

From here to Alternity and Beyond



"The explanatory principle will save you from the fear of the unknown. I prefer the unknown..."

John C. Lilly

*How does one briefly describe a man as complex as John Lilly? Whole books barely provide an overview of this man's extraordinary existence, amazing accomplishments, and contributions to the world. His list of scientific achievements covers a full page in Who's Who in America. John C. Lilly, M.D. is perhaps best known as the man behind the fictional scientists dramatized in the films *Altered States* and *The Day of the Dolphin*. He pioneered the original neuroscientific work in electrical brain stimulation, mapping out the pleasure and pain pathways in the brain. He fronted work in inter-species communication research with dolphins and whales. He invented the isolation tank and did significant research in the area of sensory deprivation.*

*Educated at CalTech, Dartmouth Medical School, and the University of Pennsylvania, he did a large part of his scientific research at the National Institute of Mental Health and built his own dolphin-communication research lab in St. Thomas in the Virgin Islands. After experimenting with LSD in the sensory deprivation flotation tank, he left the academic world in pursuit of ever higher states of consciousness. From the Esalen Institute to Chile to ketamine-induced extraterrestrial contacts in other realities, this man's life is more far-out than any science fiction. Always following the scientific tradition that carved his name into history, John Lilly systematically and courageously explored the states of consciousness produced by LSD and ketamine while in the isolation tank. His autobiographies *The Center of the Cyclone*, *The Dyadic Cyclone* (with Toni Lilly), and *The Scientist*, provide mind-boggling overviews of his amazing adventure of a life. His philosophy on how to reprogram one's own brain is best summarized in *Programming and Metaprogramming the Human Biocomputer*, and *Simulations of God*.*

Rebecca McClen and I interviewed John at his house in Malibu on the night of February 16, 1991. It was a magically enchanting evening. John was like a Zen master, with sparkling extraterrestrial eyes, in top form, more brilliant than ever at 76, laughing, creating and bursting realities like soap bubbles. John is very direct and ruthlessly compassionate, more knowledgeable than a library of encyclopedias yet as innocent and curious as a small child. The interview lasted over four hours. John spoke enthusiastically to us about how his early scientific research influenced his latter explorations in consciousness, from dolphins to extraterrestrials. He spoke to us about the distinction between insanity and outsanity, and about ECCO-- the Earth Coincidence Control Office. We discussed and shared our ketamine experiences together. He discussed his ideas about how ketamine makes the brain sensitive to micro-waves, so that it can directly pick up television and radio signals. From electrical brain stimulation to interspecies communication to sensory deprivation to psychedelic exploration, John Lilly is a pure delight to be around.

DJB

DJB: John, what was it that originally inspired your interest in neuroscience and the nature of reality?

JOHN: At age sixteen, in my prep school, I wrote an article for the school paper called "Reality," and that laid out the trip for the rest of my life--thought versus brain activity and brain structure. I went to CalTech to study the biological sciences, and there I took my first course in neuroanatomy. Later I went on to Dartmouth Medical School where I took another course in neuroanatomy, and at the University of Pennsylvania I studied the brain even further. So I learned more about the brain than I can tell you.

RMN: In what ways do you think your Catholic background influenced your mystical experiences?

JOHN: At Catholic school I learned about tough boys and beautiful girls. I fell in love with Margaret Vance, never told her, though, and it was incredible. I didn't understand about sex so I visualized exchanging urine with her. My father had one of these exercise machines with a belt worn around your belly or rump and a powerful electric motor to make the belt vibrate. I was on this machine and all the vibration stimulated my erogenous zones. Suddenly my body fell apart and my whole being was enraptured. It was incredible.

I went to confession the following morning and the priest said, "Do you jack off!." I didn't know what he meant, then suddenly I did and I said, "No." He called it a mortal sin. I left the church thinking, "If they're going to call a gift from God a mortal sin, then to hell with them. That isn't my God, they're just trying to control people."

RMN: What is your personal understanding of God?

JOHN: When I was Seven years old I had a vision alone in a Catholic church. Suddenly I saw God on his throne: an old man with a white beard and white hair surrounded by angels and the saints parading around with a lot of music. I made the mistake of asking a nun about the vision and she said, "Only saints have visions!" I assumed that she thought I wasn't a saint.

So I kept that memory, and on my first acid trip I relived it completely to Beethoven's Ninth Symphony. And suddenly I realized that the little boy had constructed this to explain the experience he had. I realized that one has to project onto an experience if one is going to talk about it because the experience itself can't be said in words. But if you are going to talk about it you choose words which you feel are most appropriate. I understood that, as a seven year old I had done that. I saw an old man with white hair because the pre-programming was there. It wasn't physiology; it was something inside, the inner reality.

RMN: Has your understanding or idea of God evolved over time as a result of your changing experiences?

JOHN: Well, when I started going out on the universe with LSD in the tank, I'd come to a certain group of entities and I'd say, "Are you God?" And they'd say, "Well, we say that to some people but God is way up there somewhere with the angels." And it turned out no matter how big they were, God is bigger. So finally I got to the Starmaker. But as Olaf Stapledon says in his book, it's impossible to describe the Starmaker in human terms. He was well aware of the bullshit of language.

I call God ECCO now. The Earth Coincidence Control Office. It's much more satisfying to call it that. A lot of people accept this and they don't know that they're just talking about God. I finally found a God that was big enough. As the astronomer said to the Minister, "My God's astronomical." The Minister said, "How can you relate to something so big?" The astronomer said, "Well, that isn't the problem, your God's too small!"

DJB: Do you think that the concept of objectivity is valuable, or do you think that separating the experimenter from the experiment is impossible?

JOHN: Objectivity and subjectivity were traps that people fell into. I prefer the terms "insanity" and "outsanity." Insanity is your life inside yourself. It's very private and you don't allow anybody in there because it's so crazy. Every so often I find somebody that I can talk to about it. When you go into the isolation tank outsanity is gone. Now, outsanity is what

we're doing now, it's exchanging thoughts and so on. I'm not talking about my insanity and you're not talking about yours. Now, if our insanities overlap then we can be friends.

DJB: How would you define what a hallucination is?

JOHN: That's a word I never use because it's very disconcerting, part of the explanatory principle and hence not useful. Richard Feynman, the physicist, went into the tank here twelve times. He did three hours each time and when he finished he sent me one of his physics books in which he had inscribed, "Thanks for the hallucinations."

So I called him up and I said, "Look, Dick, you're not being a scientist. What you experience you must describe and not throw into the wastebasket called "hallucination." That's a psychiatric misnomer; none of that is unreal that you experienced." For instance he talks: about his nose when he was in the tank. His nose migrated down to his buttonhole, and finally he decided that he didn't need a buttonhole or a nose so he took off into outer space.

DJB: And he called that a hallucination because he couldn't develop a model to explain it?

JOHN: But you don't have to explain it, you see. You just describe it. Explanations are: worthless in this area.

RMN: How do you feel about the role that discipline has to play in the process of self-discovery?

JOHN: It's absolutely essential. I had thirty-five years of school, eight years of psychoanalysis before even going into the tank. So I was freer than I would have been had I not had all that. Everybody could say, "Well, that was dissonant," and I would say, "Yes, but I learned what I don't have to know." I learned all the bullshit that's put out in the academic world and I would bullshit too. This bullshit is an insurance that I don't remember the bullshit that the professor says, except that which is really worthwhile and interesting.

RMN: What guidelines do you use when traveling through innerspace?

JOHN: My major guideline when I go in the tank is, for God's sake don't preprogram, don't have a purpose, let it happen. With ketamine and LSD I did the same thing; I slowly let go of controlling the experience. You know some people lie in the tank for an hour trying to experience what I experienced. Finally I wrote an introduction to *The Deep Self*, and said, if you really want to experience what it is to be in the tank, don't read any of my books, don't listen to me, just go in there and *be*.

RMN: So you don't ever try and go in with a mission or an idea of what you want to accomplish?

JOHN: Why should I? I'd only have gotten more ridiculous. Every time I took acid in the tank in St. Thomas it was entirely different. I think that I couldn't even begin to describe it. I only got 1/10 of 1% of it and I wrote that in books. The universe prevents you from programming and when they take you out, they tear you wholly loose and you realize that these are massive intellects, far greater than any human. Then you really get humble. When you come back here you say, "Oh well, here I am, back in this damn body again, and I'm not as intelligent as when I was out there with them."

I took an acid trip in the Carlisle Hotel in Washington, near the FBI building. I turned on the tape recorder and I just lay down on the bed. I was a tight person but it was an incredible trip. They look me out and showed me the luminous colossus, and then the Big Bang that they created three times. And they said, "Man appears here and disappears there." And I said, "That's awful. What happens to them!" And they said, "That's us." I went into a deep depression because I didn't identify with that. Then, about a week later, I suddenly realized they're also talking about me. You see all this in the introduction to *The Center of the Cyclone*.

DJB: John, let me ask you, how did your earlier inter-species communication research with marine mammals influence your later work where you experienced contact with extra-terrestrial or inter-dimensional beings on your psychedelic travels?

JOHN: Let me say how I got to work with dolphins first. I was floating in the tank for a year and wondering, who floats around twenty-four hours a day? I went to Pete Shoreliner and he says, "Dolphins. They're available. Go down to the Marine Studios in Florida." So I did, and I immediately fell in love with them. Then we killed a couple of dolphins to get the brains, and when we saw them we said, "Oh boy! This is it. This is a brain bigger than ours!" And I thought, this is what I want to do.

Well, I didn't kill any more dolphins. I studied their behavior and interactions. I was working alone at Marine Studios and I had a brain electrode in one dolphin, which I regret immeasurably. Anyway, when I would stimulate the positive reinforcement system he would just quietly push the lever and work like mad, and if I stopped he would vocalize immediately. I knew monkeys wouldn't do that. And if we stimulated the negative system he would push the lever, shut it off, and then he'd scold us. See? Then he broke the switch and just jabbered away.

So we then took the tape of this over to a friend of mine's house and his tape machine ran at only half the speed of what we had recorded in. It was incredible. Dolphin making human sounds. We didn't believe it at first. What he was trying to do was to say, "I can talk your language, let me talk to your leaders, then we can really get this straightened out about positive and negative reinforcement."

So when I got my lab organized in Miami I turned to Ellsborough and I said, "I'm going in there to try this with Elvar." So I went and shouted at the dolphin we called Elvar, "Elvar! Squirt water!" He zoomed right back immediately, "*Squouraarr rahher*." And I said, "No. Squirt water." And finally after about ten times, he had it so we could understand it. It was just an amazing experience.

DJB: Do you think that he had an understanding of what he was saying, or do you think he was just mimicking the sounds?

JOHN: If you're experiencing a foreign language, what do you do?

DJB: Well, the first thing you do is mimic.

JOHN: That's right. And slowly but surely, your phoneme system masters the sounds, right? And it doesn't make any difference whether it makes sense or not. Then the next thing you have to do is hook the phonemes up and make words. And then you have to hook the words up to make sentences. And then the meaning, the semantic system in your brain, starts working. So we have to go through all these steps and if you're at all smart you'll realize that you have to have intensive contact with the other language, with someone who speaks it very well. I learned Swedish that way and that's what we did with the dolphins.

DJB: Right. So this work with the dolphins, how did it influence your experiences with ketamine in the isolation tank?

JOHN: Well, I discovered that dolphins have personalities and are valuable people. I began to wonder about whales which have much larger brains, and I wondered what their capabilities are.

There's a threshold of brain size for language as we know it, and as far as I can make out it's about 800 grams. Anybody below that, like the chimpanzee or the gorilla can't learn to speak a language. But above that language is: acquired very rapidly, as in a baby. Well, this means that the dolphin's life is probably as complicated as ours. But what about their spiritual life? Can they get out of their bodies and travel? Are they extraterrestrials? I asked those kinds of questions. Most people wouldn't ask them.

So I took ketamine by the tank at Marine World in Redwood City. I got in to the tank and I had a microphone near my head and an underwater speaker that went down into the dolphin tank. My microphone hit their loudspeaker under water. So I waited. Then I began to feel that I was in direct contact with them and as soon as I felt that one of them whistled, a long whistle, and it went from my feet right up to my head. I went straight out of my body. They took me to the dolphin group mind. Boy, that was scary! I shouted and carried on. I said, "I can't even handle one dolphin, much less a group mind of dolphins!"

So instead of that they put me into a whale group mind and when you have an experience like that, you realize that some of the LSD experiences may have been in those group minds, not in outer space at all. Since then I suspect that they're all ready to talk and carry on with us if we were not so blind. So we open up pathways to them with ketamine, with LSD, with swimming with them, with falling in love with them and them falling in love with us. All the non-scientific ways.

RMN: Why did you stop doing the English experiments with the dolphins?

JOHN: Because I didn't want anyone to speak to them. So I did it more esoterically with ketamine in the tank, and so on, which these idiots in the Navy wouldn't do. I was appalled by what they were doing.

RMN: Have you ever managed to learn enough of their language to communicate with them on their level?

JOHN: No, because they're too fast and too high frequency. They're ten times as fast as we are and ten times the frequency. So if you record it on tape and then slow it down ten times you can get an idea. When they're working on human speech, at first they're too fast for you, and then they suddenly realize it so they slow down.

DJB: Have you ever given ketamine to a dolphin?

JOHN: No. I gave them acid to see if it would knock out their respiration. It didn't. I couldn't understand what was happening to them on LSD except for one thing they did. They turned around along the tank at the same time, and suddenly they turned their beaks down and turned on their sonar straight downwards. I remember on my first acid trip that suddenly the floor disappeared and I saw the stars on the other side of the earth, so I stamped my foot on the floor to find it. That's what they were doing.

Also, the dolphin Pam had been spear-gunned three times by Ricco Browny in the "Flipper" series. The first time, Pam went over to Browny and pulled the spear from him. The second time, she took one look at him and turned away. The third time she ran like mad and wouldn't go near him or any humans. It was just awful. So when we got her she was staying away from us with the other dolphins. So I gave her LSD and she climbed all over us. It was marvelous.

Boy, I've been trying to stop talking about dolphins. I was enslaved by them for twenty years and now I'm trying to avoid them for a while. But I can't. People like you come out and remind me of them.

RMN: That's wonderful. Okay, let's get back to people. Could you tell us, in what ways you think the exploration and mapping of the human psyche can help to improve the quality of people's lives and what about people with mental disorders?

JOHN: Do you know Thomas Szasz's book, *The Myth of Mental Illness*? Well that's where I'm at. I don't believe any of this mental health stuff; it's all bullshit. Having been through psychoanalysis with a doctor of physics, Robert Belmont from Vienna, that's what I've come to think. He used to analyze analysts, Anna Freud and so on. I started quoting papers: from psychoanalysis and finally he said, "Dr. Lilly, we're not here to analyze Freud or the psychoanalytic literature; we're here to analyze you, and you're just avoiding yourself. I learn more from you and you learn more from me than we'll ever get in the literature." So that's the way I've looked at everything. Wide open.

RMN: What do you think about people who suffer from a disruption of their interior reality? People who experience problems in coming to terms: with their inner process in relation to the world around them?

JOHN: Do you know Candice Pert's work? Well, she's found fifty-two peptides in the brain that control mood. As Pert said, "Once we understand the chemistry of the brain there will be no use for psychoanalysis." She said that the brain is a huge, diverse chemical factory. We cannot make generalizations about any one of these yet but, for instance, if you give an overdose of this one people get depressed, if you give an overdose of that one they get euphoria, and so on. If you OD on cocaine your brain changes its operation, but if you're aware of this: and you pay attention you realize that yes, it modifies some things, but it

doesn't always do it in the same way. So there's this continuous modulation of life versus brain chemistry. So I gave up long ago trying to figure out how the brain works because it's so immense and so complex. We don't yet know how thought is: connected to operations in the brain!

DJB: Do you think it would be possible to create some kind of window into the brain to see the dynamics of how thoughts arise and what their interaction is by using some kind of highly precise combination of EEG and MRI scannings?

JOHN: No. It's impossible. The Positron Emission Topography or PET scans show the changes in various parts of the brain and of various substances. When the observed person is learning, a compound acts one way, and then another way. But what's that? That's one compound that they're looking at. Imagine what else is going on.

DJB: Years back you helped to pioneer the original electrical brain stimulation research. With the understanding that you've gained in this area, do you think that it will eventually be possible to directly stimulate brain centers without using electrodes, in order to create psychedelic experiences?

JOHN: Electrical stimulation of brains is very poor without brain electrodes and with electrodes you wreck the brain when you put them in there. That's why I quit.

DJB: So you think then that it is possible to stimulate brain centers without using electrodes?

JOHN: Yes. A friend of mine at the University of Illinois showed me a set-up in which he was stimulating a brain at minute spots with focused ultra-sound and electrical interference.

RMN: Do you think that men's and women's brains operate in a very different way?

JOHN: You know, I've been researching that for years, and finally I admit that you are another universe that I can't possibly be in because you're female and I'm male.

DJB: What directions do you think neuroscience should be taking? What are the most important avenues of exploration?

JOHN: The most important things to do in science is to figure out who the human is and how he operates biochemically. We're never going to understand how the brain works. I always say that my brain is a big palace, and I'm just a little rodent running around inside it. The brain owns me, I don't Own the brain. A large computer can simulate totally a smaller computer but it cannot simulate itself, because if it did there wouldn't be anything left except the simulation. Consciousness would stop there.

DJB: Could it not be possible for human beings to create a computer system large and complex enough that, although it may not be able to understand itself, it would be able to understand the human brain?

JOHN: No, because we don't know the basis for the human brain. As Von Neumann said, it was strictly by accident that we discovered multiplication, addition and subtraction first. If we discovered the mathematics of the brain we'd be way ahead of where we are now.

DJB: You mean the binary language?

JOHN: There's no way to tell what the hell language the brain uses. Sure, you can show digital operations of the brain, you can analyze neural impulses traveling down your axons, hut what are those? Well, as far as I can see they are just a recovery from a system that's in the middle of the axon, and that's operating at the speed of light. Neuronal impulses going down the axons are just clearing up the laser points so that it's ready for the next one, continuously. It's like sleep. Sleep is a state in which the human biocomputer integrates and analyzes what went on the previous time it was outside, throws out all the memories that aren't going to be useful tomorrow and stores only those memories which will be useful. So it's a process like a big computer in which you have to empty memory and start over. We do this all the time.

DJB: Along these lines, I'm wondering, do you think memories are actually stored in the brain or do you agree with Rupert Sheldrake's theory that memories are stored in information fields or something similar.

JOHN: I've read some of Sheldrake's stuff and he's too glib. He's got all explanation for everything. The universe is much more complicated than he's trying to make it out to be. People tend to do this-I've tried to avoid it. I make fun of my own theories. I say, what I believe to be true is unbelievable, so that I don't believe in anything, you see? Temporarily I may in order to talk with somebody. Memories are stored in the feedback with ECCO and ECCO takes care of all this. I don't know how they operate, but Sheldrake calls stuff memory which isn't memory; it's living program.

DJB: Do you think that the brain acts as a transceiver;

JOHN: Yeah, that's right. The brain, the bio-computer is a huge transmitter/ receiver and we're just beginning to see what it is. Have you ever seen anything like a TV show on ketamine?

DJB: Yeah, with commercials even.

JOHN: Well, they're real. The first time I saw that I thought, my God, all we're doing is increasing the sensitivity of the brain to microwaves. And the problem with microwaves is that they're influencing us below our level of awareness all the time. Well, this morning for instance, on ketamine, I went into this place where all these people were interacting and I got involved. When I came back I realized that I had got into a soap opera on TV and was taking part in it as if it were reality!

Now kids must do this all the time. Marvelous! But you got to watch out because you may be taken in and think they're extraterrestrial or something, unless you can see something that cues you in that this is a TV station.

DJB: Have your experiences with ketamine and your near-death encounters influenced your perspective on what happens to human consciousness after biological death?

JOHN: I refuse to equate my experiences with death. I think it's too easy to do that. When I was out for five days and nights on PCP, the guides took me to planets that were being destroyed and so on. I think ECCO made me take that PCP so they could educate me. And they kept hauling me around and I tried to get back but they said, "Nope, you haven't seen all the planets yet." One was being destroyed by atomic energy of war, one was being destroyed by a big asteroid that hit the planet, another one was being destroyed by biological warfare, and on and on and on. I realized that the universe is effectively benign; it may kill you but it will teach you something in the process.

DJB: Do you think that there is actually some kind of learning process that's going on as a result of ECCO's positively or negatively reinforcing certain behaviors so that humanity's evolution is guided in certain directions?

JOHN: I had the illusion that humanity is making progress in certain directions, yes.

DJB: Do you feel that when synchronicity happens, that it's actually being arranged either by ECCO or by us?

JOHN: The only place that Jung defined synchronicity at all well was in the introduction to the *I Ching*, and he talks about controlling coincidences. He fell into the same trap I did. Synchronicity doesn't mean anything; it's an explanatory principle.

RMN: Do you think that ECCO is concentrating on humans?

JOHN: Of course not! ECCO is the one that's running everything on the whole planet.

RMN: So they have no particular interest in our survival, we're just a minute part of what's going on?

JOHN: They? You're personalizing. I used to personalize. I saw angels, extraterrestrials, then I called them guides and finally I called them ECCO and it's totally impersonal. It's way beyond what people can understand except in a ketamine or LSD state. Then they tell you, well we're at a low level, there are influences above us. It would be nice to meet these

entities that experience these various states. They won't take human form, though; it's a waste of their time. And once I joined them and realized that that's where I came from and that I had gotten bored and become human in order to have some different experiences with a smaller intelligence. It's like becoming a cat or something, to find out what's going on with the cat.

RMN: I feel that my dog, Safety, might have done that very thing. She's more human than many people I know.

JOHN: Well a dog finally convinced me of this, that there are levels that these entities choose to be, dolphins or whatever. When I experienced level +3 (refer to *The Center of The Cyclone*), I was part of a huge consciousness that was creating from the void. It was taking energy and creating a form, life and so on. It wasn't me. My ego afterwards wanted it to be me but of course it wasn't.

DJB: Do you have a hard time bringing information back?

JOHN: Oh, of course. It isn't hard to bring it back, it just doesn't come back. It's in you, though; ECCO put me straight on that. They said, "Well, everything that's happened is stored and when it's important that you know it, you'll know it."

RMN: When you're ready for it.

DJB: Bringing information back from my ketamine experiences is a real struggle for me.

JOHN: You've got to be more passive. If you struggle, then all you'll see is your struggle. It's like trying to do something instead of doing it.

DJB: Let me ask you John, how do you, or do you, distinguish between mind and body, spirit and matter'!

JOHN: Those are all explanatory principles.

DJB: How about in terms of descriptive principles. How would you describe the difference between them?

JOHN: Naming such things is a dichotomy. The only dichotomies are in language and in the eye of the observer. Until you can describe the system of mathematical continuous process, or stepless process, then you aren't really saying anything. As I keep saying in every workshop I give, "For the rest of this week you are going to hear a lot of stuff and all of it is bullshit." You know why? Because language itself is bullshit. It's a way of spending your time without experience or experiment.

DJB: But what other alternative do we have besides language for communication?

JOHN: Well, if you don't know, I can't explain it to you. No, I told you about it; on the ketamine experiences you're going through reality experienter; and they're experimenting on you and you're experimenting and there's no way that language has anything to do with this. So what's happening is so fast and continuous that you don't have a chance of describing it.

DJB: But don't you think it's important that people write books and map out the territory?

JOHN: Only if they tell you, "There's a territory over there. Go see it." That's all.

DJB: What do you think of the notion that Terence McKenna talks about a lot, that language actually creates reality?

JOHN: No, it doesn't. Language creates reality? That doesn't make any sense at all.

RMN: Maybe he means that language creates our experience of reality, because it programs us to think in certain ways.

JOHN: The experience in the tank, for example, is: a continuous paragraphic process and that's true of life in general. You can't describe me, for instance, you can't even remember me in your video memory, right?

RMN: I can't remember you? I haven't forgotten you yet.

JOHN: No, no. That's a simulation. You haven't forgotten your simulation of this, whatever it is. See, I can't describe me and I can't describe you.

RMN: Right, I see that. But if somebody were to ask me about you later on, the language I used to recall and describe you then would effect how I re-experienced you.

JOHN: My book *The Simulations of God: The Science of Belief*, explains all of this.

DJB: Explains? Isn't that the notorious explanatory principle creeping in again?

JOHN: All we do is construct simulations. I construct the simulation of you, for instance, and I turn this into words. But that simulation is nowhere near who you really are. Then I tell you what my simulation of you is and you correct it, and on and on. You cannot substitute words for the action of the brain, the action of thought or the action of mind. When I say mind I'm talking about the whole universe of stuff, see? It's not that simple.

RMN: Why do you think we have this desire for meaning, this compulsion to explain things all the time?

JOHN: Childishness. The circle. The explanatory principle will save you from the fear of the unknown; I prefer the unknown, I'm a student of the unexpected. Margaret Howe taught me something. I went over to St. Thomas one time and she said, "Dr. Lilly, you're always trying to make something happen. This time you're not going to make something happen, you're going to just sit and watch." You know what I'm saying?

DJB: Yeah, I get caught in that one a lot.

JOHN: So, if I can't make something happen I get bored sometimes. But if I don't get bored and I just relax and let it happen, you show up. Now I can afford to do this, I don't have to earn a living, but if you know how to do it you can earn a living and be passive as hell.

DJB: What's the trick to doing that?

JOHN: You become an administrator who doesn't know anything, so people are always explaining to you what's happening. My father was the head of a big banking system; he taught me something about passivity. He said, "You must learn to be *as if* you're angry, and then you'll always be ahead of the guy who really gets angry." And I said, "Well, what about love?" And he said the same thing. All those powerful emotions--you can act as if you're experiencing them, but you're not involved, you see, you haven't lost your intellectual load.

DJB: You think that if people get overwhelmed by emotion they lose their ability to think clearly?

JOHN: Well, I had a lesson in that. I got really angry at my older brother, and I threw one of those cans that have calcium carbide in them and spark, because he was teasing me so much. He teased me an awful lot. So I threw this can at him and it missed his head by about two inches. And suddenly I stopped and thought, "My God, I could have killed him! I'll never get angry again."

RMN: What do you think about America's involvement in the Gulf War and what are your thoughts about the causes of war in general?

JOHN: Well, the Gulf War happened because Russia and the United States made peace. So the United States Defense Department had to have something to do, because they have this huge budget. Luckily the Russians didn't have that huge budget as their economy is falling apart. If our economy was falling apart then there wouldn't be any war. As Eisenhower said, industrial establishment and the Defense Department are in control of this country.

RMN: Why do you think it is that politicians and national leaders so often reflect the darker side of human nature?

JOHN: It isn't the darker side. It's the busy side. They get bored so they have to do these things. I started a book called, *Don't Bore God or He Will Destroy Your Universe*. Nobody knows they're doing this to avoid boredom; they make other excuses for it. You've never been bored?

RMN: I've been bored but I don't feel like going out and bombing somebody because of it.

JOHN: No, no. You're not one of those people. If you took PCP you wouldn't kill anybody. Sidney Cohen, who died last year, was the head of the committee of the Mental Health Institute for Drug Abuse. He said, "How is it that PCP and ketamine have similar molecules. Have you ever seen any violence with ketamine?" I said, "No." He said, "Well, with PCP we see it all the time." I said, "Look Sidney, you've forgotten that there's a selection of people who take PCP and a selection of people who take ketamine. All the people that I know who take ketamine are professionals who have respect for their own minds and brains. They're knowledgeable and educated and they're not violent. But the people who take PCP are violent in the first place; peaceful people who take PCP don't get violent.

RMN: What do you think needs to happen before war becomes an obsolete activity?

JOHN: It won't happen. Something must make people busy together and war does that.

RMN: Does busy have to mean war? Are there no alternatives?

JOHN: Now Kennedy tried to make a space program. I think if we started a colony on the moon, and then on Mars and we got sufficiently involved we could redirect all our boredom.

RMN: Do you think that aggression is inherent in the human psyche?

JOHN: No. I once wrote a chapter called, "Where do Armies Come From?" Do you know where they come from? Tradition. Kids learn that history is war, so they're all pre-programmed. If you read some of the history books, it's all about war, it's incredible! In my Latin class I learned about the wars of Caesar, when I took French I learned about the wars of Napoleon and on and on and on. What did we learn from Caesar? That you don't divide Gaul into three parts. What did we learn from Cleopatra? That you may have to kill yourself with an asp. If you start reading Italian history and you come across Leonardo Da Vinci or Galileo then the whole thing falls apart. They're individuals doing their thing and it's magnificent. And that's the only part of history that's interesting.

RMN: What do you think about the current theories of evolution?

JOHN: I looked into the paleontology of humans. Paleontology is the only science that could take an observation here, and a million years later another one here and draw a straight line between the two. Every time I read Leaky or Gordon Danier or any of those other people I look at it and say, well those are good observations but are they necessarily connected at all? Maybe a spaceship came and put a colony in at this point. But they don't think of the obvious, you see.

I have a concept called "alternity." From here to alternity. I came back from Chile and sat in Elizabeth Campbell's living-room on acid and started evoking ECCO. Suddenly the energy came out from above and went straight down my spine and on all sides of me were these divisions like a pie. And I could look down this one and see a certain future and then right over here another future and on and on. So this was alternity that I was sitting in. Now actually, unconsciously, we sit in alternity all the time, we have to or you wouldn't know how to get anywhere, right? But you don't know it.

DJB: You mean sitting in a place where you see all the infinite possibilities and pathways that can emerge from a particular point in space-time?

JOHN: I don't know if it's infinite. It's sure 360 degrees and each alternative reality was every two degrees or something like that. There were a hell of a lot of them and some that I couldn't ever imagine.

RMN: If you were conscious of that do you think you would be able to make any decisions to go anywhere?

JOHN: Well, I get conscious of all of them or none of them. So when I get out of my body I don't try to program anything because there are so many alternates possible.

DJB: What are your thoughts about the future?

JOHN: What's the future?

DJB: That which hasn't happened yet. The next micro-second, the next year, the next century and so on.

JOHN: We act as if there's going to be a year out there, but we haven't got there yet, right? And we think the sun is going to come up every morning and we count on that, we expect it. What's going to happen when it doesn't? One alternity is enough so why talk about the future?

DJB: John, on a different note, do you think there is a qualitative difference between organic and synthesized compounds?

JOHN: I don't know what qualitative means; I never was able to grasp that word. It's one of the first things that they teach you in grade school and it never made any sense. My bullshit filter said it was bullshit.

We take something that a plant or animal did and we call it pure sugar or whatever. That's chemistry, the science of separating out components which you can't reduce any further without destroying them. So what does the plant do:, The plant picks up carbon dioxide and stuff from the ground and starts combining these compounds in certain ways and synthesizes them. Plants are chemists just like us. A lot of people call something natural or organic hut they don't know their organic chemistry, because anything that has a carbon atom in it is organic, okay?

RMN: How do you define addiction and how do you avoid falling into the trap of misusing the chemicals you take?

JOHN: Let's see. There's drug use, drug over-use, drug abuse, drug hypo-use and on and on. There is a set of chemicals that if you take them and you don't exercise and you don't cat right, you go downhill. When you go downhill you have to take more of that chemical to substitute for the food and stuff. But if you are taken off that chemical without the proper stimulus you get grand mal seizures or something. That's the old-fashioned description of addiction.

What I say is, you take certain chemicals and change the chemical con-iguration in your brain and body. This is a very interesting process and if you slay interested and look after yourself then you can take cocaine or heroin or any of those things. Physical exercise is absolutely essential to get good changes of conscious states. If you're in good physical condition you can experience a hell of a lot. If you lose interest then you go downhill and wind up in Harlem or something.

RMN: What about people who have developed a powerful physical and mental addiction, for example, to crack and cocaine, in some cases: even killing or stealing in order to fulfill their craving for the drugs.

JOHN: They'll kill and steal without the drugs, they live that way. The drug just gives them an excuse to do it. Read Freud on cocaine. He really knew what cocaine did but he was never able to say it in the presence of the psychoanalytic people. Psychoanalysis is all based on his cocaine experiences, every bit of it.

DJB: What do you think about this whole "War on Drugs" thing?

JOHN: We've been subject to the delusion that we should suppress drugs ever since Anslinger put marijuana on the narcotics list ill 1937. He was enforcing the laws on alcohol and that was repealed, so he looked around for something new and found marijuana. In an interview with Anslinger the interviewer asked him, "What if you were to smoke a joint?" And he said, "I would kill three people that I know." What a belief system! And he put all that in the law, you see. It's that insanity of certain people who don't understand what's going on.

RMN: What do you think about atomic energy? Do you have any ideas about how we could solve the nuclear waste problem?

JOHN: All the atomic materials should be shot into the sun. We're playing around with something we don't know anything about. This is the stuff of stars, it's not the stuff of a planet. But it's there so we do it and then we get the illusion that we can control it. Well, that's bull. ECCO did something in 1942 that I'll never forget; it threw LSD and atomic energy at us in one go. I once asked ECCO what they did that for and they said, "Well, we're trying to test out the survivability of the human species."

DJB: So you think that there are areas then that humanity shouldn't mess around with?

JOHN: Right. Well, we've proven it with atomic energy and biological warfare, too. AIDS.

DJB: You think that AIDS is the result of genetic engineering experiments gone astray ?

JOHN: Yeah, you can see it. It's fooling around with biological warfare and something's escaped. Somebody left a sink open and it went down the sewer. Les Chambers, who is head of biological warfare at Camp Detrid is an old friend of mine so I went down and talked to him about it. We went over all this and he said, "You know, someday, somebody's going to make a mistake, and one of those things is just going to go wild all over the world." He knew. AIDS is an artificial virus; it's related to the Bovine virus, but it wouldn't affect humans before. Somebody spliced it so it would.

DJB: You don't think AIDS could be a natural mutation?

JOHN: No. Natural mutations we can handle because we've lived here for three million years and the mutation rate is very slow. Our immune systems are incredible.

DJB: What role do you think science fiction plays in the development of actual scientific research?

JOHN: Well, big brains operate with science fiction and create it. What it does is free up the creative process for a look at a simulated future which may or may not exist, but it's fun making those simulations and some of them are very good. One of my favorites is *Childhood's End* by Arthur C. Clarke.

DJB: Are you familiar with Virtual Reality?

JOHN: I've just heard about it. I want to experience it. It shows us what we're doing all the time--constructing realities. You change the chemistry of the brain, you change the realities. Sometimes that can get very scary. Once on ketamine I had an experience that scared the hell out of me, and then I realized, hey, this is happening all the time! Why should I be scared of something that's happening all the time?

DJB: What do you think about the potential of using ketamine in conjunction with psychotherapy?

JOHN: They did it in Iran. One hundred patients. Got them all out of the hospital in one trip. They programmed in that which the patient feared most. Did I tell you what happened to me with that? I went and looked up the Iranian reprint at the UCLA Medical Library and the Albanian one which confirmed the Iranian study.

This whole business about keying in that which is feared most stuck out. So I came back here and took 200 mg of ketamine. Suddenly I was transported to the year 3000 by ECCO and they removed my penis bloodlessly. I screamed in terror and Toni, my late wife, came running out of the bedroom. She looked at me and said, "It's still attached." So I looked up at the ceiling and said, "Who the hell is in charge up there? A bunch of psychotic kids? And the answer came back, "Dr. Lilly, you were at the UCLA Medical Library this afternoon and we programmed in for you that which you feared most. It was in your unconsciousness."

RMN: What do you think is the purpose of fear?

JOHN: From Orthonoia to Metanoia through Paranoia. Orthonoia is the way most people think; they're creating simulations that everyone accepts. Metanoia is where you leave all that and you're experiencing higher intelligence. But the first time you do this, you're scared shitless.

On my first acid trip in the tank, I panicked. Suddenly I saw the memorandum from the National Institute of Mental Health: "Never Take Acid Alone." One investigator who tried to take acid alone got eaten up by his tape recorder. That's all I could think of. Luckily I was scared shitless, had no idea what was going to happen and boy, that was rocket fuel if ever there was one! I went further out into the universe than I've ever been since. So the paranoia is rocket fuel to get you into Metanoia.

Before I did the tank I was frightened by water. I sailed a lot in the ocean and feared sharks. I had a continuous phobia about this. Finally I got in the tank and went through that

horrible experience, being frightened to death, you know. And after that I was never afraid of water.

DJB: Do you see a similarity between lucid dreaming and ketamine experiences?

JOHN: No. Lucid dreaming is never as powerful as ketamine.

DJB: Well, one nice thing about ketamine is that you can maintain the high for as long as you want.

JOHN: When people start talking about "higher" states of consciousness I say, "In outer space there's no up or down."

DJB: It all becomes relative.

JOHN: No, it isn't even relative.

DJB: It isn't even relative?

JOHN: It isn't anything you can describe.

DJB: Now I'm thoroughly confused.

JOHN: If you stay around me long enough you're going to get a whole new language. Some people stay around me for a while and run away. I can't keep a woman here. They all get frightened sooner or later. I'm crazier than hell.

DJB: So are you writing these days? What are you doing?

JOHN: I never say what I'm doing. My analyst said it very well. I came in one day and flopped down on the couch and said, "I just had a new idea this morning, but I'm not going to talk about it." And he said, "Oh, then you understand that a new idea is like an embryo. A needle will kill an embryo, but if it's a fetus or a baby then it's just a needle-prick." So you have to allow a certain amount of growth before you talk.

RMN: What do you think is the best therapy for people?

JOHN: The best therapy for people is to hit them over the head with a hammer.

DJB: Maybe we could start running workshops at Esalen.

JOHN: I've been hit over the head several times. We had a big hot tub out here. I stood up too fast and the circulation left my brain and I fell face down. Three days before, Toni had read how to do mouth-to-mouth resuscitation in *The National Enquirer*, and she did it. So many people have saved my life, it's incredible. I finally figured out that ECCO doesn't want me to go yet. I asked them to let me go at times. They keep saying, "You've got to teach, you've got to learn what it is to be a human." So, I'm spending all my time now trying to learn this. You know, it just gets to be fun. I realized that certain humans have a lot of fun. On some day I said, "What is it to be human?" And they said, "To laugh more."