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DYNAMICS OF HYPERSPACE

with

¹Ralph Abraham and Terence McKenna

Terence: Ralph and I discussed what we were going to do this afternoon and we decided we would try for a conversational sonata, which means it's supposed to look like an unrehearsed conversation, but we both more or less think we know what we're going to say. I suggested the title "*Dynamics of Hyperspace*" before Ralph had even been asked to be part of this. I hope it's no embarrassment to him as a professional mathematician. These words actually mean something in certain disciplines. In other disciplines they only indicate things.

Ralph: Well, I agreed that we didn't want to talk about those old maps of hyperspace.

Terence: What I mean by a new map of hyperspace is this: I think that we've come to a place with the psychedelic experience where the validation of the maps of inner space that Freud and Jung put forward in the first half of this century are not valid or complete enough. In other words, LSD validated very well the Freudian concept of the inner universe; it seemed to validate ideas about repression and trauma and the need to dredge material out of the unconscious.

Ralph: And that's what you were thinking of as the old maps? Freud and Jung...?

Terence: Exactly. And more recent data that comes out of the psilocybin and DMT experience doesn't seem relevant to the human superconscious, unconscious or subconscious. It seems to be more like an objective manifold that lies beyond the personality or any human dimension, yet is accessible through these compounds.

Ralph: Are these old maps like Sanskrit, Tibetan tantric texts? One could call those antique maps. Those antique maps are closer to what you're talking about, I guess.

Terence: Well, maps grow more and more complete. Some of these older maps are badly torn and worn by time; some of them are not really maps but more almost like journals of explorers saying, "Today at noon we passed the mouth of a river, we know not from where it was flowing, but it was a mile wide where it entered the river we are navigating". Now we are going back and hoping for more complete maps of this area. I said to you this afternoon that if we had to find a formal transition point from your maps to my maps, it was Tom Banchoff's films of hyperdimensional objects. You might say something about that.

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Ralph: Well, I thought of that as a map, only it's not a map; it suggests an image as the videotape we saw suggests some images that we encounter, probably in hyperspace. But it doesn't represent the experience of life in hyperspace at all. Tom Banchoff's best film, "Hypercube", is an instructional pedagogic film on travelling in four-dimensional space. This is a good start if the metaphor of dimension is of any use here. When I saw Banchoff's film, which I knew from my knowledge of the mathematical sources was actually a representation in common space of hyperspace, that made the hyperspace idea as a metaphor, as a map context, real for me. In Banchoff's film you see a hypercube, that means a solid figure in four-dimensional space, the simplest and most symmetrical one, but outlined only by its edges and vertices. It is then projected down, using color as a code for the fourth dimension, into a three-dimensional reality where we can experience it as a solid object represented in the traditional wire frame technology of computer graphics. This looked exactly like DMT trips I've had--so exactly that it deprived me for a long time of the religious fascination that I had with my travels in hyperspace. Because I was afraid that they were simply a precognitive experience of this Thursday evening in Santa Cruz when I would be viewing Banchoff's film. So this is much less than a map, but it's like some context in which to seek metaphors out of which you can make a map.

Terence: Yes, I called the book I wrote with my brother *The Invisible Landscape* because someone once said to me that psychedelic drugs were like magnesium flares dropped from aircraft; they would briefly illuminate a landscape and then darkness would reclaim everything. But you don't still think that that was a precognitive experience of seeing Banchoff's films, do you?

Ralph: No, I think that Banchoff's film was a precognitive expression of a DMT trip that he has yet to take. In fact, the time sequence is not important because the time sequence is only a necessity of a cognitive strategy that we have evolved to deal with three-dimensional space and our motion in it with a very limited mind. So the whole cause and effect idea comes out of a kind of Greek philosophy where very static concepts are really all there is. Freud and Jung and all their maps, tantricism--it is all much too limited to use in any way in mapping our experience in hyperspace.

Terence: Yes, perhaps hyperspace is not really what we want to get at, but the idea that there are occult (in the classical sense of hidden), dimensions to reality that are now accessible through the use of these psychedelic compounds. Obvious occult dimensions in reality are the future, the afterdeath state, and then the idea that there are occult or hyperdimensional organs of the human body, specifically the human mind. The human mind is like a fourth-dimensional organ because it seems to come tangential to the body, perhaps only at one point, and yet we feel its imminence as the most overwhelming fact of being. In fact, it is the experience of the fact of being. Right?

Ralph: I guess it's reasonable to put our consciousness at the base of the rest of it and say that it's the seat.

Terence: But I like to think of it not so much as a diffuse field but actually more along medieval lines like the soul, and to actually try to imagine that there is an organ attendant upon the living human body that is

invisible under all normal conditions but is, in fact, the *raison d'être* that holds the whole fact of metabolism together. Then when the connection between that hyperobject and the body is broken, the body ceases to be a four-dimensional object; it ceases to have this life in time that we call metabolism, and it becomes merely a lump of matter whose organization is steadily falling away from it, then it's not active any more and it's not interesting.

Ralph: Well, the incarnation of the spirit in a body or the association that we have in our consciousness of our being in the body is a terrible limitation that comes from an over-addiction that spirit has had with incarnation over the centuries. It is perhaps a part of the fact that the earth is a dark planet, but in our travels we frequently have found that the body is left behind. Isn't it so? The experience of consciousness that we have during trips in hyperspace may not involve bodies or anything body-like in the sense of a kind of limitation in spatial or dimensional extension. There may be an increased clarity in a smaller location or something, but the experience of our consciousness in hyperspace is fairly diffuse. So it could be that the body is something like a computer terminal in its relationship to the host computer--that it's a probe for sensing data experience on planet Earth in common space in a lower dimensional reality, piping it back up to wherever. I have never been able to really buy the idea that consciousness is in the head or in the body or even necessarily nearby.

Terence: Sheldrake, when we talked to him two weeks ago, mentioned Bergson's *Matter and Memory*. Since that conversation I read it and, though Bergson is very much an unpopular philosopher in the present context, his idea that memories are not located in the brain--that the brain merely is able to access a dimension that is everywhere--is very modern. It touches ideas like Pribam's and all the things that are being said now about Bell's Theorem and the non-locality of information. But what puzzles me concerning those who are big on the non-locality of information...doesn't it devolve upon them to show why experience, even psychedelic experience, is always particularized? You always do have a particularized experience. Why isn't the psychedelic experience a plenum if all information is everywhere? Then what is the tuning device that brings out the various aspects of it?

Ralph: Well, since my first distant trip I have totally rejected the idea of explaining or showing why, as you would challenge them to show why. Because those theories, Bell's Theorem, quantum mechanics, mathematics, that is all the efforts to make very low-dimensional, almost common-space dimensional conceptual models for an experience which is much richer than these models. So I couldn't take that seriously. I think that people should take their experience more seriously and try to evolve from this experience models, maps, simple metaphors, or whatever, so that we could make an atlas out of local charts. In this room are people who have travelled extensively and analyzed their experiences using all kinds of knowledge of all the cultures on the planet. It's very difficult for any two of us, for example you and me, to compare our experience of hyperspace in order to see whether or not there is some kind of overlap where we could agree that this part of experience was the same, so that your map and my map could then be overlapped a little bit. Then I could have confidence that your experience expands this piece of my mind, or my experience expands that piece of yours. With the rest of us working together, if we had any sort of common ground between any two of us, we could

build an atlas for the group experience of hyperspace. But even after ten years or more of doing this, I find it very difficult to use any metaphors of ordinary reality to overlap our experience, much of which is obviously identical, but as far as representation in common ground metaphors, no. So, Bell's Theorem may show the way, but from that experience we have to evolve new consciousness which should grow so as to be able to deal with experience verbally, visually, space-time multimedia musically, to share.

It's very difficult. I'd like to try this out and see if anybody finds that in travelling you experience hyperspace, or whatever you want to call it--you experience life there. It is not that this is the structure of the room; the walls are there in ordinary reality. We have a very low-dimensional thing here, even though in, say, computer technology, you need enormous memory to record a single instant in very low resolution. In our own perception of life in this room the walls and many things stay fixed, everybody is sitting while one person moves, so this is a very low dimension of reality, and life on this planet is interactive. When you travel in hyperspace, everything is interactive. The whole universe is as a person and we are relating or dancing with everything. The child says "Mom, I danced with a rock". The reply is "Rock's don't dance." We know that everything dances. You poke it; it pokes back. So we don't have the metaphors for this experience. When we move, we have practiced our conceptual, our cognitive reality with this. Most everything is fixed and one thing moves. We fasten on the thing moving and record that in the log book. In hyperspace travel these metaphors are no good. Where we project down to too low a dimensional representation, we lose things.

All maps are vibrations, are projections. In the map of Paris, for example, many different people occupy the same spot--what I call a spot--on the map of Paris. Much information is lost through mapping reality to a map. So the dynamics of life in hyperspace exceeds what we can deal with cognitively. This is, I think, the reason why we have a great deal of trouble describing it to each other. Is it anything like that for you?

Terence: Yes, it's like that. I think that while we experience it fully we are repressed by the content of the experience. The reason it is so hard to communicate it is because language is a creation of habit, and our habits are all of this lower-dimensional space. So everything is referred downward. Everything in the psychedelic dimension is like this, like that, and yet there is this tremendous sense of inadequacy. Even as you say it is like this or like that, you know that you're betraying it. And I don't think that is necessary; it isn't that there is something magical that makes these realities state-bounded so that they can never be brought back to experience. It's simply that we have a problem with developing a language that is suitable to the subject and the only way to overcome that is to make the psychedelic dimension more and more a part of our reality, however multidimensional it is. This is essentially what poetry is attempting to do, but doing it very inadequately or very badly, even when it's doing it at its best. A William Blake or a John Milton says "Well, yes, you like what I wrote, but if you could only have seen what I saw, you wouldn't even bother with it". So it's a task of building new dictionaries and new languages and bootstrapping ourselves by transforming our language so that, finally, it maps onto the thing beheld in the psychedelic state. And this is a task of a lifetime or many generations, perhaps. Certainly it's happening now among many people,

but it is incomplete and it's frustrating in its incompleteness. Our language for reality, for what you call the low grade reality, is by no means complete. Many lyric poets have exhausted themselves without ever reaching for the heights, so the difficulty of mapping these higher order states is very great. Maybe that's why, though we can't exactly articulate it, I gravitate to you as a mathematician, hoping to hear something that will illuminate the problem, because mathematics is a language too and a very different language from the language of ordinary experience. Perhaps both mathematics and ordinary human languages are inadequate to the psychedelic dimension. But this is then where we are in the cultural task. We need to create a meta-linguistic meta-mathematical, metaphorical language in order to behold these things. I think it must be possible because people who are loaded together with a very few words do understand these things.

Ralph: It may not be hopeless to think that we will find verbal, mathematical, scientific, musical, artistic metaphors and language strategies for recording and exchanging our experiences to help further our evolution. One cannot stand forever a situation where we cannot compare our experience. Even to tell a joke about life in hyperspace is very bad. So we want this evolution. At the same time we have already experienced it, as you said, only not with these kinds of metaphors but through telepathic experience or whatever one wants to call it. Which is a part of our experience of travelling together, which is a certain proportion of every person's experience of travelling. It varies. Some people are very solitary in their travels; some people always go in twos; sometimes there's millions...

Terence: Fill the skies....

Ralph: Flying in group formation on the astral plane. So I think that the expansion of our language, mathematics and what not, has to be an expansion where what is considered to be mystical, the impossible, in search of the miraculous, telepathic and so on, is allowed to become part of everybody's experience. This is one of the most important things, in my view. I don't know what is necessary to preserve the possibility of the species' future evolution. It's not hopeless. I think somewhere evolution is possible. We have the glimpse here through our personal experience; our group experiences are extremely frustrating, even this kind of talking and sharing.

Question from the audience: Do you think there's some behavioral imperative to deny those kinds of experiences as a society?

Ralph: Well, filtration of experience is an ingredient in every social structure...filtration of experience. "Johnny, rocks do not dance." You are told that you did not dream, that you did not experience what you actually did experience as a child. And that is part of the problem, but even if by some miracle or another you were able to re-program yourself from prenatal on out, as many people are trying to do by re-processing their previous incarnations and everything else, if you could totally clarify your soul so that you had no cultural conditioning at all, then I think there is still a lot of structure missing that we need to have to function as fully expanded beings in hyperspace and to achieve the evolutionary promise of our group consciousness.

Terence: Because the fact of the matter is, though we've talked of hyperspace and used this geometric model which signifies clean breaks between levels,

actually this hyperspace that we're talking about is present all the time in the here and now as an aspect of the here and now that is simply not perceived by us. Think about the reality that we do perceive through the mediation of language and the way it differs from, say, the next highest primate. Obviously our tremendous awareness of our history, our apitition (???)for our future, our baggage of all these abstractions--scientific, cultural or mathematical, this is itself an aspect of being in this linguistically-created space that is different from the space of the experience of an animal. If you want to think of history as pointed toward a moment in time when it will enter hyperspace, then realize that the fact that history exists at all means that this process of entering into hyperspace is well advanced. History is the shock-wave that precedes the entry of a species into hyperspace. A lemur or any creature, even a social insect, cannot enter into hyperspace without entering into history first, perhaps for ten or fifteen thousand years. That is the aura that precedes the entry into hyperspace and it's a domain of accumulating language and metaphor and experience.

Ralph: So perhaps there is an accumulation from the bottom up. To physics we add Bell's Theorem; to mathematics we add chaotic attractors; to language we add a new poetic metaphor, and thus we create new maps of hyperspace. This is bottom-up accretion. Maybe there is a top-down one where the capability to communicate telepathically between two people is dramatically increased by the accretion of metaphorical skills in telepathic communication or something. Or maybe there are telepathic plants that you find in the Amazon. Suddenly this communication is very clear. I'm biased for the top-down one as I think that from the bottom-up is so feeble, there is so little help, that this is Jack's beanstalk which has got to go to the sky. But you are optimistic, being a word freak, that language can be expanded to the point where one could succeed in describing the experience.

Terence: But I do think there is some kind of, for want of a better word again, hyperdimensional object at the end of history which is casting an enormous shadow over the historical landscape and causing it to be what it is. It's as though history were the shock wave of eschatology. There is an event at the end of history such that when it is finally reached, all time which preceded it will be seen to be adumbrations and reflections of the approach to this thing. It's as though consciousness is attempting to become more and more self-reflective. And since language is the way, the strategy that is being used, we are getting a fantastic accumulation of languages and cybernetic technology -- technologies of storage and delayed replay -- so that consciousness is bootstrapping itself toward this omega-point. But the creode, the cleft in the epigenetic landscape that is directing it toward this end point already exists in some sense. This is like a Platonic model of hyperspace. Plato said, "Time is the moving image of eternity". What he simply meant was that we have a low-dimensional slice of reality in the form of what we call the present, with its perspective on the past, but that actually it is part of a higher dimensional manifold which, beheld in its entirety, is eternity. Consciousness is reflecting itself and culture is the waste product of that process. So it seems to me that what the historical task consists of is humanity turning itself inside out and that this is the problem with dimensions that we sense so acutely. It is that the body, which is presently exteriorized, must be interiorized. And the soul-mind, which is presently felt -- only felt -- needs to be exteriorized. One can hark back to the metaphors of alchemy for an idea of what this is. It's the idea that the

soul should be potentially condensable as a visible object, or a form of transdimensional or translanguistic matter which is then beheld. By being brought through this process of entry into normal space, the space we experience, the soul is placed beyond the crisis of death which is, somehow, the rending of this connection between the organic and the trans-organic, and with the advent of more and more advanced cybernetic systems, more and more advanced psychedelic substances and shamanic techniques, there is a vast family of these things to be synthesized and explored. The task of exteriorizing the soul and making it familiar will come to be. Apparently then, this end-point of history that we keep talking about is actually the place where biology is left behind because death is overcome by understanding. History is the process of being consciously caught in being without understanding death. Through languages and mathematics and science and all these various strategies, we are attempting to gain a hold on that problem so that we can turn it around. There's nothing that says this is impossible; it simply takes ten or fifteen thousand years to get our ducks in a row so that we can have a firm enough epistemological basis and a firm enough understanding of what the self, the brain, the body, the present at hand, actually mean. Then we can turn the switch and be at play in the fields of the Lord in the human imagination. Don't you think the human imagination is where history is carrying us all? That is Elysium.

Ralph: Well, that might be just a feeble projection of the much more grand... I wonder what you think is the role of the human anti-imagination? For example, what is going on with the repression and control of psychedelic drugs? Why are people persecuted? Is there a negative force in evolution? Is this archetypal creode at the end of history, the future which is determining the present as effect of the cause, does this have a major evil component?

Terence: This is a real problem. I always feel nervous about sounding dualistic or Manichaeian, but I have the strong intuition that we are not monkeys but we are in monkeys. What we're asking is "Why is there so much monkey business?" It's because we are having a great deal of trouble. We love the monkey body; we connect it to the earth, we connect it to a long evolutionary history and we believe that we must treasure it. Yet it's very obvious, looking at the way global society is organized, that the monkey nature is utilizing the discoveries of the angelic or Buddha nature of people -- ivory towerists, scientists, seers, and people simply trying to understand how things work. But this information is used by monkeys, generals, politicians, advertising executives and propagandists, and it is lethal. So we are bootstrapping ourselves, and we're not all moving. If this is a marathon race to the end of history, we cannot all be in the lead.

Ralph: It's very critical, I think, to sit here suggesting that consciousness, the unique inhabitant, the living occupant of hyperspace, in fact has got a serious personality defect. It's got an addictive personality and it likes to incarnate in monkey bodies. There's really a lot of oversoul; we're just about a millionth of one percent of it. So we are the laggards. We are addicted to the occupation of the monkey-body; otherwise we would have gone back where we belong. Some people think that we've been banished to an incarnation on the dark planet as a punishment, but for what? First of all you're suggesting that the oversoul has a personality problem and secondly, there is the dualism between the oversoul and the monkey. Are the monkeys a

foreign species while the oversoul lives in Beta Orion and the monkeys live on solar earth? Are the monkeys an inferior species? Are they not part of the projection of the conscious soul? Are there different parts? There is not a single occupant in hyperspace, but there are actually different ones. There's oversoul; there's monkeys; then, I suppose, there's mosquitoes--one of the few living beings I still enjoy to kill. There are these different parts. It is not all one.

Terence: I think that what is loose on this planet and has been for at least a billion and a half years, is a self-replicating information system. It first appears as replicating polymers which then grow sophisticated enough to be DNA and cellular matrices and enzymatic feedback systems and then, at a very late period in its history relative to us, it transcends mere genetic information and evolves epigenetic information such as culture, writing, this sort of thing. This phenomenon is localized in the monkeys. But the thing is that knowledge and understanding are inevitably two-edged, so that as we reach for angelhood to free ourselves, we inevitably gain the power to destroy ourselves. We cannot become some kind of star-roving, hyperdimensional, cybernetic species radiating out through the galaxy unless we go through the very narrow gate that has to do with the fact that we discovered fusion processes while we were still bound to a single planet. We have fifty, a hundred, two hundred years before we are home free. We will carry that burden of the knowledge of how to destroy ourselves as a species until we get, as James Joyce said, "up ne Ent" And once we're up ne Ent we leave behind the planetary ecology, the possibility of toxifying the planet and destroying ourselves, but it's clear that angelhood is not easily won. One must banish interior demons. These are demons of knowledge, the wrathful dieties are the knowledge dieties, and the knowledge that they hold is the knowledge of how to blow the planet apart as though you had stuck a stick of dynamite into a rotten apple.

Question from the audience: How come we have so many dangerous people in power positions?

Terence: Well, monkey tribes are about pecking orders and male dominance. These monkey hierarchies are the last to get the news. The militarists do not understand what Ralph understands, or what the people who build these hydrogen weapons understand. They only use these things because they have everybody under their thumb. Power is one game which they play very well. Understanding is another game which people like Ralph play very well...but the faith of people like Ralph and myself is that the power, the transcendent power of the knowledge in and of itself will be so great that it will overcome the wish of the monkeys to misuse it.

A perfect example of that would be the chip. When the chip was first developed, the alpha males were about to put it in the wastebasket because it didn't work fast enough for the military applications for which the contract had been led to produce it. They couldn't see any reason why this would have any application at all. And then someone outside that research mentality realized that it meant everyone could have a computer; it meant that the computer technology which had been a privileged thing of the ruling military and industrial classes had escaped their control. I have a real faith that this will always be the case -- that all effort to take control of something

in the technological area will find it mercurially slipping through one's fingers.

It's a moving front of knowledge. The real thing is not to think that it's research scientists pitted against the monkey generals. Orchestrating this whole scenario from hyperspace is the overmind of the species. It is releasing these ideas into consciousness. We cannot go to the stars without genetic engineering, nuclear fusion, all of these things. I think that the current situation on the planet with H bombs stacked like cord-wood, etc., is a perfectly natural situation. This is exactly what it's like when a species prepares to depart for the stars. There is tremendous risk and the risk factor exponentially rises. Who knows how many species throughout the universe confront this situation and can't make it through. It is a very narrow neck. Naturally, only sophisticated life forms radiate through the galaxy and what sophisticated means we don't know, but we're going to find out because we're going to find out whether we are one or not. The next hundred years will tell the tale. We will either break free or we will fatally foul the cradle of our origins.

Question: Just assuming that humans are the vanguard of evolution and it's happening to this mutant monkey first and we leave biology behind, what continues to go on on the planet? There's a whole planet world going on still and there are dolphins evolving towards this kind of escape. What happens to the plants once we leave the planet?

Ralph: Well, I think the planet is like high-school: every year there's another graduating class. The school looks the same every year, but if you watch the individuals then you see it evolving. If you look at war games, the battle field is always there, but the individuals on it are always different. People grow through these stages of evolution. This planet is one step in a ladder of evolution and devolution. I think there are two strategies for the growth of the spirit. One is the bottom-up one; this one requires these efforts of the research scientist since the bottom-up one assumes, pessimistically, that the top-down can't work, that telepathy will not be developed fast enough to put individuals in the kind of tight interconnective contact they have to have in order to survive these delicate balances with destruction that Terence has described. The bottom-up strategy assumes that top-down can't work so therefore it has to improve the communication of people by constructing computer networks, by tapping energy from the sun and bringing it down, and so on. All of technology is an effort to reach angelhood through material means, while mysticism is an effort to achieve the same goal by expanding peoples' capabilities with psychedelics, by meditation, by teachings from foreign planets, and whatever....

Terence: You can't live on a planet and have the kinds of powers and ideas which we have because a planet is such a delicate thing. What we dream of is so outlandish and so centered upon ourselves that the only way it can be realized without being Faustian, without destroying us and everything else, is to build it in space. The human imagination has to be lifted off the surface of the planet for our survival and the survival of the planet. It's like a mother come to term; this baby must now be born.

Ralph: It's an ecological imperative.

Terence: We must leave the womb for the sake of the mother and for the sake of the child. This great separation, this cleavage, has to happen.

Question: I believe that the human mind is dependent upon a minimum quantity of atoms and that if you had the amount of atoms in a chicken's brain you couldn't make the human mind and that it requires spatial organization, whereas you both imply that the mind came before--that the mind isn't related to the brain. Can you explain this?

Terence: Evidence that numbers of neurons are important is incomplete. The Penfield experiments are the crudest indicators that there is some relationship between neural activity and thought, but what this relationship is has never been shown. A materialist like John Eccles took the position that the mind was something which could initiate quantum-mechanically balanced electron cascades. The mind shunts these one way or another, and these events start avalanches of electron cascades which would then become what are measured as crude neural signals. But he actually had to posit an invisible force that could, at least at the level of one electron, push on the physical world. I'm not swayed by the idea that it's been shown what is going on with the relationship of neurons to thought.

Question: But neurons do seem to grow, as imprinting occurs in a chicken, and you do get an increase in mass with the neuron during the imprinting stage.

Terence: The neuronal material has a relationship to thought, but we do not know of what the relationship consists. In other words, does the brain generate thought, or does it receive thought? Is it a generator, a receiver, or what is it?

Question: Why would the human mind need to exist if it weren't for the human body -- the genes? What would be the point of a human mind without a human body?

Terence: Well, perhaps mind is a generalized term. There may not be human minds and chicken minds, there may simply be mind and one perceives as much of it as one's neural network is able to transduce.

Ralph: The brain is an organ of perception.

Question: Normally when we think of the millennium, the omega-point, the Resurrection, we think of fundamentalist religion. How does that fit into the conservatism of most religions.

Terence: I said that the object, the transdimensional object at the end of time, cast a shadow over the three-dimensional landscape of history. Implied in that metaphor is the notion that the shadow is distorted. I think that all empires and forms of social organization are attempts to get it right. Nobody, not even Hitler and Nero went around saying "I'm just the worst person to ever come down the pike". People always believe they are acting from a clear vision of what is required. But the fact is that the very nature of being in this low-dimensional space makes it very very hard to get it right. That's why the idea of Zen koans, where you are somehow to break out of a system of logic and perceive beyond it, is indicative of that. I think the thing at the end of time will be a *coincidencia oppositorum*. It will be a

union of opposites. It will not be rationally apprehendable. It will transcend rational apprehendability and, as you know, the British enzymologist, J.B. S. Haldane said, "The universe may not only be stranger than we suppose, it may be stranger than we can suppose". It's that thing which is stranger than we can suppose which is calling us through time toward it, and which we anticipate in visionary, mystical and psychedelic states.

Question: I was wondering...ever since we've been working with psychedelics we've been receiving guidance as to diet and choice of various things in our life to create an energy coordinate system that changes the dramas and energies that we draw into life. If we choose a diet, or something that we haven't been channeled, it tends to imbalance the reality.

Ralph: This is the epitome of the top-down way, so that our experience, more or less, extends to all of us. It is a function of ego, I think, to reject guidance which clearly comes -- and people do do that; furthermore, they make conspiracies to do that. I heard of one today. There is a bill in the Assembly that would allow the postal service to open everybody's mail primarily to look for things like Prevention Magazine. People are sharing ideas that they've received about the right way to eat for achieving certain purposes. Even on this level the information is suppressed. I think the ego conspiracies are monkey-level strategies for defeating the insertion of information through intuition and connection. I think that it's very difficult to be what we are calling our monkey if we don't eat other monkeys. One of the strange things about this planet is glaciation -- these historical events that force animals to eat other animals where otherwise it wouldn't be necessary because there's an adequate supply of plants. The difficulty of the survival of the species through the various glaciations has, I think, produced some of the ecological problems that we feel on the social level as wars and torture, the pressure that makes it seem as though we have no chance of getting through the bottle neck to the omega point.

Question: If you think we're going to leave this body or move on from the planet, why are these beings so interested that we become pure enough to channel them, to become part of them? When you take the mushroom or LSD, it means you become part of their energies and that we're able to evolve in this way. I've been told that they're working toward physical immortality, working toward balancing and energizing all our energy coordinate systems so that they will harmonize. You're actually going to be an ongoing entity that constantly changes in this way, constantly renews itself, constantly goes through a birth/death process?

Ralph: I personally am very pessimistic about our chances for survival to a goal without receiving guidance. I don't think that the probability of our getting past the nuclear menace is zero. The computer could make a mistake and some chimpanzees actually believe that the planet can survive a limited nuclear war. Our chances of making it through are dim and so we're pessimistic, but actually our chances of making it through to here were zero without guidance. To me it's a mystery, but the nature of the guidance and the direction in which it's going seems absolutely certain to me, so I'm hungry to take it.

Terence: I would differ with Ralph in that I'm very optimistic. I think that the most intelligent form of life on this planet is not the human individual

and it is certainly not the social institutions that human individuals have pushed together. The things that make us so strange, that always make it a stumbling block to view ourselves as simply highly evolved monkeys, is the presence on the planet of something which you could call the human overmind. It has its hand on the tiller of history. No government, no scientific institution, no occult organization is running history. The overmind is running history and it can drop the differential calculus simultaneously on Descartes and Leibnitz; it decides when it's steam engine time and when it's photon engine time. It will pull us through or it will pull something through; but history is a dash -- a ten thousand year dash -- from the point in time when you cognize that you could go to the stars to the point in time when you look back on the receding earth and breathe a sigh of relief and say, "We made it". It's very tricky, but I think if the overmind didn't exist it would be entirely impossible.

Question: What do you think it is that the overmind is saying?

Terence: You probably know Phil K. Dick's book *Valis*, where he talks about the mad god. He isn't the first one to talk about the mad god, and all I can say about that is my deepest intuition is that there may be a mad god. But in the true tradition of Gnosticism, beyond the mad god, beyond the machineries of fate that the mad god has imprisoned us in is the true, higher, hidden God, who cannot signal us at all because we are fallen into the black hole of the mad god. But we have within ourselves a spark of divinity that, if we study it carefully enough, the message -- the way out of the labyrinth, is written there. And once we, entirely by our own efforts, make our way out of the labyrinth, and this means the overmind as well, then the higher and hidden God will be present. But, yes, this universe appears to be as the Gnostics said, the creation of a monstrosity. This universe is a prison of iron. At least that was their view.

Question: Well, is your idea of an overmind some version of Margolis and Lovelock's Gaia Hypothesis, and is that healthy?

Terence: I don't believe they think of Gaia as minded and directed as I am saying. They see it as a global system for maintaining meta-stability on the planetary surface. But I actually see it as something which is controlling perturbations, directing developmental processes down certain chains to make things be the way they are. You see, I can believe the orthodox theory of evolution--the neo-Darwinian theory--except that it seems to me the time scale is preposterous. The theory works on a scale of twenty million years, but we are asked to believe that we came from the trees in half a million years. That's too fast. If that's true, then there must be a higher governing order because that's too many right choices in a row. It couldn't possibly have happened that fast without it being a non-stochastic process.

Question: You've talked about a ten or fifteen thousand year history on the one hand and, on the other, something is out there pulling us towards the future... I wonder whether you have considered that there's only one moment of time in which we're inventing both your ten and fifteen thousand year past and that thing that's pulling us towards the future. What we're doing here tonight is exploring ways of getting our heads together so that we project a reality that's a little more compassionate. I don't know any other words.

Perhaps we could make that agreement and not be quite so frightened in that case.

Terence: Well, the psychedelics carry you to the end of time. You discover the secret; you leave history and you experience the secret outside of time. It's what Mircea Eliade calls the dichotomy of the sacred and the profane. I think that's what is so exciting about the psychedelics; the government can't control the truth, the secret of the future cannot be hidden from people who do it. I don't know if this addresses your question, but it's the only source of optimism, of existential optimism, that I know. I think that Ralph would probably agree. It affirms that there is a way outside the labyrinth. It lifts you above so that you can contemplate the topology you were enmeshed in.

Question: We've taken some giant steps because this evening would not have been possible fifty years ago, or twenty years ago even. Something different has happened.

Terence: Language...

Ralph: I want to reply also.... I'm sorry I've made myself so unclear as to be so completely misunderstood. I am not pessimistic. What I tried to say and what I want to say is that I would be very pessimistic about our chances of making it on bottom-up evolution without any guidance from the top-down information. However, it is my experience that we have an abundance of this and that many of us here are running one hundred percent on intuition from above. One hundred percent...many of us. As a matter of fact, I am not pessimistic.

Terence: Psilocybin induces this phenomenon -- at the lowest level the strong intuition of what you should do, and at the highest level, the direct verbal order.

Question: In your book you sketch out what you call a quantized modular hierarchy that tries to pinpoint the points in history where all this information floods in from outside the manifold. I'm wondering since you wrote the book if you have had any further insights into that? One question I want to ask you, why did you pick 2012. It is also the end of the Mayan calendar.

Terence: Peter Broadwell, who is sitting in the front row, has labored mightily to make the time-wave theory accessible to people. My original reason for choosing the 2012 date was very idiosyncratic. It had to do with temporal distances from the date that the atomic weapons were used on Hiroshima. But once we had this program running well enough that I could see what was happening, I felt that the time-wave gave very good agreement with the historical data. The time-wave maps novelty, coming and going, from historical time. Configure it so that you'd have the zero point in November, 2012; in that case the deepest ingression of novelty before modern times was in that fifty year period in the fifth century B.C., when Laotzu, Mencius, Ezekial and Zoroaster and Plato were all active. Such a moment! Nothing has been done since except adumbrations of that work. Then, of course, as you mentioned, the end of the Mayan calendar, which is a very, very strong coincidence. The Mayan calendar was right once before. They predicted that on a certain morning on a certain day in a certain year, men would come in

white ships and should be treated like gods. And on that morning of that day of that year, the ships of Cortez dropped anchor off the coast of Mexico. We're talking about forces which wrecked a civilization. Are we to believe that the Aztec civilization was wrecked on the basis of a coincidence? It isn't like that. The prophecy was fulfilled. They had good agreement between prophecy and fact, but it set them up psychologically to be conquered in a way that would never have happened had they not had that prediction in their world view. I don't want to get into it in great detail, but I think the modern relationship of science to the flying saucer is approximately at the same level of sophistication as the Mayan astronomers sophistication was to his ability to predict future events. So prophecies do have a way of coming true when you look at civilizations on the scale of millennia, and it usually bodes great change for the society in which it happens.

Question: All the people you mentioned that lived during that time, I've been told that there was a planetary alignment--the same as the kind of planetary alignment that we're experiencing now until 1989 where certain planets are lining up.

Terence: Well I don't know if what you're saying is true, but it should be true if my theory is correct, because you've got to have agreement in the sky and on the ground. The time-wave that I propagated is only thirty years away from the zero point; this is like approaching a black hole. We have sunk below the event horizon. The Millenarian event has now exerted such hold, the creode is so deep, that it's calling us toward this moment. The walls are so high that there is no way out now. Very definitely we are tidally locked to that future event. The Mayan calendar was a five thousand year cycle and it starts out with everything in a certain configuration and then it returns to that exact configuration on that date. The theory that I developed was a hierarchical wave that can be derived from the I Ching and I derived my fit empirically or, in a sense empirically, by putting the wave against stretches of historical time and asking myself if the wave configuration fit my intuition of how that historical period should be graphed.

Question: I'm not trying to be too materialistic, but I'm really trying to understand your paradigm. If you don't believe the mind is intimately connected to the organization of the brain, why would we bother to ingest a chemical to effect the brain, to effect the mind?

Terence: I didn't say it wasn't intimately connected. I just said perhaps it wasn't generated by it. For instance, think of a television. It does not generate the signal that it receives but, by making changes in the television, you can certainly change the quality or you can get new channels, or wipe out all channels. So I see the brain as a receiver and the chemicals as various resistors, tubes, transducers, this and that, which you drop in and then say "Well, what do we get if we turn to this channel...?"

Question: But you do believe that you have your religion, whatever your parents told you, inside that brain?

Terence: Perhaps we can have the best of both worlds here; perhaps there is a small reservoir of personal experience and memory that is actually coded into the wetware of the brain, but one of the things that's always struck me about the psychedelic experience is that if you take the theory of evolution

seriously, then you have to say, well, if evolution is an endless economizing of what is good for us in terms of maximizing our survivability, what in the world is all this information doing there that is released by the psychedelic? Why should I see the planets around Zeta Reticuli? Why should I see all this material that cannot be organized by my linguistic faculties? It seems as though the evolution of the organism did not sculpt and strip away the accessibility of that information. It remained accessible because it was actually independent of the organism, consequently the evolution of the organism did not modify or limit that information. Interestingly enough, the same problem can be posed of Tantra. Obviously, evolution economizes the propagation of the species; without that there is no evolution. So why in the world should there be a fantastically transcendent experience that is accessed through the control of ejaculation? In other words, all evolution pushes for that to happen; how can denying ejaculation possibly deliver an important and transcendent experience. Again I would argue that it's because there are fields of information that are not modified and filled or lost according to the evolutionary needs of the species of the individual. These fields, these psychedelic information fields, are there to be perceived in the same way that three-dimensional manifolds are accessible.

Question: Would you say something about exteriorizing the soul, riticuli??? the body and, perhaps something about the balance to strike between these two?

Terence: I think alchemy, in the Western tradition, is the great way, the great metaphor for doing that. The alchemists in the late phase, fifteenth century forward, were talking about the stone -- the sophic hydrolith -- some kind of thing which was matter but beyond matter. It was exteriorized; it could do anything, and yet it was somehow simply material. Yet it had all the properties of thought. When we went to the Amazon in 1971 -- the incidents that are written about in *The Invisible Landscape* -- what led us down there were a series of reports about a plant preparation called ayahuasca which some of you may know about. It is a beta-carboline DMT combination. There were reports that on ayahuasca there were shamens who vomited a black fluid that was not visible to anyone except other people who had also taken the plants. We were told that they would vomit this fluid as part of their curing ceremony. They would spread it out on the ground and look into it. It was described as a phosphorescent, obsidian black, translucent material. It was translinguistic matter. It was, as James Joyce says, "all space in a nutshell". There were stars in this stuff...it was impossible. It was not simply a body fluid in the normal sense; it was actually a product of some kind of metabolic process that you could think of as transdimensional in some sense. One could think of it as a psychedelic molecule that had its trip on the outside of itself so that to look upon it is to see the psychedelic phenomenology unfolding. But it was liquid and not fixed. Our idea was that if this had any objective reality to it at all, then alchemical metaphors could be brought to bear on it. Our goal was to fix this translinguistic material. It is essentially one's mind exteriorized; it has one's name written on it. If you need to take a shower, you just stretch it out over your head and water comes out of it; if you're hungry, you eat it; if you need to go somewhere, you sit on it and it takes you there; if you need to know something, you ask it and it tells you. It is something which we have a great deal of trouble conceiving of because it violates all our notions of category. But something like this will come. The fact that it can be experienced in the psychedelic state seems to indicate that it is only in the imagination. That

means that all that is necessary to experience it in three-dimensional space is for one to be in the imagination. Then it will be found not only to exist but to be a microcosm which is mirroring a macrocosm, which is also in the imagination. It's a way to cosmicize the self and yet realize it as an object which you can wear as a bead around your neck or put in your pocket or carry in your mouth.

Question: I wonder if psilocybin ever told you where it came from? I know in the forward to your magic mushroom book there's a wonderful quote from the mushrooms.

Ralph: Which was a discussion we had the day we met....

Terence: That's right. I don't believe everything the mushroom says. I don't think you can believe anything anybody says or all that anybody says. My brother was telling me just recently that psilocybin is, I believe he said, the only four hydroxylated indole which occurs in nature. Well, that's very interesting. That single fact right there seems to me to make good grist for an empirical argument that this gene was inserted into Earth's ecology from outside. How else could it be that the only four hydroxylated indole in nature could be associated with this organism? Psilocybin occurs in a number of mushroom species, but they are all fairly closely related. It seems to me the whole problem of extra-terrestrial intelligence has been ill conceived. The scientists have been allowed to make the rules of the game and their rules are very self-limiting. The current, rather primitive, state of molecular biology is already talking about taking control of the genetic code and genetic engineering and that sort of thing. Obviously, once that's done, once a species discovers how to do that, it's form is no longer dictated by the evolutionary constraints of its planet of origin; its form is dictated by imagination. If a species wanted to radiate through the galaxy and was searching for contact with other minded species, a good approach would be to create a probe which is more biology than technology. After travelling a given distance, say one astronomical unit or something like that, this probe replicates itself into four and then, as these probes move out from each other at a certain astronomical distance, they replicate again. What you get is an expanding sphere of probes, but the number of probes is increasing as the sphere grows in size. When any one of these probes contacts a world where there is the potential for the evolution of minded beings, a gene is tailor-made or is already in existence in the programming of this bio-mechanical probe, and it inserts that gene into an organism or set of organisms that can be seen to have already occupied their ecological niche, so they are not going to undergo radical evolution. The fungi are in this category. If you want to write a message to someone, the pyramids are six thousand years old and they're wearing away; the only slate you can write on and hope to have your message last over tens of millions of years....

Ralph: A self-replicating one.

Terence: Yes, a von Neumann machine. The DNA will carry a gene along for hundreds of millions of years, unmodified--the morphogenetic field. So then when this psychoactive molecule is taken by a primitive human group, shamanism emerges. Shamanism is about predicting game movement and weather on the functional level. In hunting and gathering groups, this is what the shamans' prognostications consist of, because these are the only future events that

matter. Movement of game and weather; this information is being fed into the ecology from the probe--the part of the probe which remained somewhere else in the ecology. I don't know if psilocybin throws open the door to contact with a minded species like that, but it seems to me highly possible. At the level of fifteen milligrams, which is usually five dried grams or so of mushrooms, the phenomenon of an organized entelechy, a voice speaking with greater knowledge than you or your subconscious possess, is very marked. I began this evening by talking about how the Freudian and Jungian maps were inadequate. I was just edging up on this matter. For Freud and Jung a voice in the head was pure psychopathology. I am saying that beyond their model there is the voice in the head which is, simply, the contact with this sophisticated entity. It's non-technological, you know; this is another unsettling thing. It doesn't come in enormous ships at hyperlight speed. No, it radiated through the stars by the slow pressure of radiation. The spore itself is one of the hardest organic materials known and has an electron density close to that of metals. Imagine the mushroom shedding the spores which then, by Brownian motion, percolate to the top of the atmosphere of a planet. As they pass through the outer levels of the atmosphere of a planet, there is a lot of electrostatic charge present, and they pick up what are called global currents, which initiate electron flow over the spherical surface of the spore. These global currents become, perhaps, superconducting; at that point the imperviousness of the spore to radiation is such that it has no trouble surviving the drift between the stars, even if it has to lay dormant for millions of years. And millions of years is an unnecessary amount of time. The earth goes around the galaxy every 275,000 years. There is great percolation of material in the galaxy. I will anticipate a revolution in biology right here by making a prediction which will be obvious to everyone in this room, but which no biologist has ever said: Outer space is only a barrier to species drift, no more a barrier to species drift than oceans are. All of the processes of drift and establishment of new populations on desert islands that we're familiar with in earth-based ecology happen on a galactic scale. The galaxy is an organized bio-system; it's simply that the species which developed the strategies which allow them to drift across the galaxy are either minded and do it as we propose at our current level of civilization to do it, with ships and suspended animation and the whole gamut of science fiction techniques, or biology can carry a species to it another way by creating a spore-bearing organism. Or it may be that once the mushroom was a monkey, but it decided to repackage itself as a mushroom because that was a more viable evolutionary strategy when the galaxy is viewed as the biome that one wishes to populate rather than the surface of a planet. Let's call a halt. Thank you very much.