectified it, but life is an uncompleted puzzle; I could certainly change my mind.

I have never felt that the primary use of these things was to cure what is called in modern parlance "neurosis," what I call "unhappiness." It isn't for that. This may be the influence of Jung in my background. Jung felt that there was no such thing as normality, that the task of life was what he called individuation, and he felt that it doesn't really begin until you approach middle life. You must leave the 20s behind you, because they are so socially and hormonally turbulent that you're just basically trying to make sense of it on a day to day basis. Then you settle in and this unfolding takes place. I really assume that we are all beyond neurosis; not that we are not neurotic, but that we all have our own strategies and our own take on our own quirks and peculiarities. The psychedelic thing as tool is more to go beyond the legacy of the normal into the transpersonal or the suprapersonal and really view life as an open-ended domain to be explored.

I find myself talking to psychologists a lot — because this is where this has been seized upon, because it does perturb the dynamics of the psyche — but for instance, I don't think you should give people hospitalized for psychotic behavior psychedelics. They are having enough trouble. They are being overwhelmed by the contents of the unconscious 24 hours a day and have no tool to make sense of it. The rest of us can make sense of overwhelmment by the unconscious

if it doesn't go on too long. I don't think there's any one of us who would wish to take mushrooms, arrive at the heights and just stay there. After 48 or 72 hours, some situation would arise which would cast us into an extreme state of disequilibrium. It's more like diving. A friend of mine said many years ago, "The yogi," and sub in "shaman," "psychedelic voyager," "The yogi and the schizophrenic dive in the same ocean, it's just that the yogi remembers to take his tanks along." That's what it is: there is this possibility of inundation and overwhelmment. Well, let's return to the matter of dosage and set and setting.

Audience: You mentioned yesterday how you favored organic materials over synthetics. What about taking organic materials and then refining them and narrowing them down, getting rid of all the other ingredients in the plant? That's our Western tendency, to take something and refine it down and isolate the active ingredient and then take doses with that. Do you see that the natural ingredients in mushrooms, or ayahuasca, or whatever it is, have provided and sort of synergized the active ingredients and made the trip easier or smoother?

Yes, I think so. Rarely in a plant where you have a psychoactive compound will it occur all by itself. For instance, in the peyote cactus, there is mescaline, there is *N*-methylescaline, there is anhalamine, anhalinine, there's a whole family, about a dozen of these things. Similarly, in the coca bush: cocaine, several other -caines and several other active compounds. When you take a plant, you're getting a broad spectrum of these active molecules that have a familial relationship to each other. No chemist has ever exactly explained to me what's happening, but I think all chemists and pharmacologists are aware of the fact that natural compounds, even extracted or purified, are smoother than their synthetic counterpart.

I recently had occasion to relearn this because there's been some amount of experimentation with 5-methoxy-*N,N*-DMT, which is not like DMT, but it is short acting and creates a profound oceanic emotion, but also in the pure substance there's a tremendous heart rush in the first 30 seconds. I mean, you just feel like you are in an up-elevator which knows no limit, and just about the time that you figure you're going to go into some kind of emergency situation, it tends to back off. So recently there has been this material in the underground called "toad foam," which is actually 5-methoxy-*N,N*-DMT extracted from the glands of a large southwestern toad. Well, when you smoke that, it too is 5-MeO-DMT, but there is no heart rush and it also doesn't last as long. It's much more benign and easygoing.

Even in cases where there isn't a detectably variant spectrum of compounds present — for instance, in *Stropharia cubensis* there are really only two active principles: psilocybin and psilocin, and psilocin is the dephosphorylated ester of psilocybin, so they are basically the same compound. Nevertheless, if you talk to somebody who has only taken Sandoz psilocybin, it's much less animated and interesting than organic psilocybin. The counterexample to this is that when Hofmann synthesized psilocybin for the first time, he gave some of it to Wasson, and Wasson took it back to Huautla in the Sierra Mazateca of Oaxaca and gave

it to María Sabina, and María Sabina said, “The spirit of the mushroom is in the little pill.” This story has been repeated over and over again. My assumption is simply that María Sabina was a wily old lady. It’s not writ anywhere that shamans have to always tell you the truth, and I very seriously doubt that the experience is the same, although I’ve never had the opportunity to take chemically pure psilocybin.

The difference between the morning glories and LSD is one of animation and color. The morning glories — I’m talking now about *Ipomoea* and *Turbina*, the Mexican species — when you take them there is a flood of Aztec, Toltec, Mayan imagery. It’s just uncanny. You can’t believe it while it’s happening, that you would see this much carved obsidian, glyphs, Quetzl feathers and all of this stuff. Is it the morphogenetic field? Is it the broader vegetable spectrum of the alkaloid rather than the synthetic? Who knows; these things remain to be looked at.

When I take ayahuasca, wherever I take it I encounter the motifs typical of Amazonian shamanism: the jaguar, the giant anaconda. To show you that sometimes the iconography of these compounds is not predictable: black people. Everyone in the Amazon says this, that you see black people. Well, there are no black people in the Amazon, not really. In the Lower Amazon there are a few, but in the Upper Amazon a black person is as rare as a Kurd, and yet everybody insists on this. I have had this experience on ayahuasca, and to call it “seeing black people” is a very mild gloss on what it is. It’s like being at the Apollo Ballroom on a hot evening in 1960 and Aretha Franklin is onstage; I mean, it is a deep hit of blackness.

I don’t know quite what to make of it. Claudio Naranjo gave harmaline to urban people in Santiago, Chile — stockbrokers and advertising executives, people who have no connection to the jungle — and they reported jaguars, giant snakes, jungles and black people. This is a tremendously fertile area for Jungians to look into. Psychics have claimed since who knows how long that by holding an object in their hand they could penetrate its past states of being. Well, it’s like all these other occult claims in my experience: mantra, yantra, yoga posturing, past life recovery. For me, none of these things are possible unless I’m stoned, and then they all become possible. It’s like you just throw the switch and suddenly mantras work. I can chant mantras until hell freezes over in an unstoned state. The precondition for empowering occult idea systems seems to be a shift in brain chemistry.

It’s to be noted that in these cultures where a lot of magic, a lot of violation of natural law is going on, there is a lot of psychedelic stuff going on. Among the Aguaruna-Jivaro for instance, a very no-nonsense tribe of headhunting people in the Amazon, the shamans live continuously in a state of altered consciousness. I mean, they are taking this stuff all the time, it is a food item. What would it be like to be the shaman of the Aguaruna in the jungle, all the time taking all this stuff? It’s hard to imagine, because when you just do it once all plants have auras, all plants have songs which can be extracted out of them. They are living, literally, in some kind of other dimension.

Audience: I'd like to play devil's advocate, if I can for a minute, about this whole idea that certain plants or certain substances have certain attributes or certain places that they take people to. I've had the ideation that you're talking about — the visualization of the snakes, the cats, the jungle, the pyramids, the whole Mayan aspect, jungle and shamanic routine — on LSD, on mushrooms, on ibogaine and on *yagé*, and I've had clients that have had the same ideation doing breathwork.

Yes, this raises a real question. I don't understand exactly how this works. I will join your side for a moment because there's a phenomenon that I've noticed, and some of you have heard me talk about it. It's possible to do this on psilocybin; it's really easy to do it on ayahuasca. Ayahuasca, in a way, is somehow more open to suggestion. These other things have their own agenda; ayahuasca will work with you. One of the bizarre things that you can do on ayahuasca is that you can suggest a period, let's say Italian Baroque. You just say it in your mind and paintings, altarpieces, architectural spaces, balustrades, vehicles, armaments, saddlery, clothing, serving utensils, bowls, pewter, candelabra, all of this stuff will begin drifting toward you, and it is high Baroque. In fact, it is more Baroque than the Baroque, it's obviously what they were shooting for. Then you say, "Dynastic Egypt," and you get a hawk-headed guy. Then you say, "Art Deco," and thousands of cigarette lighters and coffee tables appear, more intensely realized than when you actually encounter these things in real life.

Well, what does that mean? I have no idea. First of all, the possibilities seem to be that what we call styles or motifs are actually categories in the unconscious, but the amazing thing about it, having looked at the Italian Baroque, Dynastic Egypt, and Art Deco, is that you can also say to it, "Surprise me," and suddenly it can surprise you, 100%. It can show you objects that you cannot place to any set of motifs, any historical period, past, present or future, and then you can say to it, "Surprise me again," and it gives you Surprise B, which is completely different from Surprise A and also not related to any known style. So then you say, "Are styles categories in the unconscious? How many of them are there? What does it mean, then, for a group of people in 1680 or 1930 to suddenly find one of these places and punch into it?" Then another question is, "Is there a necessary historical progression or is it by chance?" In other words, "Could the political world of the 16th century have lived with the design motifs of Art Deco? Could we have had Columbus arriving in America in a ship consonant with the best canons of Bauhaus design?" Strange questions, friends. "Is there necessary succession in style or are these things pure chance?" I don't know.

Returning to and responding to your demonic advocacy, it may be that going to Tikal preconditions you and that pushes the button, and then when you take the psychedelic you realize that the high Mayan, the classic Mayan button had been set, and then you find all of this stuff. It's a little more bewildering to have it happen in your living room.

Audience: My feeling about it is that those experiences are available to any-

body in various states, with various ways to get there, and I don't feel that it is mutually exclusive to say that some substances do seem to have a certain predilection for certain kinds of experiences. I've had both feelings about it, that the bandwidth of experiences is available and that some things are more likely to put me there than others.

Well, LSD is a relative of morning glories, so if you got Mexican imagery off of LSD that would be understandable. It may be that all the indoles resonate together; perhaps all of the indoles can access each other. One thing that I've done on psilocybin — and you might try this, this is an interesting experiment — once you get it up and running smoothly, then you can say to it, “Be MDMA!” and it will be it, and you can say to it, “Be LSD!” It loves to do imitations of other psychoactive drugs. I don't think you can say to MDMA, “Be DMT!” and it will move over into that space. You hope not, don't you? Obviously it's some kind of freely commanded modality in the psyche with which we can have a relationship if we will but evolve a control language and a dialogue. It remains mysterious. A point that I made yesterday that I think is worth repeating is that the psychedelic experience is the beginning of the spiritual path. That's why it's not important that yogis claim that they can deliver you the psychedelic experience, because it begins with the psychedelic experience and then you go from there.

I said something like this a few weeks ago at the John Ford Theater in L.A., and this guy got up and said, “So why don't you take more?” which I think is a very interesting question, very valid for me, personally. Our whole lives, we conceive of spiritual development as looking for the answer: is it Taoism? Is it diet? Is it tantra? We look for the answer, and I think we have become so accustomed to looking for the answer that it's never really entered our minds what it would be like to find it, to have it. Once you come face to face with these psychedelics, the trail ends. You have found the answer. Perhaps because you're smart, perhaps because you're lucky, perhaps because you deserved it, perhaps because you hang out with the right people, you have found the answer. Now the question is, “What the hell do you do with it?” because the answer is going to make hash out of your life, because your life is based on living without the answer. Suddenly it's not, “I want to be an enlightened being, I want to be a shaman, I want to be a Taoist, I want to be a yogi.” Be it; see how you like it!

So the answer to the question, “Why don't you take more?” is because I am attached, basically. It is entirely my own attachments that now impede my spiritual growth. Nobody is holding me back, nothing is holding me back except my sense of the awesomeness of what is now possible. This is true of everybody who reaches a certain point. Think of the Taoist sage on Cold Mountain who has been up there in the fog and the mist and the rock escarpments for 30, 40, 50 years, and the people in the village occasionally mention him to each other and say, “Is old Fuzhi still alive? Has anyone seen him recently?” and someone will say, “Oh yes, I saw him three years ago across a valley gathering wood, but when I approached he ran further up the mountain and disappeared.” To be Fuzhi is entirely possible, to actually attain what we have previously thought of as

unattainable spiritual accomplishment, but I don't think it can happen without leaving everything. Do you really want to be a Taoist hermit circulating the light for 200 years in a cave, high up above timberline? You can; there's nothing stopping you once you understand that this psychedelic vehicle is available. I am appalled at that. I mean, it's one thing to change your life to be nicer to your coworkers, it's quite another to change your life to be incomprehensible to 99.9% of all humanity.

Once you have the psychedelic tool in hand, then real choices have to be made. What is this to you? Is it simply something that you do once or twice a year to affirm to yourself that it's possible? Is it something that you can use in some way for your good and the world's? That's sort of where I have come to rest, and I hope it's not a delusion, but I think that there are ideas out there, and that they don't do any good out there, that they only have efficacy if brought into three dimensions. There are all kinds of ideas, in fact they are *all* ideas. So we're talking about a more efficient internal combustion engine, how people can learn to love each other, how to save the planet, the most efficient way of packing crackers in a box for long shelf life and low destruction of their structural integrity. It doesn't matter what the problem is, the answer can be found out there. It puts people who are into this psychedelic thing in an entirely different stance from all other spiritual seekers, because all other spiritual seekers are furiously seeking. Psychedelic people are holding it back with all their power because they are in the presence of the mystery, and then the trick is to get a spigot on it so that it can be turned on and off, rather than just coming at you like a tidal wave a mile high and twenty miles wide.

It's a different problem, an embarrassment of riches, an embarrassment of access to past, present, future, alien dimensions, mantra-hoarding elves and promise-bearing demons. Strangely enough, it creates a certain kind of conservatism. I don't think that everybody realizes this. Many people take psychedelics in order to prove to themselves that they can and then gain acceptance from their social group. It's a way of fitting in. You can always evade the mystery; not always, but if you're trying to from the get-go you can evade fully confronting the mystery; but if it's what you want, you will quickly discover that you have hit the main vein, and that changes the rules of the game pretty entirely.

Audience: Some psychologists say that psychedelics will only take you so far, and then you have to do something else, but my experience with it is that that's not true and it will take you as far as you're willing to go.

That's what I think; I think people who quit doing it see something, detect. If you think of the self as a diamond, the psychedelic is pressure on the diamond. You can raise the pressure to 1,000 pounds per square inch and there are no structural flaws, but if you raise the pressure to 10,000 pounds per square inch microflaws begin to show and sheer lines appear, because everything will fly apart at a certain level. One cannot encompass this mystery. I think finally you have to avert your eyes and just — “adore” is a strange word, and “worship” is also a strange word — but certainly give credit to. It is not a program that

you finish, and people who say, “I learned all I could from it,” probably learned mostly that they shouldn’t do more of it.

Audience: I think it threatens to put people out of a job, especially psychotherapists.

Well, it threatens to put anybody out of a job, because eventually the contradictions of living in this low-level slice of reality will just become unbearable. This actually happened in the '60s, many people quit and dropped out for many reasons, but the seed of all that talk is that you just say, “This is absurd, I am going to sit.” That’s not absurd. But what about your stockbrokerage? What about your portfolio? What about your divorce in progress? I think that the depth of this cannot be taken. Eventually the male ego in every single one of us, regardless of our gender, will feel threatened, because it’s hardly different from death, because you’re not going to recognize yourself. That’s the point that I wanted to make in talking about the guy up on Cold Mountain. Once he ran a gas station, once he followed the Dodgers, but then it all began to slide in a certain direction and he is no longer recognizable to himself.

Carlos Castenada has Don Juan say, “You must lose your personal history.” I don’t know whether Don Juan is a real person or whether he ever said that, but it’s interesting, that notion. How many of us would be willing to become unrecognizable to ourselves? And yet obviously that’s the path that one is on, and so then you just decide, “Is there an obligation to go to the end? Do I have to become a genie? Do I have to become a Taoist sage, an immortal?” and I think the answer is no, one doesn’t have to do that. Buddhism creates the notion of the Bodhisattva, that is in a way this same thing. It’s where you are just about to go over the hill into incomprehensibility, and then you say, “Wait a minute, what about the people in the prisons, the naked, the hungry, the oppressed?” and you pull back and say, “No, I forswear enlightenment until the last being attains enlightenment.” Well, it’s a noble gesture, but I’ll bet these Bodhisattvas make this vow with a tremendous sigh of relief. Now they know what they’re going to do with their lives: they’re going to work in prisons, or council the dying, or get into political action. “Geez! For a minute I thought I was going to go straight into the light, become unrecognizable to myself and lose my definitions,” and so forth and so on.

Audience: The two words that struck me were “adore” and “worship.” On Friday night Matthew Fox quoted, “We have come to a point in history where we must either find some form of meaningful worship or commit suicide,” and somehow that quote came back when you mentioned, “When one may reach that point of the penultimate truth, of the unspeakable, or the formless form, or the light,” and the mushrooms are pointing the way. Breath therapy, all these things are only something that points you to the ultimate, and when you get there it moves into the adoration and the worship level. Interestingly enough, coming from a recovering Catholic, I could never find any kind of religious community and I didn’t want to join a monastery for that purpose. What I see is

this neurosis or unhappiness that exists in so many people in this country. They have no contextual format for worship, because it doesn't have that power for them to do it.

You have to have the personal experience of something to worship: this is what has been lacking. What the churches are peddling is high abstraction, and you really have to work yourself up into a lather to be able to accept that as worthy of that kind of attention. The psychedelic subset of society is into an experience, it's accessible. In a way we're like Calvinists, not in our ethics or our restraint on behavior, but in our insistence on a direct personal relationship with the mystery. This is something very new. We have really accepted the idea that truth descends through hierarchies, basically from *Newsweek* and *Time* and the *Washington Post* down to us, as consumers of these various images of what is going on. The notion that you might know more about reality than the combined editorial board of *Scientific American* and the *Journal of Foreign Affairs* is startling stuff. We always give ourselves away, we don't realize that it only depends on you. To believe that at Cornell or down at SRI people understand the universe is not helpful. You must understand the universe, and if you don't know partial differential calculus then your model of how the universe works must do it without partial differential calculus. In other words, it's not writ anywhere that only one model will work, and in fact I think that all abstract models should be highly suspect.

We have to view life as an opportunity. What are you doing with it? Are you afraid of it? Some people live their lives and apparently what they are doing is arranging their deathbed scene. They want it to take place in a large baronial house with clipped green lawns, acres in surround, they want the room in which they die to be filled with fine art, they want their loving heirs to be dutifully assembled while they pass out the final wisdom, and they spend their entire life creating the dramatic scenario of their passage. Of course you have to work hard, because you've got to make the money to buy that house, you have to sire all these children, educate them into your values so they won't be stabbing you in the back and misbehaving in this situation. You have to create loyalty, possession, power, all of these things and then you won't die in a ditch, unknown and abandoned; but on the other hand, what was the quality of that life?

Life is an opportunity; how much pressure should you put on it? How many places should you go? How many drugs should you take? How many sexual configurations should you experiment with? How many professions? It depends; the question, I think, is, "How seriously do you take it?" Do you just think that life is a lark and it's fine with you that you're going to go into a pine box and be forgotten for all eternity, or do you have some inner consolation that that won't happen and you're going to go off and be with Lao Tzu and Mao and everybody else who ever died? Just what is it? I think of it as a telephone booth being filled with water. You can see that when the water reaches the top of the telephone booth you're going to be dead as a doornail, so you have 30 years to figure it out.

We are alive, there's no contest about that. It's extremely improbable that we should be alive, that we should be here thinking, feeling, sharing. The fact that we're alive throws open the whole game, means anything is probably possible, but I doubt that it's easy. I'll bet that you have to be very smart to figure out what's going on and get it right, so I guess I have a private religion of intelligence. It isn't how good you are, it's how wily you are, which was the Greek virtue of Odysseus, that was always his epithet. He was "wily Ulysses." Reality is some kind of maze, a puzzle garden that you walk through to try to find your way out. It isn't to the swift that the race goes, it's to the thoughtful, to the careful, to the one who can tease it all apart. For puzzle solving, the psychedelic is this tremendously powerful tool, because it extends the domain of mind, and that's what's necessary to make it go.

OK, moving through these things and discussing dosage, probably in order of the likelihood of your encountering them. Mushrooms: I feel that people who weigh around 140 pounds should take five dried grams. This is a stiff hit. This is a committed hit. There will be difficult moments in a five gram trip, but on the other hand certain questions will be solved forever for you, because you will validate the existence of this dimension, you will see what your relationship to it is. I don't believe in diddling with these things. People tend to take tiny amounts, thinking that one tenth of a dose is one tenth of an experience. It doesn't work like that; half a dose can be no experience at all, and a full dose can feel like ten of these experiences, so trivializing it is really — and I use this word advisedly — sinful, because you are trivializing the only mystery. It's like trivializing sex. The ordinary objections to pornography are not my objections, but to my mind a very strong objection to pornography is that it trivializes, and anything which trivializes anything central to our self-definition is bad mental hygiene. Taking small doses of psychedelics tends to trivialize them. There are people who probably take LSD every weekend and go dancing and have done this for years and have no idea what LSD is capable of.

The main shift in the use pattern with LSD is: it may have been childish, but the style of the '60s was, "How many mics can you bolt down?" "Have you had the 500? Have you had the 1,000? Have you had the 2,000?" Eventually it becomes moot because you just dissolve into shimmering atoms for longer and longer periods of time on these trips, but the modern approach, which is, "How little can you get away with taking and still be one of the gang?" is even more insidious, because then people feel capable of talking about these things. There are people who feel that their opinions on the psychedelic experience should be weighed very carefully who have only taken MDMA. Well, listen, I've got news for you: that is to the domain we're talking about like a broken tricycle to a Testarossa Ferrari. So this is a general comment, that you should take a committed dose of whatever it is you're taking so that there is no ambiguity, because there's nothing worse than a sub-threshold psychedelic experience. It's all show and no go: you feel the CNS activation, you feel the keyboards light up, everything comes on, you start down the runway, you pick up speed, and then you come to the end of the runway and taxi back to the hangar. Well, that was not a flight to Boston, that was just clogging the traffic pattern.

So, committed doses. Then, because you're going to take a committed dose, inform yourself of the medical and pharmacological chit-chat on the matter so that you can feel reassured. Talk to a heart specialist, questions like, "If my heart is pounding, does that mean I am having a heart attack? What is a fibrillation and how will I recognize it?" because you can have very odd feelings and not be in any danger whatsoever. Your heart can pound — it's made to pound, look at all these aerobic exercise freaks — well, the fact that you're sitting still when this begins to happen doesn't mean that you've been shoved to death's door, it just means that everything is equalizing and coming to some kind of equilibrium, and you're passing through a transition. These drugs do have a kind of Mach barrier. In other words, there is a barrier somewhat like the speed of sound. It's a pharmacological and physiological barrier. So you take the compound, the plant, whatever it is, nothing happens for 40 minutes or so except false starts and little things and you have to pee and then you come back and sit down, and then it begins to come on.

It can have many manifestations. It can be chills, tremoring, knotted stomach, nausea, restlessness, so forth and so on. This is what I call, taking a page from the engineering book, Q . Q in engineering circles is vibration in a physical system. When they launch the space shuttle, if you listen to the radio chit-chat they will say, "Approaching max Q ," then they'll say, "Max Q , mark," and then they're through that. What that means is that as the system approaches a transition it begins to shake, it begins to shake as though it's going to shake to pieces. The Q forces are building on all the air surfaces, the airframe. Then you break through that, Q falls to 0 and then you're in the cool, main engine cut off. You are now in orbit, all vibration has ceased, noise has ceased. You are in orbit, you are weightless, you are there. It's different. Now you shut down all these switches related to the launch procedure and begin to set a course through a different kind of medium, a medium characterized by smooth stillness and that sort of thing. LSD: I don't see anything wrong with 300-400 μg as an initial dose. I don't see any point in running up into the 1500-2000 μg range, because in my experience what happens at higher doses is that there is simply an area where you can't remember what happened, and the higher the dose, the longer that period of time, but since you can't remember anything about it, it should be shortened. DMT: 70 milligrams vaporized in a glass pipe.

Audience: I have taken very large doses of LSD at times and it's always seemed to me that it's very difficult to process all that's going on. The biocomputer shut downs for a while, and like you said, I forget.

Yes, it overloads, it just shunts it past you. What do we need to cover here? DMT, psilocybin, LSD. MDMA, which probably you all know, 125-150 milligrams, and because I tell you these doses it doesn't necessarily mean that I approve of all these things. I'm just saying that if you take them, these are the doses. Ketamine: people take small amounts, again usually after attaining some amount of proficiency with it. I've only done it four or five times, and always fairly large doses, 130-150 mg. Interesting compound, but contraindicated

because of physiological problems. It depresses the immune system, there's the possibility of epileptic kindling. Certainly, if you were to vomit in that state, you might well strangle because you wouldn't be able to clear your throat. What I also have against ketamine is that you have to shoot it. As I was driving home last night I was listening to some program and they were talking about intravenous drugs and I thought, "How interesting. That's a distinction you don't hear made very often." They were saying, "We should legalize all drugs except intravenous drugs," so that's of course morphine, cocaine, heroin, ketamine, steroids, I suppose. That's an interesting distinction, operationally.

Audience: You can snort ketamine, can't you, though?

You can, but I've heard that it's dangerous. When they give it as an anesthetic it's 600 mg IV push, which must be just like being struck from behind by a freight train. I'm sure you never know what hit you. I mean, imagine: an exploratory dose is 100 intramuscular; they are talking about IV, directly into the vein, 600 push, that means pressure on the feeder. So it's just like a high pressure filling of your gas tank, you would never know what hit you. Now they've pulled it from general surgery, even veterinary surgery, because it seems to depress the immune system and the worst thing you can do is to do surgery on somebody and then put them into a surgical recovery ward with a depressed immune system. So that is kind of out.

I must say about ketamine that it did something to me that nothing else has ever done, which is that it erodes the observer in a way that the indoles don't. On ketamine you can get so out there that it is a major intellectual breakthrough to realize that you're on a drug. In other words, there's this situation and it seems like it's always been there and it always will be there and you can't remember who you are, or what you are, or where you are. This situation continues, and there's something about it but you can't quite put your finger on it, and there's never been anything else, there will never be anything else, and then suddenly comes this tiny thought: "You're on a drug!" "Oh, right, I remember now. That's it! That's it, I'm a human being and I took a drug. This is a trip. That's right, I'm on a trip. Now I've got it!" Well, what this means is that you're coming down because the trip is now over with.

Audience: I had this experience with mushrooms. For hours I had no connection to anything which had any connection to my personality or to life. It was wonderful to be there and to see what makes up our minds, how this world is made up with all of its structure and architectural designs.

Yes, maybe this is the white light. Maybe this is what these early LSD people were so enamored of, getting so far into it that you don't even know you're into it, because you can't remember where you started from. It's not what I'm shooting for because I always want to bring stuff back. My belief is that this stuff is important for all of us, that we are in some kind of lower-dimensional slice and what you see in the psychedelic experience actually has historical im-

plications. I find this sort of paradoxical because I'm the person who draws everybody's attention to the fact that people have been doing this for 50,000 years, so in a way that sounds like I'm saying, "It's not a big deal, it's part of the human heritage, certain people have always known about this."

Audience: The point between when there's nothing and when the observer kicks in: that's a big issue in my life, where does the observer come from? Is it an evolutionary thing, like animals never have it when they fade into the white light? Do you have anything to say about that little place in between?

I think it begins with self-reflection. In other words, the question, "What is happening?" I don't think animals ever ask that question. For animals, what's happening is what's happening, but we are capable of creating a state of distance and posing the question, "What is happening?" and at that point in the trip it means that you are making your way back to the modality that you left from, you are drawing away from the translinguistic place — and it truly is translinguistic: nothing can be taken out of it — but at the interface of the sayable and the unsayable is the novel, the new, the never before seen, said or done. I think it's important to try to bring out ideas because I think we are the animals that bring back ideas. Somehow our hunting and gathering adaptation then set us loose in our own minds, and somebody came back and said, "Let's throw a chunk of this meat in the fire and see what happens." It's this "see what happens" attitude, so then suddenly they discovered that meat burned in fires is easier to digest and tastes better.

By this means, this "let's see what happens" approach to things, the ideas come in the mental dimension. The "let's see what happens" translates those of them that can be translated into three-dimensional space. "Let's plant this plant, let's slaughter this animal, let's try sex this way, let's go over that hill this year instead of that hill." What has come out of this is the entire legacy of our cultural heritage as a global civilization, but all of these ideas began in the mind. What are ideas? This is the central question of Platonic philosophy. What are we that we seem to separate the doable from the undoable in the realm of ideas? Anything that can be done, we do. It doesn't matter how perverse, how painful, how destructive, how grandiose, how wonderful, how sublime; if it can be done, we do it. Then, in this three-dimensional domain of space and time, these ideas compete with each other like organisms and an ecology of mind evolves. That's really what culture is: it's the ecology that mind has created for itself, in the same way that bees create a beehive and then the beehive is the cultural context of beehive. We have created civilization through language and then civilization has become the context for humanness, and yet we always seek to transcend it and go beyond it.

Now, I don't know whether this is something innate in us or whether it is somehow programmed in from the planet at different levels. It's very interesting, I don't know how many of you are aware of this, but there are leafcutter ants in the tropics, they are a major part of life in the tropics, and they march in columns through the jungle and they can swarm up a tree and take all the leaf

material off a large jungle tree in a matter of hours. What they do with these leaves is that they return, sometimes at great distances, each one carrying like a little banner a chunk of leaf, and they go down into their nests, chew it up and stick it on the wall, and then some of them go back to the surface and gather spores on their antennae, and then they go back down into the anthill and they inject or inoculate the chewed plant material with these spores. Naturally, this chewed plant material is pretty organic and funky, so it begins to grow all kinds of things: molds, mildews, bacteria, so forth and so on. The ants farm this and weed out all these bad bacteria and small microfungi and organisms, and only cultivate this one fungus which then converts the plant material into a usable sugar. This is a symbiotic relationship between the fungi and the ant. The ant is getting an enriched food out of this and what the fungi is getting is a cultivated situation where all its competitor organisms are carefully kept away and weeded out.

This is precisely, in my model, what is happening with the human species at a more complex level. In other words, by domesticating cattle we have set up an environment that is very favorable to the growth and appearance of what would otherwise be a very rare deep forest mushroom, but because we domesticate cattle and clear land we have created a huge circumtropical global environment in which these mushrooms can reside. What they make for us is not sugar but ideas, something we need the way ants need sugar, and these ideas take all kinds of forms and then we refine them. I really believe that human populations that do not have contact with the psychedelic tremendum are neurotic, because they are male ego-dominated. The reason I call it male ego is because women, by virtue of physiology, basically, are pretty unavoidably welded to the nitty gritty, because they give birth, they carry children to term, and those two things are biologically dictated. There is also the cultural dictate that women are usually involved in preparing and burying the dead in traditional societies, so women know how weird it is. Surely, to give birth must give you a perspective that anybody who has never done it just cannot hope to have. The male ego floats on this myth of separateness that no woman has the luxury of entertaining, because birth, pregnancy, menstruation, care for the sick, care for the dying, these are boundary dissolving activities that keep women close to the nitty gritty. The male organism can go off into its own private Idaho, pretty much. Often what child rearing means is the simple act of impregnation, and that's the contribution in many cases, in primitive and modern societies. Death is something that the women take care of. At birth in primitive societies men are never present; women do it alone or with other women.

In these Neolithic and Paleolithic societies this tendency of the ego to tumorize and grow in individuals was kept down by a chemical regulator, which was the psychedelic experience. It was part of the food chain and it suppressed ego much in the way that drugs are given in prisons to suppress libido, because it's hard to manage a highly libidinous people in an institutionalized situation, especially when only one sex is involved. So this natural regulation of the human species by regulating this psychic function called ego was disrupted with the invention of agriculture. The hunting-gathering society with its deep in-

volvement in ecstasy, these weekly or biweekly psychedelic orgy ecstasy picnics that people used to have, that gave way. Weston La Barre makes the point that ecstasy is not at a premium in agricultural societies because it's disruptive. What is at a premium in agricultural societies is the ability to get up before dawn and pick up your tools and go to the fields and work like a dog. If people have been up all night before dancing and tripping they can't do that. The psychedelic gods are replaced by cereals — corn, wheat, rye — and of course at a very early strata in the Neolithic you do get the emergence of the Great Corn God and all this. Frazer is full of talk about this. So we are living the legacy of millennia of cultural neurosis in Western civilization by virtue of the fact of the untreated growth of the cancerous ego. We know this, it's simply that we assume there is no cure, we assume that it's natural to have ego and that it's somehow unnatural to suppress it. Wherever you have an outbreak of psychedelic use in a high-tech society then you see refeminized, hang loose, communal, caring values. Values come into prominence within the community.

Audience: Have you seen a difference in the way men and women react to psychedelics, given the fact that perhaps men embody a stronger male ego than women? My other question has to do with the role of the observer ego when you're doing drugs, whether it's marijuana or alcohol or especially psychedelics. Sitting here, thinking that the reason that I don't take anything stronger than marijuana is that I lose myself even in a strong hit of marijuana, I lose my ego completely. I get a different form of the experience if I don't get fearful and paranoid, but it's easy to get scared when the sense of the observer ego just goes and I don't remember that I'm on a drug trip and it seems timeless and eternal. Then I come down later. As you were saying, at the backside of the high I say, "Oh, yes, I just took some marijuana two hours ago. Everything's fine, I'll recover tomorrow." Maybe you can talk a little about that and what people can do who don't have a strong ego structure, whatever it takes to do these powerful drugs. I don't think I would be able to handle it.

If you don't have a strong ego structure, chances are you're not a heavy-duty male dominator, because they're sort of antithetical. I think that probably cannabis was a major ego dissolver and that all these things have been used this way, and if that works for you, that's fine. I didn't take psychedelics to lose my ego. Although people said that would happen, I never quite understood what was meant, but looking at it as a mass phenomenon, where you're not talking about an individual tripper but tens of thousands of people, inevitably this feminizing of values seems to take place. I don't know if men and women experience psychedelics differently, I've never quantitatively looked into this, but my impression is that it's less of a surprise to women and that they feel less of a need to do it. I think this is particularly true of cannabis; I'll bet that two thirds of cannabis use is male use. Why is this? I'm not sure. Maybe women have too much work to do, too many obligations. The old man can sit and smoke dope, but somebody has to do the shopping, get the kids to school and pick them up, keep the insurance paid and all that. Women, I think, have

a different relationship to it. Women are often shamans, and in many cultures the best shamans are usually felt to be women. Women are connected up to all of this stuff. Drug taking may not be a male enterprise but history is a male enterprise. I don't think we would have ever gotten into it if it had been up to women.

In a way, the women outsmarted themselves because they had, not control in the conscious sense, but they were sitting in the front of the canoe and then they invented agriculture and that undercut their own position, because the vast repository of plant knowledge that had been the secret knowledge of women no longer really mattered as long as you knew how to grow corn and a couple of other things. The vast encyclopedic data on wild plants became less important and it became more labor intensive. Men, because they had evolved toward being efficient hunters, probably did have a physical edge on women in terms of stamina and the ability to work with a hoe for 8 or 9 hours a day, because what the women did when they were in the prime cultural situation was that they gathered. They looked at stuff and talked about it with each other, and this was the domain in which language then arose. Gathering is not hard work, it's just steady work, and it's lots of fun if you do it with your friends.

The cliched notion about aboriginal peoples is that women chatter, this phrase, "the chattering of women" in primitive situations. It really is true that women avail themselves of language much more than men in these preliterate situations. The men are hunters and they act like hunters: they're stoic, they hold it all in. Literally, the larger bladder size of men is thought to be related to the hunting adaptation and so forth. The men are stoic, they're holding it in; the women are information freaks, for them it all rides on information. "Where do you find it? How do you cook it? What does it look like? Is it poisonous? What time of year is best? What soil is best? What do you combine it with? Is it good all year round? What do the flowers look like? What does the fruit look like?" Data, information. How could you ever understand the use and location of 600 plants or more unless you had a tremendously evolved vocabulary for this kind of thing?

Audience: The physical weakness that follows psilocybin, is there any way to prevent that?

These things take energy. Obviously, during the trip, energy is being sucked into the moment. A trip is hard work even if you're sitting still, so then there's going to be an energy debt. One way of assessing the toxicity of a drug — in the course of this weekend I've named several ways, and they all need to be used together — one way of assessing toxicity is how you feel the next day. What I do when I take mushrooms is that I usually take them at about 9 at night. By 1 or 2 in the morning it has usually passed, and then I eat before I sleep so that I don't wake up in the morning with a protein debt. That's very important; if you eat before you sleep after a trip, it won't be nearly so hard a comedown. One of the things that's really appalling to me about MDMA is that here is this pretty minor psychoactive, and my God, the day after is tough sledding. For a

hangover like that you should at least have seen God. LSD: if you drink a lot of water, that helps, and yes, vitamins are never a bad idea at any point with these things. LSD, as I said yesterday, was so effective at low doses that on that scale it appeared very non-invasive. I feel terrible after taking LSD, it takes me 24 hours to put it back together.

The interesting exception to this — and it always seems to cut my way in terms of favoring the ones I think are most interesting — DMT is again the anomaly here. DMT is the most powerful hallucinogen there is. If it gets stronger than that I don't want to know about it. 15 minutes after you do it, you feel as though as you have never done a drug, you are down 100%, mentally, emotionally, spiritually, physically. It just returns you to the baseline. Ayahuasca goes DMT one better, and ayahuasca is the only one that I know of that does this. I maintain that the reason these things behave this way is because they are so similar to ordinary brain chemistry. With ayahuasca, you actually come out slightly higher than you went in, and it isn't lost. I mean, you feel great the day after an ayahuasca trip. If it's your first trip and you spent 8 hours vomiting, you're probably not going to feel so good, but if it was an ordinary ayahuasca trip then you're going to feel much better the day after than you did going in: more connected, more alert, more energy. This must have something to do with the fact that the constituents of ayahuasca — harmine, harmaline, DMT — all occur in the human brain. Why doesn't this happen with psilocybin? I don't know. Psilocybin doesn't occur in the brain but it is a very close relative.

I think DMT is absolutely fascinating from every point of view. Why is it so benign? Why is it so powerful? Why is it so short acting? Why is it so hard to get any? That's the \$64 question. Believe me, every book on drugs that you pick up says it's easily made, they ask you to believe that people are making it in their kitchens all around you. Well, I don't know. I've seen it botched many times. The literature doesn't tell you that; botched, ruined. If somebody comes to you with a grainy, dark brown syrup, forget it. That is not what it looks like. That means that they swept the floor after they dropped the retort or something. What it looks like is orange moth balls. It looks like a crystalline, waxy, orange to pale rose to yellow kind of substance, and it's very aromatic. If someone shows you a liquid or stuff which looks like brown sugar, it's a mess.

We were appalled, we got samples of underground DMT and ran high pressure liquid gas chromatography on them, and it literally looked like the guy swept the floor. These people had actually done it. I wouldn't have given it to a rat, much less a human being. The notion of someone actually taking that stuff was just hair raising. What you should have is a very steep spike at 620 nanometers and what we got looked like the Himalayas. It was running around all kinds of stuff. There has been DMT around which was shootable DMT, which is the hydrochloride, and since I don't shoot things I didn't pursue it, although what people tell me is that shooting is not as effective as smoking. People think that shooting a drug is the most effective way, because you see it all go into your body or something, I don't know. If you shoot DMT it takes about 5 minutes to come on and lasts about 45 minutes. That's why if you read

in the literature, “How long does DMT last?” it will always say 45 minutes. If you smoke it, the peak experience lasts 400 seconds, something like that. It’s extreme, that’s why it’s so astonishing, because it is so intense and the onset is so sudden that it’s more like something has happened to you, rather than that you’ve taken a drug.

Sometimes people come out of it saying, “What happened?” “Have we done it yet, or was there an earthquake and the roof fell on me just as we were about to do it?” It has the quality of an event rather than an experience, and also it has the quality of an event because it does not touch the core observer. You are not changed, what’s changed is the sensory input. You are still who you are. You don’t think you’re God, you don’t feel bad about yourself, you are exactly who you were before you did it with the same set of concerns, but you have been whisked into an alien dimension, one you never had imagined existed or could have a moment before have conceived of, and suddenly it’s 100% in place 360 degrees around you, and then 3-10 minutes later you’re raving to your friends, and it’s as far away as that trip to Mallorca four years ago.

Audience: Could you explain the distinction between DMT and 5-MeO-DMT in terms of the quality of the experience?

They are day and night. 5-MeO-DMT, some people like it. It’s a feeling, that’s what it’s been for me. It’s this huge feeling that kind of sweeps through you, and it’s velvety. It’s hard to describe, but the main thing that I’m noticing when it’s happening is that I am not hallucinating. Of course, the main thing that’s happening with DMT is that you are having hallucinations so intense, so three-dimensional, so highly colored, so sculpturally defined that it’s more real than reality. By that I mean: if you look at this room, notice how all edges are slightly feathered, there is at all boundaries a slight indeterminacy, but on DMT it’s hard-edged, everything is just defined. Sometimes people say, “It’s as though all the air had been pumped out of the room.” You’re seeing it with that lunar starkness and clarity: unimaginable objects, objects off the art scale, and entities. DMT is the only one of these psychedelics where I have seen the entities. On psilocybin it speaks and it’s audial. On DMT you see these things. I don’t know whether it’s my personal mythology. . .

For me, DMT is the center of the mystery. I fear it, I love it, I thank God for it, I wonder if I’ll ever understand it. It takes a huge mustering of courage on my part to do it. I mean, we talk, talk, talk: change, transformation, other dimensions. This is not talk when you do it. You just do not know the parameters. I feel like I know more about what could happen to me if I’m in the Amazon jungle than I know what could happen to me when I’m in that place, and after many DMT trips I’ve finally been able to paint a picture for myself of what is happening in there. I don’t know anybody who has done it as much as I have. I wish people did it more and talked more about it, because, boy, if there is a landscape where we need some consensus, this is it. I have been present when people did it, and they come back babbling about the same thing I think that I have encountered. One woman said, “It was a carnival, it was an

extraterrestrial midway,” and somebody else came back and said, “There were gnomes, there were elves,” and yes, this is getting close to it.

What happens to me when I do it is that there is an initial period of hysteria and confusion. It’s almost as though time speeds up, even before you take the first hit. Many people say, “Just before you do DMT there’s this funny kind of impression in the room,” almost as though there is backwash from the event about to happen. You are caught in the psychic field of this event and everything is moving faster and faster, it’s like the *Q* phenomenon. Then you take the hit and it’s building up in your body and your heart is pounding, and then you break through to this place. The first impression is of the sound of cellophane being crumpled, that crackling sound, as if someone had just taken a bread wrapper and crackled that cellophane. A friend of mine says, “That’s the sound of the radio entelechy of your soul tearing out of the organic envelope,” which is what it sounds like. It sounds like your body has just been wadded up and thrown into a corner and now you’re a radio signal approximately four lightseconds in diameter spreading out through an alien universe, and the next impression is of a cheer. It’s, “Hoorah! Welcome, welcome!” It’s them, they’re waiting and they can hardly wait. There’s a moment when they are not on me, just a moment, and then they say, “You’re here, we’re glad to see you! Why did you stay away so long?” and then they come toward me, and the main thing for me in the DMT thing is to struggle not to go into shock of wonder, basically. There is a strong tendency, and for the first few trips I couldn’t conquer it. I was just a victim of it, I would just go into this, and I would say, “Heart? Heart OK. Breathing? Breathing OK,” but I’m looking and I can’t believe my eyes, because I’m in some kind of domed place.

The impression, don’t ask me why, the impression is of being underground, even though it’s a huge vaulted space and highly colored. What is of course riveting my attention are these beings. They’re small, and they’re like I’ve described them, as machine elves. They seem partially machine-like and partially elf-like. They are not so mundane as that, they don’t have a fixed body outline, and in fact that’s one of the things going on in this space that’s so baffling. They come toward you. They are singing in this alien language which you somehow understand — it cannot be translated into English but you understand it in that moment — and they are using their voices to produce objects. So song becomes thing, and there are dozens of these things and they come closer and closer, and the songs they sing condense into objects, and the objects themselves can sing. These things come and they are saying, “Look! Look!” and they are holding this stuff out to you, and you look at it, and you’re fighting wonder because your entire being is caught up in, “This can’t be happening,” and yet they’re saying “Just look!”

What are these things? Devices? Toys? Works of art? Objects? Whatever they are, they are amazing, and you look into it and they seem to be shifting, even though they’re made of metal and glass and gems and pulsating. Everything is migrating and shifting and changing and they say, “Look at this one!” It’s the most astonishing thing you’ve ever seen, and then they say, “Look at this one, look at this one!” and they’re piling up. These things are coming to-

ward you and then they jump through you, they can pass through your body. They're running around, chirping and singing and making these objects. What they're doing is they are saying, "Do what we are doing, *do* what we are doing!" and you just say, "I just want to go back to New York." They say, "Later for that!"

The implication is — and this is the mystery of my life, I'm teasing it out, trying to understand it — but the implication and the promise is that ahead of us in time, 6 months, 50,000 years, is a visible linguistic channel of communication. That the thin channel of audial communication composed of small mouth noises is just a provisional kind of communication, and what is being proposed in this state is a true telepathy. Now I always thought that telepathy means that you think and I hear what you're thinking. What it actually turns out to be is that you speak and I see what you mean. I don't mean that metaphorically, I mean that I *see* what you mean, so that your linguistic intentionality condenses as a three-dimensional object in front of us, a sculptural modality. So then we both see what you mean; you made it and I'm your conversational cohort, and we're both looking at your meaning. We can walk around it, we can adjust it.

Notice that no common dictionary is necessary here. If you're Witoto and I'm Polish, I still see what you mean, because what you mean is an objectified three-dimensional modality, not a string of Witoto words, and it's saying, "Do this, do what we are doing!" It took me about 15 trips to get this far, and then I began to experiment with sounding in that state and I discovered that they were right. That "mmmm" is a 3.5 foot wide, 8 foot long, magenta curved surface with lime auras, and that "uhnnn" shifts the lime auras into rose pink and adds grey-silver pinstriping along one edge. I thought, "My God, what is this?" Then when you break out into actual chanting, actual linguistically-modulated sound, you discover that you too can make these objects. What they apparently are — how this could be, don't ask me — they are apparently syntactical sculpture, sculpture made of syntax. Syntax suddenly becomes not the rules that govern spoken languages, but the rules that govern the assembly of three-dimensional thought objects, as though words were the shadows of hyperdimensional intentions that can actually be broken through to. Well, my God, I just thought that this was the weirdest, this takes the cake. I've never heard of such a thing. Nobody's ever suggested to me that this is possible.

So then, as is the case with most things, if you look long enough you discover precursors. What I discovered in a wonderful book, and any one of you would love this book, I'm sure. It doesn't deal with the psychedelic experience by name, but it is a psychedelic book. It's called *The Phenomenon of Life* by Hans Jonas, and if you can find this book, what a read. It's a group of essays, and in one of the essays he is talking about the etymology of the word "Israel," and he says, following Talmudic thinkers, that Israel means "He who sees God," that this is the actual etymological basis of the word "Israel." Did I say that we are talking now about the writings of Philo Judeaus? Yes, Philo Judeaus, in discussing the etymology of the word "Israel," says that it means "He who sees God." Then he says, "What does this mean, he who sees God?" Well, as you probably know, in the Hellenistic world there was this phenomenon called

the Logos. The Logos was an informing, internal voice that tells you the right way to live. It's like a spirit ally that speaks to you and informs you. So Philo Judeaus said, "What would be the more perfect Logos?" and then he goes on to answer his own question. He said, "The more perfect Logos would go from being heard to being beheld without ever crossing over a quantized moment of distinct transition." This is precisely, and in fact, what is going on in these states, because now I have learned or have found out how to evoke this DMT phenomenon in the more controllable environment of the psilocybin intoxication.

It happens like this: first of all, I form the wish for it to happen. I usually follow a line I learned in an old *I Love Lucy* rerun where she's explaining to Ethel how she contacts flying saucers and she says, "I just say, "Come in, little green men! Come in, little green men!" So on mushrooms I do this, I say, "Come in, little green men!" and what begins to happen is this sound like bells, like very distant bells. Then it becomes louder and louder, sort of like bells with wind. It becomes louder and louder and more complicated and more complex, and at a certain, very hard to precisely define moment, it begins to spill over into the visual cortex. Then I see the language and I can interact with it. It is apparently a more perfect Logos.

This is what I had in the back of my mind yesterday. Remember when I talked about how smoking was new to Europeans and they couldn't understand what it was, and then I made this offhand comment that it was a new use for the human body, only 500 years old? Well, it proves that there may be undiscovered uses for the human body. I mean, we've only been around playing with our bodies for 50,000 years and we've discovered most sexual configurations, and all these acrobatic things and amazing things that people can do like make pyramids of ten individuals, but smoking is pretty basic and yet only 500 years old. It seems to me that right under the surface of human neurological organization is a mode shift of some sort that would make language beholdable, and that if we could somehow kick over into this alternative mode we would become unrecognizable to ourselves. Now I realize that this sounds pretty far-fetched, but you always have to have reference to context.

In a universe where there were no people, that would be a pretty far-fetched idea, but the fact that we already possess language seems to argue that we are in the process of continually evolving new applications for our bodies. When spoken language burst onto the scene 35,000 years ago, by most estimates — think of it: 35,000 years ago, people invented language — what must it have seemed like to them? It must have seemed like a miracle. Hardly anything sets you up for it. The difference between a 9 hour recitation of oral poetry and three chickadees on a line is quite a leap. I'm suggesting that somehow there could be a leap forward in the communication dimension and that this is in fact what shamanism is all about, what the end of history is all about, what psychedelic drugs are all about. We are edgewalking on an ontological transformation of what it means to be human. The mode that this transformation will come in will not be political or technological. It isn't starflight, it isn't socialism; it's a whole other way of making our minds known to each other, by being able to show each other our minds. In psychedelic states you can do this.

Audience: Do you think there is any relationship to the Australian aboriginal belief that the forefathers actually sung the world into being? That concept doesn't seem too far off.

Yes, that's right. In our own tradition, "In principio erat Verbum, et Verbo caro factum est," in the beginning was the Word, and the Word was made flesh. That's the whole story. What we need to do is to pass through this transition and make the Word flesh. In other words, to somehow objectify the Word. Believe me, I talk about these things but the pictures are provisional. I don't understand how it could be done. I'm an engineering type on one level, but is it an acoustical hologram? How in the world could I make you see a concept in my mind as though it were hovering three feet above the floor? Is there a way?

I've noticed on psychedelics, and again, I don't know whether this is a false trail or whether this is part of the mystery, but I've noticed on psychedelics that if you get a person between yourself and a candle so that you have them in profile, and they are raving and you can see the candle past them, there's something coming out of their mouth. It's like how when you agitate oil in water you see this swirling oiliness of water, or when you're in a swimming pool with too much suntan lotion in it there's this kind of roiling discontinuity that's fairly subtle. Well, something like that is happening for about 8 inches in front of people's mouths when you look at them under certain conditions. Maybe it doesn't need psychedelics, I don't know. It's possible that it's nothing, it's that air goes into your lungs, is heated and then is returned to the colder air of the room, and what you're seeing is the mixing of the warm and cold air which have different refractive indices, and so it shows up as a kind of wave-like distortion. Could be; I am a reductionist on one level. If it's not real, then I want to know that it's not real, but I'm not sure that that's what it is, because it seems to me that they are beginning on a very small level to do this thing and language seems to me to be a continuous spectrum.

Because I'm a public speaker, because I work with language, I think about these things a fair bit. It seems to me that language begins in total inarticulation, basically "um, erm, ungh" kind of stuff, and then it goes on to operational speech: "Give me this, bring me that, change my diapers," this kind of thing. Then you introduce the notion of communication. I mean, at what age do children become capable of saying, "I feel x, y and z"? What this means is that they are beginning to move invisible, interior modalities out into the linguistic domain, say, "I feel sick to my stomach, I feel too awake to go to bed," so forth and so on. Then you get more complex ideas, where people are conveying abstract ideas. Then you get eloquence, a speaker who can make you listen and can rivet your attention. Then beyond eloquence comes poetry, and supposedly in the Irish tradition and in other traditions great poetic feats were undertaken and poets were magicians. The difference between a poet and magician was practically nil, but that's where we're asked to believe that it ends, in great poetic eloquence.

It seems to me that it's possible to just keep going, and one of the curious

things about the way we think about language is that when we talk about clear language, we always use visual metaphors. To understand someone you say, “I see what you mean.” Seeing is the sense that we trust. “He spoke clearly,” is a visual metaphor. “She painted a picture,” “I see what you mean,” as though we unconsciously sense that language is an uncompleted project at this point, moving toward a visual mode of expression. If we say that the psychedelics are catalysts for imagination, then what is it that they are catalyzing? They are catalyzing the further concrescence of language. Who knows how long this is. Looking back at the invention of language, you kind of have to suspect that it happened rather suddenly, that people went from not speaking to speaking quite suddenly. They had all the physical machinery: the lungs, the vocal chords, the coordinating mind, and apparently, if you follow Chomsky and his school, the genetic foundations for syntax. Syntax, Chomsky has shown, precedes language. Chimpanzees and squids show evidence of syntax, but their language is extremely rudimentary. Somehow you can’t have language until you have syntax — syntax is the set of rules that define language — but at a certain point, language has this capacity to become truly self-reflecting. I can’t imagine what a world would be like where this ability would be mastered. I suppose you would have to say it is a psychedelic world.

Audience: Earlier you were talking about this possibility, and you were saying, “I can’t imagine how we would do this,” and you started talking about it, and to me it felt like you were talking about something hovering. At that point I could almost see that it would be possible to continue. When you said “hovering,” I got “hovering,” I could almost see something hovering, and it seems like there’s really an evolutionary thing, that once people get used to really hearing each other it would just begin to happen. Little by little, we’ll get used to it and we may not even know it. Maybe it’s happening now, that language is being used much more in different ways than it used to be.

Yes, I think that’s true. My fantasy is of a workshop where some day we get it out. That’s really what I want to do: I want to punch a hole into this other place and have this linguistical, syntactical, intentionality-directed stuff pour into the universe and fill it to the brim. It seems to me that this is a real possibility. Whenever I’m stoned, I have this notion that I call the Last Conversation. It’s where it seems possible to sit down with somebody of good will and say, “We’re going to have the Last Conversation. We’re going to start from here and we’re going to work our way in, and when it’s over with there will be no you, there will be no me, there will be no here, there will be no there, because we will have carried out some kind of Derrida-type deconstruction project on the apparent reality and we’ll be left with bedrock.” I don’t know if that’s the same program as the visible language. What I do know is that with ayahuasca in the Amazon Basin, this is what’s going on. They call it singing, but it’s a visual art.

Our little company sells ayahuasca songs. They are audio recordings, but they are visual works of art. How they sound doesn’t matter, it’s how they look. When you’re sitting in a blackened hut with these people you’ll hear

someone lay down a riff which manifests as a fluorescent pink line with grey undershading, and it's a wavy line. The shaman is sitting next to the singer and will go back through and place a mirrored green dot in the trough of each wave, and the sound is lost in this. The experience is entirely visual. Is it only abstract colored patterns and moving fields of light, or can I sing you my grandfather and you would see him with his blue visor and his pegged pants and his crew cut? It's this kind of thing, you know.

This is why I believe that the psychedelic experience has some kind of historical role to play. If we take seriously that it is an enzyme for the imagination, and if we take seriously the notion that language is the carrier wave of the imagination, then probably what we're involved in here is a quantized evolutionary leap to a higher modality of language. It will come out of our biological organization; it's not cultural, and it's still less technological. It's in the bones and tongue and brain and lungs of human beings.

Audience: Terence, when you're in one of these circumstances and you speak to the little people, if someone were in the room with you, would they hear you speak? Do you actually acoustically verbalize this kind of conversation from your side?

Yes. It's a kind of glossolalia, or that's what we would have to call it. Glossolalia, as you all probably know, is speaking in tongues, but this has characteristics that glossolalia doesn't have. For one thing, people who do glossolalia have a kind of disconnectedness from it. In other words, in these Pentecostal churches when someone will go into glossolalia, often when they come out they will turn to the people around them and say, "Did I speak in tongues? Did I really do it?" In other words, there seems to be a kind of occlusion of the observing mind. The other thing is that glossolalia of that sort involves pretty radical physiological changes. Some of you may know Felicitas Goodman, who wrote a book on glossolalia. She measured pools of saliva 18 inches across, having originated from a single person during a 20 minute burst of glossolalia. Well, that's a pretty lathered-up, hyped-up state to be in. The glossolalia induced by DMT and psilocybin is controlled and willed. It's as though the English-forming part of the mind steps away and an *ursprach*, a kind of primordial language, steps in. It's highly modulated; it doesn't have to be screamed, sung or chanted, it can simply be done at conversational levels. When you do this in the stoned state, it's wonderful, and when you make tape recordings of it and listen to it in the unstoned state, it's either alarming or silly. I mean, people have said to me, "Soft-pedal this part of it, because it's *too* weird."

Audience: The point I was trying to get at is that in order to form these sounds there's some sort of electronic, neurological something going on in the synapses to cause the muscles to form the sounds, and there's a radiation of electric energy that starts the mechanical-acoustical coupling to the vocal chords, and in trying to figure out the mechanism you were discussing, how would you make this work? Would you actually see the sound coming out of the throat? It would

seem more reasonable to me to pick the electronic model and the radiation of electromagnetic energy, rather than acoustical, to project this information.

True, although it is interesting that sound can be used to form holograms, which are three-dimensional objects. In other words, there are what are known as acoustical holograms, not generated by lasers, but generated by patterns of interference that are acoustical waves. For years, in the psychedelic states I could hear this translanguistic stuff but never do it. Then I became able to do it on the drugs, and then after many more years I've been able to do it pretty much on the natch, or at least give a reasonable imitation of it; but when I do it and I'm not stoned, it doesn't transport me. It has syntax, it has order. I'll give you a short sample of this. If I'm at all self-conscious or anxious, something shuts down and I can't, and I know I'm faking it and it's not real. *Nideughey voundwy haxigivitchny moughamvwa takitam didikini hipikektet*. It's like that. It's far removed from English, it sounds to me like a very primitive language. The image that comes to my mind is of pygmies around a fire, one guy raving. He's telling a story. There's something in there; it feels like meaning, but it doesn't compute to a dictionary. When you do it on your own you just can do it for hours in that state, and it's very, very satisfying. What you're hearing is the shadow thrown by a hyperdimensional object that the person making the sound is actually seeing, and you are just rotating this thing, going into it, expanding it, taking it apart, melting it, fusing it, remaking it. Strange stuff. I played this stuff for a linguist, this very straight linguist. I played about a 30 minute burst of it, and he smoked his pipe through it all, and when it was over he said, "No Os."

Audience: Did you just make that up? Did you have any images? Can you describe what was going on inside of you when you were doing that?

I was trying to stand aside, I was trying to not do anything to it, I was just trying to let it be, because there will be a part of it and I'll think as it goes by, "Hmm, sounds French." The main effort is just to relax and let it be. The way I discovered it is that when I smoke DMT I can't stop myself. At first I would yell it, and that got my friends concerned. Slowly I've been able to bring it down into this conversational level, but it just goes on and on, has a feeling, has a tone, it's very satisfying to do. That's why I think that language existed for millennia before meaning. Bowl, bison, reindeer: meaning is just some kind of late thing that was tacked onto language to make it a more practical enterprise, but I think that people were taking drugs and amusing each other with artistic compositions of the sort I just did for you for a long time before they did anything practical with it.

Audience: I was just wondering if you thought that language may have changed around the time that agriculture came in, when things were narrowed down to a few commodities.

I think that language goes through tremendous periods of impoverishment, and

I think that was one. The origin point of language is placed at about 35,000 years ago, although on what basis they do this I'm not sure. There is a flute in existence that's 26,000 years old. That's pretty interesting, and that's not the Museum of Atlantis artifacts either, that's the real thing. The Pythagorean face of number, musical tone, language and proportion is still alive. There's still something to be learned there. A perfect science, an appropriate science, a science of harmony, resonance, proportion: that is and remains the shamanic ideal, the Orphic ideal, the Pythagorean ideal.

Audience: What are the risks associated with MAOIs and psychedelics?

You do not want to take certain hallucinogens if you're taking an MAO inhibitor, because it will prolong it and will cause it to behave in unpredictable ways. There are many MAO inhibitors commercially prescribed, some quite strong. In other words, that act for weeks, I think even after a single dosage. What are those things for?

Audience: The common scenario is Marplan, which is a monoamine oxidase inhibitor. What that means is that monoamine oxidase is the enzyme that destroys monoamine, so if you are taking that particular drug and then you take something that builds up in your system like aged cheeses, lentils, maybe mushrooms, wines, fermented kinds of things that have lots of amphetamine-type chemicals in them, then they overload the synapses. It happens because you can't break it down in your brain and basically it deteriorates. There is one that people did this with and died, so apparently the hallucinogen had some of that build up and it can't be destroyed properly, so that's why there's the warning not to take it.

The hallucinogen is a monoamine, and then if you inhibit the monoamine oxidase, which is the compound which inhibits the monoamine, then the monoamine will accumulate. It's important to know this because we tend to move in a yuppie environment, and a typical yuppie buffet of good burgundies and good brie is just going to load your system with tyramine, tyrosine, these kinds of things. They are monoamine oxidase inhibitors, and then if you take a hit of ayahuasca 12 or 24 hours later it's just going to send you skittering all over the board and you won't understand why unless you are aware that this monoamine thing is working.

Audience: Someone gave a talk in New York about smoked fish and plantain, and possibly this is a precursor of certain neurotransmitters.

Yes, this is a more complicated question than simply yes or no on the MAO inhibitors. Serotonin, which is, of course, the neurotransmitter that runs the nervous systems of all higher animals and occurs in all animals, is very strongly present in bananas, for example. You can load your system with serotonin without realizing it if you eat a lot of bananas, and that's very interesting. There

was a group of people in tribal Africa who had actually lost the gene for the production of serotonin, or of serotonin-2. In any case, one subspecies of serotonin, and they didn't know that that was what was wrong with them. All they knew was that as soon as anybody left the tribe they all became psychologically ill, and then they would return to the tribe and this situation would immediately normalize. So they looked into it and they discovered that these people were eating bananas as a huge component of their diet. Consequently, even though the serotonin gene was deficient, they always had a sufficient amount of serotonin because they were getting it from a dietary source.

If somebody left the tribe, left the forest and went to Kampala and got a job and stopped eating so many bananas, they immediately appeared to become mentally ill. This is because they were then finally forced to confront the fact that on the natch they could not produce enough serotonin to stay balanced, so this is an example of how foods and neurotransmitters and all of these things work. It's really astonishing, the fact that evolutionary biologists, in talking about how human beings have come to be, have so far as I know never talked about the evolutionary influence of diet. The fact that under pressure from dwindling rainforests we ceased being frutitarian, canopy-living creatures, and instead became omnivores and meat eaters on the plain. In going through that transition we subjected ourselves to a huge amount of mutagenic influence.

There are all kinds of compounds in plants that will break chromosomes, interfere with ovulation, interfere with lactation, interfere with fetal formation, control or accelerate tooth decay, interfere with acuity of vision, digestive enzymes that may or may not work in certain situations. If you just start eating things randomly or testing things to be foods, you're exposing yourself and your progeny to an immense number of mutagenic influences. This may explain why the human somatotype, the human body type, went through this period of rapid change about 50,000 years ago. This is when the brain size doubled, and then nothing much has happened since to human beings physically; all evolution has gone on in the cultural domain. This sudden explosion in the size of the brain case is occurring at the same time when there is this dietary shift.

One of the things that I mentioned the other night is the preservation of infantile characteristics as a part of our species, not necessarily simply infantilism psychologically, but also our hairlessness, for instance. More primate babies are born hairless, but we're the ones who stay hairless the whole time. The suppression of secondary sexual characteristics — for instance, our rumps don't redden when we're in estrus — and all these things that we see happening in other primate species are suppressed in human beings. There's a lot of debate about why these things go on. Why, for instance, there isn't a mating season in human beings, or why it is that female human beings can keep pregnancy a secret for quite a long time before it becomes apparent. How does this feed back into primate social organization? What do males do if they think a female is pregnant or not pregnant? How does this work into the evolutionary thing? There's a lot of thought that needs to be given to all this.

MAO is one of the most easily influenced of these internal enzyme systems because there are MAO inhibitors in so many things that are human

foods — pulses, all beans, fish, cheeses, dairy products, so forth and so on — the very things that were probably fairly prominent in the primitive diet. All monoamines will be more active in a human being who has taken a monoamine oxidase inhibitor. One of the strange things, and I mentioned this yesterday, is that in the Amazon they have figured out how to make this work for them. For instance, DMT cannot be taken orally, it's destroyed in your gut. If you inhibit MAO then it isn't destroyed in the gut, it passes through the bloodstream and through the blood-brain barrier. They figured this out; it's only been since the mid '50s or something that the MAO system has been understood by Western medicine. These people apparently intuitively figured it out thousands and thousands of years ago. These things compete with serotonin for the bond site; many of them are in fact inhibitors of serotonin. If you have a huge amount of serotonin in your system, the serotonin can mitigate the trip. It's a gentler trip because it's not as strong a trip as it would be had you not loaded yourself with serotonin.

Audience: But some people do, that's the whole theory of why some people get depressed, that certain people have higher levels of serotonin and certain people have lower, and that if you have higher levels supposedly it correlates with how naturally high you are.

Yes, well it's sort of hard to nail this down. When people first started doing psychedelic research they thought — it was the so-called psychotomimetic theory of psychedelics — that these things make you crazy, therefore being crazy must be a natural state of producing these things. So, for instance, they measured DMT in the blood of schizophrenics, people who are diagnosed as chronic schizophrenics. The problem is that there is no visible correlation. Some people have more, some people have less. It isn't as simple as that mad people are people who are making their own psychedelic molecules. There was great hope for this in the '50s but it didn't quite pan out.

A thing to bear in mind, sort of related to what you were saying, is that disease, which we accept as part of life, is actually something fairly unusual in nature. The only places in nature where you see a lot of disease happening is in insects. Insects are highly subject to viruses and there's a huge family of insect viruses. This is the basis of many pesticide design strategies, to spray crops with viruses that attack insects. The other area in the animal world where you see a lot of disease is human beings and the animals they have domesticated. Cattle, pigs, poultry and people are all fairly subject to disease, but for instance, birds of prey are not greatly subject to disease. Fish, all animal groups have some susceptibility to disease, but really human beings and insects seem to be the most set up for this.

The reason that is advanced for this is that these are the social animals, the insects and the human beings, wherever you have intense social activity. For instance, in some species a male and a female will encounter each other only once in the life of each individual, then have sex and that's it. There is no social life. No disease can get a foothold there, because diseases require transmission

and contact. The AIDS thing is a perfect example of this. The statistics are that a professional prostitute has five or six sexual contacts in an evening. A person at high risk for AIDS with a very active homosexual lifestyle may have three or four times that number of sexual contacts. No virus is going to pass a chance like that up, it's just like a super intense environment for transmission. The diseases want to be able to move from one person to another. The susceptibility to disease was apparently also something that was going on at the same time as we were beginning to acquire language, to domesticate animals, to switch our diet.

What we really are is the evolutionary wreckage of a very chaotic and crazy series of pattern shifts that went on between 50,000 and 100,000 years ago. Now we are the inheritors of that. As long as I'm on this subject, there's a very interesting relationship between disease and spirituality because pilgrimage sites are the great disease vectors of the ancient world. Here you can imagine that you have a temple, everybody comes there to get cured, and everybody leaves sick because all these infected people have been there. There's a wonderful book, I can't remember the author but the title is *Plagues and Peoples*. It's a study of epidemiology and the history of disease and its impact on human populations. Very interesting, and it has a lot to say about psychedelic use by implication because psychedelic use also brings people together under very close and intimate circumstances many times.

Audience: Let me ask a chemical question. I have never done these substances that you're talking about, specifically *N,N*-DMT and 5-MeO-DMT and what you're talking about as ayahuasca, which is a hybrid of an MAOI and DMT. Those are the chemical names of these substances. Are there generic names or so-called street names for these things that you are aware of?

First of all, 5-MeO-DMT doesn't occur in ayahuasca. The way ayahuasca works is that the MAO is a β -carboline: harmine, harmaline, tetrahydroharmine. These things are hallucinogens in their own right, but only at uncomfortable doses. If you took 600 mg of harmine you would have hallucinations but you would also have so much discomfort and icky feeling that you couldn't call it a trip. 5-MeO-DMT occurs in *Anadenanthera peregrina* and in the toad foam that I mentioned. It's interesting that the toad foam is the only animal-based hallucinogen that we know anything about. DMT does occur in certain fish and these fish are eaten for psychedelic effect. DMT is psychedelic in its own right, but not when taken orally. When taken with the harmine it becomes orally active. If you combine 200 milligrams of harmine, which is a sub-threshold dose of harmine, with 50 mg of DMT, which is a sub-threshold dose of DMT, you'll have a tremendous trip. That's called ayahuasca, and it comes from these plant sources. You drink it, it's a beverage. It's a fluid; tastes terrible.

Audience: You recommended a committed dose, like five grams of mushrooms, in a silent space, preferably at night and also alone.

If that's your predilection, if you're comfortable with that. If you're uncomfortable with that, get a friend. Is that your question?

Audience: I guess that's my question, because it seems to me from reading Stan Grof's books that the point he makes is that these substances are physiologically very safe. The danger is in psychological acting out, and for that reason you have someone there in order to prevent a confusion of what he calls holotropic and hylotropic, i.e. you decide that you want to jump off your balcony and you confuse your psychic reality in which you can fly with the physical reality of your body, which is that you'll fall off and die.

If you have that delusion you would certainly want a sitter present. In 99% of the cases what the sitter is there for is not to restrain you but to tell you that it's OK. Just to say that it's OK, this is immensely reassuring to people, no matter how uncertain the sitter is that it *is* OK. You could almost have a button that you could push which says, "You're OK! Don't worry, it won't last forever," something like that. I guess I'm sort of in a funny position on the sitter issue because I find them so distracting, but you do want it, the one time you need them you really need them. The other thing is this issue of whether you should do it indoors or outdoors. What I found is that I really like keeping it mental, that's my way of controlling the situation. We all know this phenomenon called synchronicity, which is where it's weird for no reason. If you go out into the world stoned you will just discover that it is a maelstrom of synchronicity, and I don't like being swept away into strange and unexpected adventures.

This is an example of how this works: I was at Sarnath once, outside of Benares. Sarnath is the place where Buddha preached his first sermon after attaining enlightenment. He was enlightened at Bodh Gaya and then he walked south many miles to the deer park at Sarnath and gave his first sermon there. There's a stupa there, an ancient stupa, 2nd century B.C., and manicured green parks; a very nice place to take a psychedelic, I thought. So I took this psychedelic, it happened to be mescaline, with these two women who were friends of mine, and there was nobody around. It was very early in the morning, we were sitting up on this little knoll in a tree and it began to come on strongly. I was looking out over this green expanse, and almost at the edge of discernable vision I suddenly see two dots, two people moving orthogonal to my position across my field of vision. Then they got to the middle of my field of vision, and they just stop dead. These two people must be 500 yards away, 1,500 feet away over these rolling green lawns, and they stop dead, they scan and they start toward me. I cannot believe my eyes, that these people have changed course 90 degrees and are now headed right for me. I kept telling myself, "It's a hallucination, it's an illusion. They are not getting larger in your field of vision, you are not going to have to confront these people. Please, God, make it so." No reprieve.

They just keep getting larger and larger, and so I said, "I'm going to make this go away by not looking, and I'm just going to sit like this," and I sat like this, not moving, until the guy's feet entered my field of vision. Then I didn't

move, I didn't say anything. I just looked up, and he said, "You're from which place? You have been how long in India?" and it was the grilling. Any Indian tourist knows that any citizen of the subcontinent can approach you at any time of the day or night, anywhere, demand to know your name, how long you've been in this country, and then the kicker, "And what you think of India?" This question is asked for the specific purpose of observing your discomfiture, because they know damn well what you think of India. I looked up and I gave this guy my most penetrating gaze and I said, "I cannot be interrogated," and I just put my head down and waited an hour. When I looked up they were gone, but only in that circumstance of being so stoned would I have ever behaved that way.

The normal tourist reaction is, and they watch this happen to you, you just go into a tailspin of, "It's their country, everybody's a person, I'm a stranger. I should be nice, they're harmless. What's so bad about this, anyway?" Then you pare it out, you explain, "I'm from San Francisco, California. I've been here three months," so forth and so on. A friend of mine told me a funny story about taking the Bombay-Calcutta mail and arriving in Calcutta on this train. It's 4 a.m. and he gets off the train, and there's a little sadhu man over there, and the guy starts toward him and comes up to him. My friend said, "Wait a minute, before you say a word: my name is Nathan Jones, I'm from Brooklyn, New York. I've been in India three and a half months and I hate it," and the guy said, "Ooh, you're great, *baba!* You're reading my mind!" You've got to be fast, that's all there is to it.

Audience: You've said that the mushroom tends to create its own agenda. You've also given examples of how you've directed it. So which of those is true? Are there ways to direct it to specific regions by doing specific things, whether you want to deal with certain issues like death or the body, or to get into certain regions of consciousness?

It has its own agenda. It has certain qualities: this extraterrestrial, outer space, planetary, history is ending, apocalypse, millennia, kind of thing. You can direct it if it likes the way you're going. It's sort of like a very strong horse. If you're going the way it wants to go you're fully in control, otherwise not. I can remember situations with mushrooms where I hadn't taken it for a long time and I fall into confusion, and it usually revolves around, "Am I doing the right thing?" whatever the right thing is, so then I'll take mushrooms and wait until properly stoned, and then put this question to it, "Am I doing the right thing?" It reminds me of a press conference that Lyndon Johnson gave shortly after he became president. Somebody asked a question that he didn't care for and he said, "What kind of a chickenshit question is that to ask the president of the United States?" When I went to the mushroom and said, "Am I doing the right thing?" it basically said, "What kind of a chickenshit question is that to ask me?" I think that was a very good answer, that was what I needed to hear, you know, "Are you kidding?"

My father used to say, "You can drive a horse to water but a pencil must be lead," and I think that's sort of the situation with the mushroom. If the

question pleases it, it will answer. If the question doesn't please it, you'll hear about it. It is amazing how it gives people what they need. You know that Rolling Stones song, "You can't always get what you want, you get what you need"? I have a friend, dear friend, but arrogant, no doubt about it. This guy is arrogant, he definitely thinks he has the truth by the throat in most situations, and he won't take mushrooms because it gives him such a hard time. It says, "You're arrogant! You want to know what we do to arrogant people?" "For God's sake, lift it off me!" A certain amount of humility; it's a relationship, like to a crusty Zen master or something like that. It is really like another entity, because you cannot predict the answers. I remember a dialogue that I had with the mushroom early on where I said, "What are you doing on this planet?" and it said, "You're a mushroom, you live cheap." It said, "Listen, this neighborhood was not so bad until the monkeys moved in. To you it may look like a mess, to me it was paradise."

The mushroom is very, very weird. I'll tell one more story and then I'll try to get off stories. I was in Malibu with all these fancy film people and we went out to dinner; Ralph Abraham was there, too. There was this French woman there, a film producer, and she was seated next to me at dinner, and before dinner we had been talking about the mushroom. I had been introduced to her as "the mushroom man," and she said to me, "You say that the mushroom speaks to you, but I do not understand exactly how this works," and I said, "Well, it's sort of like it has many faces that it can show, like sometimes it's like the role that Rod Steiger played in *The Pawnbroker*." At that precise instant, Steiger shows up at the table to shake hands with everybody and slap a few backs and then he just drifts off into the recesses of this restaurant. Ralph Abraham, who was sitting across the table from me watching this whole thing and had heard what I said to this woman, reached across the table to me and said, "You see, the mushroom is showing us that it can touch us anywhere, anytime." Strange stories; synchronicity.

Audience: How do you remember to bring back what you've learned?

That's a good question, that's an important question, that's a key question. Roland Fischer, who was a great psychedelic researcher with psilocybin and later retired to Mallorca to be Robert Graves' next door neighbor, coined the phrase "state-bounded." This means that you can't bring it back. I'm sure you all have had the experience of dreaming, being caught up in some incredible dream with strange people, foreign countries, exotic costuming. The alarm goes off and as you stagger out of bed this is just melting like an ice cube in a blast furnace. By the time you are out of bed and fully dressed you have nothing, not a shred, not a hint, not a clue, it's absolutely gone. This is a state-bounded memory. Chemically what is going on is apparently that short term memory transcription is just not occurring. You are having the immediate impression of these things happening and then it's not going to disk, so to speak, it's just lost.

The dream is not truly lost in that situation where you wake up and it

melts away. The proof of this, and I'm sure you all have had this experience is that you go about your daily business and then there will be, almost always by coincidence, an image, a chance phrase, a view of a street or something, and it will cause you to remember the dream. Once you get a hook into a portion of the dream, if you then work on it, you can probably bring a lot of it out. How this works in psychedelics is that if I have an insight or something that I particularly want to remember, first of all, I will say it aloud. This is strong imprinting. Then the real imprinting is to repeat it a few minutes later, and then a few minutes later again. If you can carry it over a number of minutes to several different levels it won't leave you. A very useful shortcut for this is a tape recorder, where if you play the tape of the trip back after the trip, just a phrase spoken will set off a chain of associative recall and you will retain it this way. To my mind, what shamanic training must really be is mnemonic training. If you want to bring stuff back you have to train yourself to bring it back.

Now, this state-bounded thing: it's important to notice, we talk about how dreams are state-bounded, how psychedelic experiences are state-bounded, but what we fail to notice, usually, is that ordinary reality is state-bounded. If I were to ask any one of you, "What did you discuss with the person you had lunch with yesterday?" it's probably very touch and go to actually put this together. I had lunch yesterday with Richard, we discussed his television transmission system, but that was new to me and therefore easy to retain, and also Richard and I haven't had thousands of hours of conversation together. The person we are most familiar with is ourselves. I don't know if it works for you like this: I am, let us say, cleaning my house, vacuuming, doing dishes, making beds, and I'm all the time thinking. I understand why Rome fell, I realize what I said wrong to somebody two weeks ago, I recall a telephone obligation that I have to fulfill, I think about things that happened years and years ago, and then the doorbell rings, I go to the door and there's someone there. They say, "What are you doing?" and I say, "Nothing." This is because the ordinary state of consciousness is highly state-bounded.

One thing these Buddhists have certainly gotten right is that attention to attention is the key to taking control of your mental life. Most of it is just like a river flowing by, and every once in a while we check to see if the river is still flowing by, but we don't attempt to retain it. Memory training is great psychedelic training, and of course, as I'm sure you know, there were arts of memory in the past. We are very poor memorizers because we rely on technologies to do it for us. People in the past had all kinds of technologies for allowing them to remember things. For instance, the most common one in use in late antiquity and up through the Renaissance was the memory palace approach. This is where you think of a place you know well — a school, a hospital, a cathedral, a university, but big — and sit and think about it, think about how it looks as you go through the main doors and then what you see when you turn to the left and what you see when you turn to the right. Learn this building until you really can command it with reasonable vividness in most situations. Then if you want to remember something, imagine yourself walking through the front door of this building, turning to your left, and there near the water fountain

you will place an emblem of this thing that you want to remember. Then you will go down the hall and around the corner, and by the fire extinguishers you will place another emblem of the next thing you want to remember.

The act of remembering this long list of things is the act of mentally moving through this imaginary building. When you come to the water fountain the clue will be there, when you pass the fire extinguishers in your mind the emblem you place there will be there. I know this sounds highly unworkable and unwieldy, but it actually is extremely workable, and people like Catulus and Cicero, the great late Roman orators, were able to speak for hours on end with lists of virtues and vices and interconnecting causes and this sort of thing, because they were masters of this mnemonic memory palace technique. Well, psychedelics are this vivid. This is another one of these things like mantras and yantras that works on psychedelics. You can do this so that when you're on a psychedelic and you have an experience that you want to remember, place it in your memory palace, and the next time you come past that point in your memory palace this thing will be there.

If any of you are interested in this, the last word is *The Art of Memory* by Frances Yates, who was a wonderful woman, a great scholar of Renaissance magic. The final trick is to make the image extremely vivid, so that for instance if you're about to give a speech to your collegium on the seven deadly sins, one of these sins is lust. I chose the easy one because I can't remember what the other six are; shows you where my problem lies. You don't just place the word "lust" in the memory keeping spot, you place some vivid and shocking image. Yates suggests the image of a nun lifting her skirts. I think this was a classically suggested one that people were taught to use. Then when you come around the corner and meet the nun lifting her skirts you think, "Aha, lust, that's the first one," then you go on, and so forth. Some of the most astonishing products of the medieval engravers' art are these books of what are called "emblemata." Emblemata are surreal juxtapositions of things, animal parts and bodies and machines, that are memory emblems made as grotesque, surreal and bizarre as possible in order to make them unforgettable. That was the technique, and the surrealists used this very consciously. There is something about the unexpected, the grotesque and the surprising that is almost by definition memorable, and this will work very well in the psychedelic state as well.

Audience: I'm interested in the legal aspect of this thing. We're talking about something that is highly illegal. As far as the law is concerned, how do you handle it? Anybody that drives around with the license plate *NNDMT* — I wonder, are you paranoid about that?

No, I'm not paranoid about it. If they wanted me they should have come a long time ago, because I was much more vulnerable then. I've sort of covered my ass. Naturally, if you speak about these things you can't do anything particularly illegal. Perhaps I'm foolish, in the sense that I shouldn't be worried about being arrested, I should be worried about being shot. If that's how they play the game then I'm in big trouble, because they'll just come and shoot me,

and you too, if you get into this; but if we actually have a legal system that works, then this is called advocacy and it's not a crime. It's an exercise of the First, Fourth, and a couple of other amendments to the constitution. Henry David Thoreau, you don't get more American than that, said, "If you are right, you are a majority of one," and we live by majority rule. I don't feel heroic. It's not false modesty or anything, I don't feel heroic doing this. This is really humdrum to me; I just could not behave any other way because of what I've seen. This transcends laws, all that is seen as preposterous. I believe in universal laws: you shouldn't kill people, you shouldn't lie to people, you shouldn't inject yourself between lovers. Most cultures recognize a set of universal laws, but, "Thou shalt not smoke marijuana?" Surely the God of Mount Sinai has better things to do than worry about that sort of thing.

We have to create a new option. All social progress is made by people taking chances. If I am an anomaly, some kind of dangerous sociopath, then my message will be swamped and lost in the noise of the tumult of the world, because there are thousands of messages out there. If, on the other hand, this is a great and important domain of truth, then they are crazy to try to repress it because it cannot be repressed. They *have* tried to repress it.

Audience: Why did they seek to repress it? If the use of psychoactive drugs is so good for the psyche, why have they sought to repress it?

They sought to repress it because there is something in the Western mind that gets very nervous when you try to talk about the bedrock of ontology. McLuhan talked about this. He met great resistance, and all he was saying was that print had created certain kinds of unconscious biases in society in favor of uniformity and linearity. He was amazed at the violence of the reaction against this. He concluded that those cultures that have evolved from the phonetic alphabet are so removed from the stuff of the world, as opposed to languages like Chinese or Mayan where there is a retention of the image in the written language. The cultures descended from the phonetic alphabet are extremely paranoid about questions about the nature of reality. That's what this is really about.

The psychedelic issue does not relate to the drug issue at all. In fact, it's important to make this point: drugs and psychedelics are not two members of a family, they are antithetically opposed to each other. The pro-psychedelic position is an anti-drug position. How can this be, since we are accustomed to thinking of psychedelics as drugs? Well, it's like this: what is it that we object to about drugs? I think most people can agree that we do have a drug problem. If you live in the inner cities you see people getting all twisted up behind this stuff. So what is it about drugs that we find problematic? I think that what is objectionable about drugs is that they cause unconscious, obsessive, destructive to self or other behavior. Unconscious, obsessive behavior is intolerable, because we are conscious people accustomed to injecting choice and meaning into our lives. You cannot have meaning if you do not have choice. This is why we don't have to spend any time at all talking about whether the world is predestined, because if the world is predestined, then I'm not saying what I'm saying because

it's what I want to say, I'm saying what I'm saying because I can't say anything else. You're sitting there because you can't not sit there, so it makes the world very dull and uninteresting. Compulsive, unexamined, obsessive behavior is the quintessence of antihuman behavior. It was Ludwig von Bertalanffy, the founder of General Systems Theory, who said, "People are not machines, but in every situation where they are given an opportunity to behave like machines, they will so behave."

Then there are drugs which reinforce obsessive, unexamined and self-destructive behavior patterns. Well, what do psychedelics do? They destroy behavior patterns, destroy cultural assumptions, completely hold everything up for grabs, completely throw open the possibility that reality could be any number of ways that are not culturally sanctioned. In that sense, the psychedelics are almost the answer to the drug problem. The early use of psychedelics reported spectacular progress with alcoholism. The people who believe that alcoholism is a disease — and I don't follow this literature closely — it seems to me that this is a preposterous statement. You mean a disease like influenza, smallpox and AIDS? Alcoholism is a disease? Can you get it if you don't practice safe sex, or do you have to wash your eating utensils? It isn't a disease, it is a failure of self-image. The reason LSD, in many cases, had a tremendous impact on alcoholic behavior was because it just showed people what they were doing. It said, "This is you. You're a drunk! You're a burden to your family, a bore to your friends, you smell bad and you're useless! How do you like it?" So you say, "I don't like it," and it says, "Then stop drinking!" That's how psychedelics cure addiction. When we talk about addiction, nobody ever talks about what is called self-restraint.

Audience: There's a new book that came out about a month or two ago that's incredibly controversial. The man takes the position that for the last 30 or 40 years we've seen alcoholism as a disease, and that's just more bullshit from the medical model, and that we need another alternative. Of course AA is up in arms about the book. It's called *Heavy Drinking: The Myth of Alcoholism as a Disease*, and he discusses the fact that essentially it's a rationalization to say that alcoholism is a disease. There are certain people that have certain chemical reactions to alcohol, but they are in the minority. This is very important to me because this is work that I am interested in, and alcoholism has also touched my family, as it has a lot of families.

In the disease model there's no responsibility involved. AA's position, their goal, is not to understand the nature of the universe; they're not in the philosophy business. They are trying to get people to stop drinking. So to maximize that goal, I think that they go far overboard. First of all, all substances: they say, "If you are an alcoholic, then you must forswear everything." I don't know how they relate to tobacco, but what you've got to understand is that we are set up for addiction. It's just like language and cognition and all of these other things. We are the animal which addicts; other animals don't addict. Addiction is a way of relating to the world. We not only addict to drugs, we addict to each

other, to chunks of territory, to behavior patterns. We attach to everything.

It's very real, it's physiological. I remember that years and years ago a woman left me for a homunculus, and I was appalled. I was vomiting every four hours, could not sleep, would burst into tears in inappropriate situations, of which there were many in my life. Heroin withdrawal cannot be worse than that, I mean, are you kidding, vomiting every four hours? Then one night, in the middle of the night I was just frantic because when I was awake I felt like I wanted to be asleep, when I should have been sleeping I couldn't sleep. I was just dragging myself to classes, I thought, "This is crazy, I should turn myself in, but they don't have crisis centers for broken hearts. What are you going to do?" So then in the middle of one of these bouts, I went to the medicine cabinet and this woman who had left me had left all these pills there. I sorted through all these pills and came upon a small bottle of tranquilizers, a very mild tranquilizer like valium or something. Well, I had never taken valium, so I said, "I'll take half." I took it, and a few hours later I went out to breakfast and somebody sat at my table and said, "How are you coping since Hermione left you?" and I said, "Who?"

It really gave me respect for tranquilizers. I was appalled that something so real to me, so much *me*, half a tab, I didn't care. Let 'em go. I realized that this is how all the people around me deal with emotional crisis. Nobody wants to feel anything. The moment that an unpleasant emotion rears its head, people go take valium or something else and cut themselves off from feeling. We addict to people, that's the point of that story, and when they leave us suddenly it's just like having your heroin taken away and you become a mad thing for months, years sometimes. I mean, I still vibrate from this event and it was 15 years ago. We addict to territory. This is war: our turf, our land. This arises as again a consequence of agriculture. Before agriculture, nobody had land, land was something you walked around on as you migrated behind your herd. Once it was cognized as an object and fixed upon, they were ready to knock the other guy's brains out for setting foot on your territory. We all do this. We are addicted to caffeine, money, sugar, praise, television.

This is a favorite one to talk about because television is a forerunner of very insidious drugs to come, it's just the crudest and the first. Imagine if after World War II a drug had been introduced into this country of right-thinking, hard-working, decent Christian people such that 20 years after its induction the average American citizen would be spending 6.5 hours per day involved in this drug. That's the figure for television consumption in this country: the average American watches 6.5 hours per day of TV. It is an electronic drug. It is an obsessive behavior pattern, an unconscious behavior pattern, and a physically destructive behavior pattern. I mean, it's done more for the rebirth of hemorrhoid specialists than any other single force in our society; but people say, "That's not a drug, that's entertainment." 6.5 hours per day of entertainment?

Before electronic media a person could regard themselves as a great patron of the musical community if they heard twelve live musical performances a year when they would go to a theater. How many experts on Beethoven in his generation or the generation following heard the Ninth Symphony more than

several times in their intellectual life? You have to get a lot of people together and cooperating to perform the Ninth Symphony. To us, the Ninth Symphony is an object: listen to it, listen again. We are able to objectify experience and then addict ourselves to it. Is this bad? How can it be bad if it is so written into us? I don't think it is bad; I think what we have to do is choose our addictions, choose our behavior patterns. One can choose to be addicted to punctuality. I am accused of this; other people are addicted to always being late. One can be addicted to meaningless sexual encounters.

I think the physiological end has been much overplayed. Should we not fall in love because we pheromonally lock together with this person and become a single unified set of drives and goals? The physiological aspects of addiction have been, I think, very strongly overdrawn. I smoke cannabis every day at most opportunities, and have for years and years, since I was 18 years old. Every once in a while I stop, just to see what that's like. It's trivial; it's utterly easy. All that happens is a shift in behavior patterns. I read more: that's what happens when I stop smoking cannabis, and yet I'm supposed to be breaking out into cold sweats, wandering aimlessly through the streets of the city staring up at lighted windows. I think we give each other too much permission to be weak in this area. What is never talked about in talk about addiction is self-restraint. For heaven's sake, just take hold of yourself. If you tell people that addiction is a disease, addiction is because you're black, it's because you're poor, it's because you're this, it's because you're that, you have just given them a whole bunch of reasons not to take responsibility for their own situation. What is needed in these addictive situations is the shock of recognition.

I believe that if you don't take drugs, you're unbearable. I can't think of a society on earth where people don't take drugs that any of us would want to have anything to do with. Let's take Calvinist Geneva, say. I imagine that as an example of an environment of moral rectitude. These people did not wear bright colors, didn't listen to music, never drank coffee, never smoked, forget about alcohol, sex is for procreation, so forth and so on. They were paradigms of the male ego frozen in place: didactic, paternalistic, all-knowing, filled with hellfire and damnation. Everything is seen in terms of a moral dimension that makes impossible demands on the human animal. Rather, I think what we should realize is that somehow our evolution into a civilized self-reflecting being is caught up in these synergistic relationships that our conscious mind has with various things in the environment, so that we should choose our addictions.

Notice that addictions to natural substances are harmless. Let me name some natural substances that you might disagree with me on this point. I think probably the strongest one would be opium. People will say, "What about opium? Surely this is the scourge of mankind." Actually, opium was never a problem in human populations until it was conceived of as a problem by British colonial policymakers who decided that they could manipulate the opium trade to get an entree into China. Alcohol was never particularly a problem until the discovery of distilled alcohol. Of course, heroin is distilled opium, morphine also. Sugar is a refined vegetable substance. In every case, it has required the intercession of science and technology to take harmless habits and turn them into

dangerous addictions. Everybody has a solution to the drug problem. I think what I would suggest is something called the Vegetable Drug Act, where you just say, "If it's a vegetable, it's not a drug." This was the position until very recently with British common law; in Canada, mushrooms were legal. Mushrooms aren't psilocybin, psilocybin is a refined chemical. It is technology which allows us to create these super powerful, addicting substances, and there will be more and more of them downstream, you may be sure.

I think we need to think of human beings as hardware, as the computer, if you will, and drugs are forms of software. The software that you run determines the kinds of functions that you can perform. If you run distilled alcohol software then you take on the persona of the alcoholic. I believe that cannabis is probably the most harmless and benign drug around. It carries out this feminizing that I talked about, it lowers the profile of the male ego. Instead of wanting to duke it out, people just say, "Well, if that's your thing..." I mean, that practically boils down to what we call tolerance. So I think that this disruption of our relationship to psychoactive plants is what set us on the long, hard downward path into neurosis. It began with agriculture, with the narrowing of our spectrum of plant awareness from many plants down to the rye, the oats, the barley. It's interesting that then out of this came the cultivation of beer, which preceded wine. That comes out of the fact of having created surpluses, because the way beer was discovered was through the fermentation of grain that was stored. If you didn't have surpluses you would never discover the psychoactive properties of fermented grain.

In Nepal, the Newari people have an alcoholic beverage that looks like a bowl of granola when it's put in front of you. It's dry; they pour it out of a sack into your cup and you say, "This is beer?" Then they come along with boiling water and pour it over it, and then you get this foamy, lightly fermented, contaminated grain water. To my mind, that is clearly how fermentation of grains and production of alcohol was established. Notice that it was also the accumulation of surplus from the agricultural adaptation that creates the need for defense, because now you've got a surplus and you have to guard your surplus from everybody who doesn't have any. The other thing that the creation of surpluses caused was the invention of barter and money, and this sort of thing, because now you have something that you can trade for something that you don't have. All of these adaptations; also, a nomadic people cannot move a grain surplus with them. If you're a semi-nomadic people, a people like in the Amazon, they plant things and then they leave them and go away. They have a yearly peregrination and when they come back to that place a year later there's all this food ready for them.

Imagine a nomadic people who were doing that kind of quasi-agriculture with cereal and then there's one year of great weather and great rainfall and when they arrive at their little wheat patch, so much wheat has been produced that they can't move it, they can't take it with them. So then they say, "We have food now, we don't have to keep hunting, so let's spend the winter here," and this interruption of the cycle of nomadism to deal with unexpected surpluses obviously spawned the idea in people's minds, "Wouldn't it be great if we had

surpluses every year!” Then that says, “That won’t happen if we are as careless as we have been about our sowing and harvesting, but maybe if we’re very careful and till the land, carefully plant and do careful weeding, we’ll have to stay here and weed but then we’ll get this tremendous payback in the end.” To my mind, the invention of agriculture broke our relationship to the wild plants and the lowered profile of the male ego and set us on a path of defending wealth, creating fortifications, supporting more specialization, larger populations, so forth and so on, and from there to the present predicament it’s only a moment.

I think that now things are very far out of hand, and we are caught up in the endgame of history. We are going to have to create a way out of this impasse that is probably going to mean a complete redefining of who we are and how we relate to each other, and space and time, and life and death. It appears that technology is now the thing that is guiding us forward. We are not being lead into the future by politicians. Politicians are running frantically along behind the wagon of history, trying to jump onto it. What is pulling the cart is technology. I think that technology is the program of realizing the practical concerns of the imagination, and that really where are headed is the imagination: it’s a place. I don’t know whether it’s in solid-state circuitry, or in the bones of the planet, or in artificial archeologies in deep space. The future will figure out the details, but we are close enough to it now that we can anticipate it. It’s what the shamans always said was possible: a world of value and meaning lived in the light of nature.

I think that if we can get through this narrow neck that rationalism has imposed upon us and overcome these poisonous, paternalistic philosophies, we will return. That’s why I call it the Archaic Revival: it’s the myth of the eternal return. History is something that you finish with as quickly as possible and then return to the archaic mode of eternity. I think that’s the adventure that we’re all caught up in, that’s the agenda that the plants and the planet have always had in front of them. It’s just that we wandered away from an awareness of what was happening by deluding ourselves with our own inflated self-image: man as master of woman and nature. This distorted part of our self-image has now become so dangerous to us that we have to abandon it, we have to draw back from it.

Under that kind of pressure, I think we will. Harking back to another question, the reason I do this, and the reason I don’t feel any great trepidation about it, is because I believe that historical momentum is with us. This is what is destined to come to be. We are going to take control of who we are by taking control of the physiological and psychological foundations upon which the self rests, and that means the chemical reengineering of ourselves into the state of Edenic innocence that was lost when we set out on the long trail of the sword and the hoe. That’s it. End of weekend.

Thank you very, very much. It’s a political point of view, you see, and as a practical matter there’s no better way to succeed in politics than to champion the most out-of-it point of view. We live in an era where beige fascism is apparently the rising rule of the day. Well, that means that if you want to be on the cutting edge you have to embrace something very akin to psychedelic

anarchy, the absolute antithesis of the fascist state. Then you will participate in the turning of the tide and the vindication of this point of view; and it will be vindicated, there's no doubt about it. All other points of view are bankrupt on the face of them. End of footnote.