### #26 Formal talk-30102006 Morning day10 Lila recording day 10, morning 30/10/2006 061030000 1 Hr 48 min Recording 26

Y: Knowledge is called tacit knowledge. The word tacit means in Greek silence or by silence here tacit is being used as no consciousness. Explicit means in the consciousness and tacit means not in the consciousness. So explicit knowledge means knowledge that's in the consciousness no matter how it got there. Whether it was put there by the person, or it came in there by information through the senses, or it was arrived at through conclusion and though process. It doesn't matter as long as it is conscious, the individual is conscious of the knowledge it's explicit knowledge but if they are not conscious of it, it is tacit. And I have called this direct knowledge because while tacit it could be really tacit hyphen direct (tacit-direct), to be correct. Because it is true that it is not in the consciousness but it got there by direct means. Well it wouldn't have to get there by direct means but what I'm referring to here is here is direct knowledge. To be tacit it just has to not be in the consciousness at the moment, and could have gotten as explicit knowledge in consciousness through perception or decision or whatever. And then one is not conscious of it so it is stored in the tacit realm. But I'm going to add a factor that direct knowledge means it has gotten by this specific means that I have defined. That one is in a state by ones own free will originated act, of being in a state of knowledge of a non-physical individual, and that act is done by an non-physical individual. So it's direct knowledge but it is also tacit. It's not in consciousness. But the framework that the epistemologist are taking with regard to it, does not include this direct aspect. So just to call it tacit is not correct, it has to be direct and it has to be tacit, and from it we can derive consciousness. From this tacit realm, this unconscious realm. Now another point the difference between two acts which is an intransitive verb. Intransitive verb, a verb to act, an a noun an act. An act is a noun. It is a non in the way I am using it here, it is a non-physical act. And that act is both a verb and noun. Being non-physical you can do that, because I am saying so. It is a verb in that one does originates this action, and what one is originates is a state. Which is the act itself and the state of knowledge are one and the same thing. This is in the timeless non-physical realm and it is direct. It is a direct act and it includes the entirety of what an individual is. Which includes not only the ability to act but the acts that one is making in the timeless sense of the word making. So if A acts, that is exercises its ability to act and acts to be in a state of knowledge of B it includes not only B attributes but all the states both to be in the state of knowledge that B is making and the states of no knowledge that B is making, is included. Alright now there is a further point. How you ask? How do I know that this is so and I answered you yesterday. But there is a further point about that. In... when I am presenting here, is not the evidence that I discovered about this happening with myself and by first person inquiring people, about their first person experiences. I am not saying that, this is an assumption. It is just assumed that this is true. Period, it's an assumption, so it is not a matter of how do I know, it is an explicit assumption. Or you could call it an axiom or you could call it a premise or its a hypothesis is a little to weak.

B: Axiom. Axiom is to strong then.

Y: Axiom.

B: Stronger that assumption.

Y: Yes.

B: You should decide. Axiom is better because whenever you start something you have axioms. And it is theory which doesn't require proof.

Y: Well that is in mathematics.

B: Ah I know.

Y: But in the philosophy of science they use hypothesis and in philosophy they use assumption. It all means different... Slightly shades of different but you start with it in any case. The other day I read out load the introduction to a paper that I gave to the Society for Scientific Exploration in which I suggested a modification of the scientific approach in which, is allowed that you make an assumption and it follows logically and consistently to conclusions that match measurements, conscious observations, then that should be allowed. That is the assumptions should be considered as one possibility of ultimate truth. So those are my opening comments before we start discussing some of this.

B: Later on then I'll tell you something that about this. Because it is considered in a...

Y: This is apropos you can do it now.

B: You say this is in mathematics and this is in philosophy but they are not that separated, at least maybe our ambition is to take them closer together. And it is not that philosophy was not thinking about all these questions and of course you know. So in there... There is so called propositional calculus which is part of mathematical logic in which there is something about this, it is called fantasy, although in mathematical sense. Fantasy, axiom or premise or society.

Y: Who worked that out (Quinn?)

B:( Quinn (Barkeley Quinn). For instance you enter fantasy like we are doing now. Now I am using term fantasy in stronger meaning.

Y: (acknowledges)

B: And you do an assumption. You start with an assumption. And you don't know whether your assumption is true or false. Maybe it will prove to be true maybe it will prove to be false. But what comes out is a conclusion out of fantasy is 100% true. Although I will never know whether, maybe not never, but I still... When I come out of fantasy I still don't know whether my initial presumptions was true or not. How does it work? For instance I enter into fantasy I put an axiom, for instance I say non-physical individuals have four attributes and then out of this I derive 100% valid conclusion,

then out of this I derive 100% valid conclusion, then valid conclusion or legitimate transition, whatever we call it, transition which is allowed into the system for one to two to three. For instance I start with X I go further, further, further, on and I still don't know and I go out of my fantasy. I still don't know whether X is true or not. But I have obtained Y here for instance as in conclusion of my assumption. For which I still don't know whether it is true or not. And finally I go out of the fantasy and I am... I have full right to conclude that if X then Y. And this is 100% true. Even though X is still maybe not true, I don't know whether X is true or not. Maybe it is 30% true or 40% true, but my conclusion if X then Y this whole thing compound statement if X then Y is 100% true. So no matter whether my presumption is true or not my conclusion is 100% true, because I say if X then Y.

## Y: Yes.

B: Yes. If X then Y if the non-physical individuals have this attribute, this attribute, this attribute, then all my conclusions are 100% true. And if someone wants to ruin your conclusions, he could not do so because they are firm because they are due to legitimate transitions for the assumption to another conclusion, to another conclusion, to another conclusion, to another conclusion, and then the final conclusion which if X then Y is 100% true. What he is allowed to do, he is allowed to ruin the presumption.

## Y: Yes.

B: For instance, if I say, "If the weather is fine, I go to the city." So X is if the weather is fine and Y is I go to the city. So my premise, not premise but something stronger, my theorem, I'll use this mathematical term. My theorem if X then Y is 100% true. If X then Y if the weather is very fine I'll go. Maybe I won't; maybe I haven't went, but it means that weather was not fine. But this theorem of mine is 100% true. So this (is) why in all this programming language, we must have something like this. We must have if/then/else common in our language. It is needed and we must have something like fantasy, fantasy rule.

# Y: Ok.

B: May I say something else just shortly and maybe we maybe later we shall come to it. When you say ability to act, an act, both an ability to act... and both acts are both attributes of the non-physical individual, then means this acts. Ability to act is the same for every non-physical individual' but acts are different. So these attribute is... with this I put this attribute into the same category in which I put the 'who' attribute because my choices, just the way who am I; no one else is who am I. Just the same, my choices are my choices and mine alone. So this makes me different. My choices make me different from any other non-physical individual. So if I say the non-physical individual has both ability to act and acts as their basic attributes, then these acts come to the same category as 'who' but because they are unique. My choices are just my choices. But ability to act is something different. Ability to act might be the same for each.

Y: Yes, we all have the ability to act.

B: Yes, but different choices. But we exercise our ability differently, so basic attribute should be still ability to act. And by exercises, my basic attribute which is ability to act, I make different choices. At a point you said both ability to act and acts are basic attributes of the non-physical individual.

Y: Ok. I'll read one line here of my comment.

One of the attributes of the non-physical individual is that it is the ability to originate itself into states of direct knowledge or of no direct knowledge of a non-physical individual. Then I say, "Strictly speaking one does not have the ability. What one is, is the ability to originate oneself into such states."

#### We discussed that.

The idea of direct knowledge is new. This is why it is called direct knowledge, to differentiate it from either ordinary knowledge or indirect knowledge. Direct knowledge, as its name implies, is not arrived at through a process of perception.

So I am clarifying what is meant by the direct part here.

But by fiat, by originating oneself into a state of direct knowledge of a non-physical individual...

It's how he gets into that state.

The direct concept includes that nothing or anyone can intervene in one's being in that state of direct knowledge. The word direct knowledge as used in this paradigm does not mean consciousness.

So that differentiation has to be made between consciousness or explicit knowledge and tacit knowledge, and the difference between direct knowledge and indirect knowledge. Or do we say indirect direct knowledge?

Y: Ah yes, maybe, because you are in indirect. You attain it through another individual, but you get their direct knowledge.

B: Yes, then this is great. Then this will resolve the problem we were mentioning those days about self-enlightenment and being in indirect/direct knowledge of something.

Y: Yes, and this is not, that is not made clear here. So that has to be re-done. But this example about your mother's maiden name is one thing. What was your maiden name?

B: The same. I have kept my name.

- Y: So your father's name was.
- B: (Decingcosfski.)

Y: And then your 'kova' being female.

B: My what?

Y: Your 'percin kova'

B: Yes.

Y: Tecova is the female.

B: Ah, yes, female.

Y: He is the scheme of the men.

B: Strictly speaking Percinkovska, but Percinkova is Percinko.

Y: Percinkova, Ah, that's how it is said. OK. I neither had the knowledge nor was I conscious of it until you told me. So that is another state where one just simply doesn't have knowledge. But in regard to being in a state of knowledge or no knowledge, one is in either one or the other. Now I am not sure that that is right. It could be that one could be in the state of knowledge by choice, and then just cease to make that act. So that one was not is a state of no knowledge, but was just...had no act at all. It might be that way. I ran into some logical troubles later on taking that approach. But I would have to have someone such as you to check it. So when you're working on this in the future, consider the possibility that instead of being in either the state of knowledge or in a state of no knowledge that one could be in a state of knowledge by choice by origination. Or by origination, one might not be in any state whether it be of knowledge or anything else. You follow?

B: I follow you.

Y: That is different than being in a state of no knowledge.

B: I follow, but my feeling is maybe my perception is wrong, that what you are talking about is not in the basic level which we already defined but on a higher level, you know.

Y: No, I don't know.

B: Because if we change the basic level, it will affect many other perceptions we have here, many other statements.

Y: That's true. As I said, I ran into trouble using the alternate assumption.

B: Then all we have done was based on this assumption.

Y: Yes.

B: If we...

Y: And they work.

B: And they work. Yes.

Y: The thing is that I haven't worked out all the effects of being in a state of no knowledge.

B: What I was...

Y: Yes, I was working some of them last night and I think they are right.

B: Then we should start from the beginning with another assumption.

Y: No, the assumption, I think, is right.

B: But the...

Y: The state of no knowledge is a state that one can act to be in. But that is different than not acting at all except that to act to be in a state knowledge. And then, there is no other state. It just would be the absence of the state of knowledge. You see the difference between being in an absence of a state of knowledge or being in a state of no knowledge. You see that those are different?

B: Ok. But now this is something else; and it is closer to what it should be according to my opinion. And it's doesn't contradict. But what I understood you was that one might be in state of direct knowledge, and then ceases to be in state of knowledge like this choice of his seemed to disappear. But this is something different; this is something different, this.

Y: I don't... I can read upside down. What does this say?

B: Absence of state. You say...

Y: The absence of state I...

B: Absence of state, it is. I don't want to use the term 'is prior to.' I put myself into a state of knowledge to oneself. I am in state of absence of state somehow.

Y: I worked with that for a long time. And I could not account for all the phenomena and the physical appearance of things. But by working with no knowledge, a positive state of no knowledge, then it works out. But I would like you think about both options and see which ones you think works the best.

B: For instance, if we are looking on the charts you have made, according to Monte Carlo, you have one state and one state. One state here and one state here. But this jump is what you are talking about in a sense. Isn't it so?

Y: No, it's not so. At least I don't see it. I think...

B: Because there...

Y: I think we're talking about slightly different things.

B: Maybe. There is such position or state of affairs of absence of state. Yes, there is. But

Y: There is that...

B: Somehow we should locate it somehow in order to proceed because, you know, if there is different approach, this is why I said we have.

Y: Let me show you.

B: We have logic first, then algorithm level second. And now which level we are. This is what I am...

Y: You are way ahead of me. I'm not anywhere near that.

B: Ok.

Y: We have A arrow B; and then we have B is in a state of no knowledge of A. A is in state of knowledge of B.

B: Ok.

Y: Or we do this and say that this does not exist. And we just have this.

B: Yes, I understand.

Y: This is not a state of A being in a state of no knowledge of B. It's in a state of the absence of knowledge of...

B: Which is exactly what I was talking about, only on... only I applied it for a complex situation of your charts.

Y: What?

B: You are giving me very...the most simplest example possible A to B for A B; and this is the same as this.

Y: More complicated one.

B: More complicated, instead A to B, there is a whole network A, AB, CD.

Y: Well, let's talk about simple one.

B: Yes. Let's talk about this simple one. This I understand, yes. Yes, there is simply a state, how you put it, of absence of state.

Y: That is different than the state of no knowledge.

B: It is different than the state of no knowledge. And there are infinite of those states.

Y: No, there's many.

B: Ok, many. Finite, they're finite.

Y: A large but finite number.

B: Large but finite.

Y: So those are two different things or not. Is the absence the same thing as the state of no knowledge? Or are they different?

B: They are different, yes.

Y: I agree.

B: They are different only; it is very difficult to grasp it and not include illusionary time or something.

Y: Ah, that's a thought. What I was thinking last night was that when (in) the state of no knowledge when you're connected to the whole network, someone's connected to the whole network as it is now. The most there is going to be, mostly past along states of no knowledge to the one individual, to our reference individual. And his state will be mostly of no knowledge states. He will have trillions and trillions, thousands of trillions of states of no knowledge that he is indirectly connected to and that is come to him. And he has one arrow, say, going to one individual that he has direct knowledge of. That is going to affect his state that he has these. But if there is just absence, then he has just one arrow and we make no comment about. He is not in any other states. He's in no states of no knowledge. So this has a big effect on him just as it does in the circuit. He has all these states of no knowledge past along to him. And one state and it makes him in a dull depressed or lower state, a dull state or an uncertain state or a no knowledge state, trillions of them, billions of trillions of them.

B: Now, isn't this...

Y: And somebody comes to take an Enlightenment Intensive in that state, and you say, "All right, set out to directly experience yourself and say whatever comes up." And all these no knowledge states he gets and in one form or another, one pattern or another. So it takes him days if not years to get through all that stuff in order to finally get separated from those just instantaneously, so he can have an instantaneous experience without them which comes from actually cutting off that one arrow some where else and putting an arrow to himself. I am just saying this as a... to begin to show some of the functionality of the no knowledge state, the states of no knowledge of this individual of that individual of that individual all due to the having not only made the decision himself to be in a no knowledge state of him but to get all the no knowledge states that the one that you are accepting is in which includes all his no knowledge states that he got from all the ones that he's not accepting.

B: No, now we are... you remember at one point I mentioned to you that states of no knowledge is a potential.

Y: Yes.

B: And now are we not talking this similar thing, if not the same, that all those no knowledge, states of no knowledge are potential. And this is what complimentary graph is. From the very beginning and in my first second lesson, letter, I mentioned to you that complimentary graph to one that we have could have a meaning. And now you are explaining this meaning. Isn't it so?

Y: I am not sure what you mean by complimentary graph. You will have to remind me.

B: Complimentary graph. First I'll show you the graph and then the matrices. In complementary graph we have, for instance, A B C E D non-physical individuals. And A is in state of knowledge of B. This is the positive graph. And now the complimentary graph to this one is A is A B C D. A is in state of knowledge of B, A of C. A is in state of knowledge of D, D B. B is in state of knowledge of D. B is in state of knowledge of ... I'll show you first with non-directed graph because it's easier.

Y: I think I know now. You have reminded me. Everything that is missing in this one, is in that one.

B: Yes, is in that one. And in terms of matrices, if you have zeros, ones, zeros, ones, where zeros are state of knowledge in the complimentary graph, providing we don't have this... Oh, maybe, we could include this also. We have where I have zero. I have one here; and the other way around, I have. So this is a picture of this one, only zeros and ones are changed. It is easier to see in undirected graph. We have A to B; and in this other, we have A to B

Y: Like (Eser?)

B: A B C D

Y: Yes, I see what you are saying now.

B: B to C, C to D, B to D, all accept this one. So this is a complimentary graph.

Y: But is that the same?

B: It's the potential.

Y: Potential, but is it the same as the states of no knowledge being accumulated by the referent individuals?

B: It is not the same; it is another ingredient into the picture.

Y: Ok, then we agree.

B: Ok. But this is another. When I make a choice to be in a state of direct knowledge of another non-physical individual, I accept not just its states of being knowledge of individuals, but also its states of no knowledge of other individuals; and it stresses me somehow.

Y: Exactly.

B: It is a great pressure from me because I accept all his sorrow, so to say, all his non fulfillments.

Y: Yes. And the cure for it is to accept all of those that he is not accepting. If you accept them, and then you will have direct knowledge of them.

B: Ah yes, yes, and he still does not; I leave him alone to do his best anyway.

Y Ok. But that's not part of this.

B: Only another point not to forget. Maybe later on we shall come to this.

Y: Sure.

B: Now, when you are including also states of absence of state, now this is different. Now we could not just simply say, "This is complimentary graph." Now we have something else.

Y: Yes, it is.

B: Which we should identify what it is.

Y: We should at least know...

B: Maybe, this is just the underlying non-directed graph, you see.

Y: That mathematically, that may be true.

B: But to help us thinking, we have a positive graph of positive states of choices to be in state of direct knowledge; this is G. Then we have G compliment. And this is in matrices one, zero, one, zero, zero one. Then we have G compliment which is states of no knowledge which is potential of this original graph where we have one. We have zero. Where we have zero, we have one, zero and so on. So these are potentials. Or this is what I still have to do in order to be fully enlightened individual, for instance.

Y: (acknowledges)

B: Or in order to have a fully enlightened universe of (N) square, this is what is missing. This is the complimentary graph. And we have an underlying non-directed

graph. No, not the underlying undirected graph, now, I see. It's not to the absence of states, but simply the... just individuals without relations, absence of...

Y: I see, yes, that is underlying.

- B: That is underlying.
- Y: Then you add...
- B: Absence of states...
- Y: Then you add the ability to act.

B: Then you add the ability to act. Not then, but then the illusionary then.

Y: Very good.

B: And maybe the underlying non-directed graph means something else, something forth, something not seen yet.

Y: I would be open to that possibility.

- B: Maybe, we should ponder.
- Y: Ok. We'll read on and see what else is inadequate about this current write up.

The word direct knowledge as used in this paradigm does not mean consciousness.

One can directly know something and at the moment not be conscious of it. But one can bring it to one's consciousness a moment later (so to speak). Whereas, if one were not in a particular state of direct knowledge, one could not bring it to one's consciousness no matter how hard one tries.

B: So we have potential here; but we have greater potential here.

Y: Ah, yes.

B: We have potential here. I am missing something.

- Y: But this...
- B: I missing some. I am not (), but this is great.

Y: But this...

B: There is greater potential here because the whole potential...

Y: That's also something to do with entropy. (Question for myself, "What is the greater potential?")

B: Yes.

Y:

One is in a state of direct knowledge only by fiat (by one's own origination) and not by perceptional process. By indirect knowledge is meant, as the phase indicates, knowledge obtained by or through a means. As used here,

However, I could say...

Indirect knowledge means it was obtained through (or by way of) another nonphysical individual. That is, if non-physical individual B is originating itself into a state of direct knowledge by its own fiat of non-physical individuals, C and nonphysical individual A, by fiat, is in a state of direct knowledge of individual B. And if B's state of direct knowledge of C is included in A's direct knowledge of individual B, A will be in a state of direct knowledge of individual B. And is also is in a state of indirect knowledge of C.

B: Indirect direct knowledge. (Vijay's note: Direct knowledge and other's direct knowledge which is indirect for you as the observer.)

Y: Of indirect direct knowledge of C.

B: So we should add direct here, isn't it so?

Y: Probably. Or some other word that means the same thing. I am not sure what to do about it.

B: It is very important, later on.

Y: Yes. This has to be worked enough or explained enough so that time is easy to understand because time is A arrow B arrow C. It says here, "By way of B." And also, I have just made...I made a rule that rule one is that the individual being in a state or knowledge of another individual is also not only in a state of knowledge of that individual's attributes but of all of his states of knowledge and of no knowledge. And I say that the reason why this is so, without the rule, you could derive the rule, is because not to include them is to not be in a state of the individual. A state of knowledge of that individual because the knowledge of them is that they are in that state. B is in a state or several states or at least one state with regard to C. And that the act of being in a state and that state are one and the same thing because there is no time. It's not this and then as a result of that this... And now (?) is you make the act as a result. You are in a state of knowledge. You act to be in the state of knowledge. And you're in the state of knowledge which includes all of B because what B is in is in a state of knowledge of C. And that is what B is now or in the extant situation. B is in that state. And so it's B; it's not something he has over here in a bag. It's him; he is in that state. So to be in a state of knowledge of B is to include...is to include all of B which is all his attributes and his states.

B: But this is the same if you are saying, for instance, to be in (a) state of direct knowledge of B is to know who B is, who B is.

Y: Yes, it includes who. And you include in 'who' his acts. Is that right? I think it is a combination of who he is and his exercising his ability to originate acts of knowledge.

B: This is correct because it is so. Because I was stressing and you, of course, another way, maybe, that accepting B is accepting his choices which are different from mine. But there is a sameness between my ability to act and his ability to act. And this brings consciousness into picture. And this is all correct. It is easy for me to be in conscious state of B because I have the same ability.

Y: That's the conscious state.

B: Yes, but it is not easy for me to be conscious of 'who' B is and to be conscious of the choices B has made because his choices are different from mine.

Y: Yes, that's consciousness.

B: That's consciousness. So we differentiate between those which makes this picture be so strong and so powerful and so true.

Y: Yes, it does. But let's return back to states of knowledge. This is important. And I don't want you to get away from it. In this is that A is in a state of knowledge of B which in... forget about consciousness for the moment, which includes B's states of knowledge that B is in or his states of knowledge that B is in, both.

B: And 'who' also.

Y: And all of the attributes, 'who' he is, his existence attribute, his ability attribute; and because we don't include his acts we're not including his attribute of having the ability to act because the ability to act and his acts are two versions of the same thing, two ways of saying the same thing. So A being in a state of knowledge of B includes B's states of knowledge and no knowledge that he's in because to not do so is to not accept B's attribute of ability to act because you are not accepting his acts. That's all I am saying. It's not a matter of a rule; it's a matter of what actually is the case. And that is all I am trying to say. If you have got that, I am happy. I had...I sent out some things to some of my former students. And the bright ones read it. It was about the Lila Paradigm. This one is Ed Riddle; and he wrote back. He says, "How can A be in a state of B acts? How does he get it? And I am just explaining how that is so. That A being in a state of knowledge of B does include his acts because not to do so is not accepting or not being in a state of knowledge of B as B is, which is the ability to be in states of knowledge. And if you don't let yourself as A be in a state of B's acts, then you are not in a state of knowledge of B.

B: Yes, because, otherwise, if we just stick to the abstract ability to act, then we stay in a not identified state of what could be actually, and not of actual non-physical individual. I understand this. But I was implying is that you say if I don't accept B's states of being in state of knowledge of other individuals, then I don't accept. I am not in state of direct knowledge of B in a way.

Y: (acknowledges)

B: And it is true because just to...I myself have ability as a non-physical individual. I won't say have, but I am, for instance, my ability. And the other individual is also his ability to act; and this is abstract. This is the same for each...one non-physical individual which makes my choice special, to be in state of direct knowledge of a specific individual B.

Y: Yes.

B: It is my accepting his states of knowledge. This is so. But then this includes also 'who' so we once again...we come to the point when we must differentiate between, we must put enlightenment into picture.

Y: Or consciousness.

B: Yes. Because we say... somehow, maybe, implicitly we differentiate between 'who' which is something just this individual could have and all the other attributes.

Y: (acknowledges)

B: But in a way, my choices are also just my choices. These are my choices and no one else's. In a way, it is maybe a bit weaker; but also the same as 'who' am I as my identity. It is part of my identity to have this particular choices.

Y: On the level of direct knowledge 'who' is always included. But on the level of consciousness, 'who' is excluded except for yourself.

B: Yes.

Y: You have that table handy? That chart you just made. This one, yes.

B: At certain point, we could include this.

Y: I am talking on this level now. Consciousness is based on this level. And the physical world is based on this level. You could turn it upside down and have it the other way to. Direct knowledge is in heaven, consciousness is in a conscious individual's bodies and the physical world underlies that. You could turn it this way too.

B: Because there is no space.

Y: But when I am talking now, I'm talking just about the direct knowledge. And direct knowledge always includes all the attributes and all the states they are in whether they be states of knowledge or states of no knowledge.

B: Ok.

Y: And if A originates himself in to a state of knowledge of B, it includes all of B states of knowledge and his attributes.

B: Ok.

Y: Then we can get to the consciousness states. It's derivative on this, so you could turn the arrows around then. And you could say, "Consciousness rises up out of direct knowledge; and out of consciousness, rises up the apparent physical world." But it is all based on this. But I don't know which way the arrows should be; and I don't know which order it should be in. Every person you talk to has a different way of thinking about it. If I write a book, I am going to write all the different versions. And show them all. This is...some people understand it this way; some people understand it this way, some people prefer this way in there mind. And they're all wrong because they are all in their mind. You have to just understand it as a pure concept, not visualized in the space or time of the mind. However, I was...during this discussion we've been having. I've been thinking that we need to back up again. The order is wrong. We have to get back to self-enlightenment, self-acceptance, self state of knowledge of yourself. I think we are going to have to discuss that. But you can't discuss everything at once because in order to put C out here and get time, we have a different process of what role does B play in it. Well, I have him put in as memory, the unit of time in the past. That is correct. But how does it get to be that way in your mind so that we have this phenomena? And I put the word on it and call it memory. But that's just a label. What is the understanding of the principle? And I am trying to get us to that level of understanding. I don't know if I am up to it right now. I think it may be better if we change the subject for awhile. Maybe, you could share something of you stuff.

B: Yes. I will tell you something about algorithms and about how to proceed with Monte Carlo method and be able to recognize the patterns.

Y: Yes. I wanted to see that. And I want you to watch and see if it's different than the way, the approach you have taken whether this is more useful or less useful than the one you have taken, or what. If we have both of them, and they come out with the same answer, then we'll have pretty good confidence in it. So I really think this is important.

B: Yes, it's very important and it will open up a whole new field. First of all, I was thinking about recognizing patterns in matrices. For instance, find tau particle or just we may name it a forked structure. I was working on it...it is rather long but maybe we shall start.

Y: So you start with this, and then you write this step by step; that's the algorithm. You do this, you do this, and then followed by this, and followed... It's a program.

B: And I have some new ideas...

Y: Ok.

B: Included into picture. This is one thing. It is rather long. And the other point is pattern recognition. I know how to do this pattern recognition. It is a whole field in science.

Y: Did you do either of these two approaches; or did you do a separate thing?

Bret: Since she hasn't said what the approaches are yet, I don't know.

Y: One is using the matrices and...

B: It's long. Maybe I'll tell the whole story and then conclude.

Y: Then I'll ask. Ok.

B: Because it includes something new. This is a whole field in robotics, pattern recognition. It is how the robot differentiate between different objects he is seeing. It is very difficult because for him, it is all the same whether this or this or this. And pattern recognition is a whole science actually, a whole field. And people are doing PhD just in pattern recognition; it is very complex. So first, for instance, let us name the rows, Li, because they are knowers. I mean, they...in the matrices presentation in rows wherever I have one this, means these ones are the out-going arrows. So these rows are Li, the knowers, and La, the known.

Y: Ok. Very good.

B: So this is very in favor of...

Y: Clever.

B: I mean Lila Paradigm. We have Li's and La's, Li and La.

Y: Ok.

B: And so Li all the rows are the out-going arrows.

Y: Arrows or the acts of knowing.

B: The acts of knowing. And

Y: And this is what is known.

B: Yes. And when, for instance, I have a matrices... maybe, I'll find a matrices. So far I have just zeros and ones. Now I have included two and three. I'll explain what does it mean. For instance, if we are looking in the Li or the row Li, Li lines are denoting the out-going arrows or the states of knowledge, the acts of knowing of Li. And if we are observing a column or La these are the ones...

Y: What do you mean by observing a column?

B: Just look at it. Just recognize zeros and ones.

Y: I don't see you on here. Are you one of these or something outside of the system?

B: This is just representation of the graphs. This is another representation of the graphs.

Y: Yes, I see that, but you say observing... Look at this.

B: Look at this, yes. I now...

Y: But that's not part of the algorithm, looking at it.

B: It could; it remains. It will be part of the algorithm when I put here a comment, do while zero if A11 is zero A11 to A.

Y: Ah!

B: Go, go, go. One to have one.

Y: You see, I am ignorant about programming. That's why I have to ask these questions.

B: Yes, great!

Y: So you, actually, write that into your program to look at column so and so.

B: Until I find one. When I find one, I stop here. And now, the program branches. I have comments, comments, comments. I come to this point. And when I recognize I have one here. If it is one I go to do something.

Y: And there is a way of writing down something that tells the computer to check if the matrix to see if it's... if a one is there or .... Ok.

B: Yes.

Y: That's what we mean by looking at it.

B: And once I find one, this one shows me from which individuals are in state of direct knowledge of this particular individual. This is why I name it La; it is the known. So this individual... this one shows me that if this individual is known by B. This means in this individual, in this case N, the incoming arrow is B. So N is known by B. So all these column are La. They are known, known from. For instance, if I look at this or observe this column, the non-physical individual C is known by Y. This means that Y is in state of direct knowledge of T. T is known by Y and T is known by C. So these are La; and these are Li. If I look...

Y: In that case, that would be common knowledge. There are two of them...are in a state of knowledge of the same thing, of this one.

B: Yes. This means in T there is... One is T, one is Y. Y is in state of direct knowledge of T. And the other one is C. C is also in state of knowledge of T.

Y: Right. So we have common knowledge.

B: Yes. Yes, we have common knowledge, yes of T.

Y: So that's one pattern recognized right there.

B: Yes. So this was done. Now I have gone further on. So once I have this picture... So all the out-going arrows, for instance...now by arrow, I mean something else. If I start search from this ones for...for instance, I start from L; and I am searching for a individuals which are known by L to which L is in state of direct knowledge of. So these are the out-going arrows. I find the next one. The next one is E. First I start; I see that L is in state of direct knowledge of E. I go to E. I see E is in state of direct knowledge of Q. I go to Q.

Y: And this gives you which pattern?

B: I go to Q' then I go see Q is in state of direct knowledge of M. I go to M and see M is state of direct knowledge of 1.

Y: I see, so...

B: And so on and so on. I proceed. This is like going along a circuit.

Y: A spanning Hamiltonian.

B: A spanning Hamiltonian. And whether it will end in the starting non-physical individual will depend on whether all these circle through the matrix. We are bound into one of the L column because in order to be in the Hamiltonian, L should be both Li and La.

Y: (acknowledges)

B: It should be Li and should be La. But the whole process goes through once because one shows connection. So I might start with L. I see L is preceded by E. I go to E. I see... for instance, I ignore this first one. I go to the second one, and I see that E is preceded by L. I go to L and I finish to the L column. But not in one which means I should go further on to P, then to C and so on unless it happens. And I show you with a power point presentation that when finish this spanning Hamiltonian, I will end in this B which is 1 in L. And if I hit the one in the L column, it means that spanning Hamiltonian has closed itself because L shows the known.

Y: So the pattern you have found is this Hamiltonian? In this example?

B: Yes, it was known by now. Now I have...

Y: Can I ask a question before you go on?

B: Ah, yes.

Y: Because I am not sure where this came from. In other words, what put these great squares there? How did they get there? You have to generate this first, don't you?

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B: This is done by ( )
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Y: This is done by random. No, no, no, no, no.

B: Yes.

Y: You have to generate it some how. One way is to do it random.

B: Yes.

Y: You randomly choose one after the other and put them on. And wherever they land is where they land. But say I wanted to not have it be random. Say, I wanted to get it to the edge of chaos. I'd have to tell it some kind of an equation that would tell it where to pick. And it would be not fixed, but still a little random around there.

B: This will be Monte Carlo method. By Monte Carlo method, I will do it with just...

Y: Monte Carlo will generate it? Generate or where do you find the equation from? That is going to tell it what to do, to make it not random.

B: This is why I, when we were discussing Monte Carlo method, this is why I stressed that the ranges of where these random number fall.

Y: Ah. So you change the size of them, and they make it. Ah ha!

B: This was what the idea of this cashiers which one was.

Y: Yes, I remember now... I put... now you have answered the question.

B: Yes, Ok.

Y: I just have to put two and two together, one thing to another. Then you did it. So, Ok, go on now.

B: You have ranges. And so, what I have done do far. I have presented to you in this letters. I could repeat now; or maybe some other session, the way how I find these structures. So this is done; it is explained. I could go through it once again. But maybe I should present to you what I have found now. What was not clarified for me until now was the method how to recognize patterns in terms of computer program.

Y: In terms of?

B: Computer program.

Y: (acknowledges)

B: Now, I have found it; now I know how.

Y: Ok.

B: Because what was concerning me was that if, for instance, we go through the procedure which is known in pattern recognition science (this is a whole science, and

I'll tell you about it.) Then it will be almost impossible because, for instance, we have...for instance, someone could write this pattern like this. Someone is more in favor of order and he puts it orthogonally, to be orthogonal, A B C. Or someone might do A is here, B is here, C is here.

Y: Ah ha. I see the problem, yes.

B: So it is very difficult to recognize and how to do it.

Y: Ah.

B: For instance, when this will go further on, but it will take two years, my estimation, optimistically. My optimistic estimation is because this should be put in Monte Carlo method. These probabilities should be obtained. For instance, we have so far Poisson distribution; then ranges of, then cumulative...

Y: Ranges.

B: Cumulative probability should be found. Then we should find valid random number generator. This is also a problem, you know because the random number you are using in you calculator, it is great. The idea is ingenious, but they are not truly random. They are not truly random. In order to have really accurate process to have our curve really merge into big band line or whatever, we want to do precisely. We might have truly random numbers. And truly random numbers do not exist, a truly random number as we discussed outside the sessions as Paul Davis put it. Only if the number of digits of number is the same as the number of digits or bits of information for that matter of the...

Y: When it's not compressible.

B: Model explaining it, only then this number is random.

Y: When it is not compressible into an algorithm.

B: Exactly, when it is not compressible. But the only way to describe it is just to write it bit by bit. So this is truly random. There is no way to write this number. But to say the first digit is one, then eight, then 9, then 1, then 1, then 1 two, then three, then zero, then, zero, then one, and so on and so on. So there is no other way but to write it down; this is truly random. And so because randomness introduces not full accuracy, it diminishes the accuracy; but we should know exactly how much.

Y: (acknowledges) would twenty three digits be enough to handle N?

B: Yes. I could say, "Yes," but you know when I say, "Yes," it does mean...

Y: Ok, theoretically, yes.

B: Theoretically, yes, even this might be so. But now the idea I wanted to introduce is this pattern recognition will not go through. Now, to tell you more about pattern recognition. In pattern recognition, for instance, when you are using this OCR

programs which is, Object Character Recognition, in order to recognize, for instance, when you are writing this, if someone wants to put into a print form into a visible form, it should use pattern recognition. For instance, his way of writing A is this, but maybe I write A this way, or someone else this way, or someone else is this way and so on. So in order to do pattern recognition, what is being done? For instance, this is common A. Most people write A like this. So this is put into our rectangular and this is then scrambled into little pieces. And then whenever you have bold, you put one there and whenever it is blank, you put zero. So out of this I obtain a table like this one; and I have zero, zero, zero etc. all is zero.

And here I have one, one, one etc. And so this is A, one, one, one, etc. And now they take thousands and thousands of tables like this and find the average A. And then they recognize this A. This A might not be A. So there is a whole chapter in Hawksheader's book which is called the *A-ness of A*, you know which very clever is. The A-ness of A. What is the main feature which makes A to be A.? It is like whoness the A-ness of A which the identity of A which makes... And then he represents a whole big picture of different A, A, A. And they are so different. There is no common ingredient to it. You could not say what makes this A. I could see this is A somehow, but how do I do it. It is not possible to do it with zeros and ones, you know.

Y: Yes, I know having used on my computer. It misses a lot of the time.

B: Ah, yes, when you do pattern recognition, yes, with OCR program. But so this is a problem. But another problem is to do it here. But when I introducing the pattern through matrices, and this is the big advantage of this method and this will prove to be the only method to do... To deal with Lila Paradigm later on which will... which we'll come to more complex stages.

Y: Oh, that's a big statement.

B: It's a big statement. And I firmly stay behind it. It will not be possible at all to do pattern recognition through graphs. It is impossible.

Y: (to this time?)

B: It is impossible to recognize A let alone to recognize a pattern in a graph.

Y: Got it. I accept that.

B: So we must introduce matrices. Maybe not now, maybe not this year, maybe not after two years, but it should be done because it is the only way to do the pattern recognition.

Y: Ok.

B: And now I have... Now I know how. When you do it through matrices, then you are close to these method in which they operate in pattern recognition,

Y: (acknowledges)

B: For instance, since I'll be searching for a forked structure, for instance, not into the graphs. For instance, we have you are big representation here of Monte Carlo, your simulation and this is all represented in matrices.

Y: (acknowledges)

B: When it is represented in matrices and I have already introduced here a method how to find the forked structures, whether we haven't come to it yet. It is complex; it introduces, for instance, when I find one I should change it into two. To know it has been passed not to bump into it once again. And not knowing this is the same one.

Y: Ah ha.

B: So when I passed one I change into two, and then I go, go, go. Then I change it into three; then I go, go, go. Then I change it into four. So I both count the members of the circuit and both solve the problem in the algorithm.

Y: Ah ha.

B: So this is second point. I have done it, but it requires more explanation. But my point is, at this point...once I am doing this through matrices, then my pattern is always the same because I introduce it.

Y: Say that again.

B: Once, for instance, I am searching for forked structures like this one.

Y: So you introduce it.

B: I introduce it once. Once I establish an algorithm to find this pattern and I have done it in a way, maybe it should be improved. Then I am the one who introduces this pattern into the picture. And I will do it always the same. I'll now I'll switch from this matrices which was the initial matrices and which helped me to find the dependencies.

Y: And then you, for example, could find how many there are,

B: I can find.

Y: Of that?

B: Yes, theoretically, yes. It will be not easy, but yes. I will find.

Y: Is there any?

Y: (acknowledges)

B: So now the pattern recognition is solved because I introduced the pattern myself. And it is always the same. The A-ness of A is not a problem anymore because this is what A is and period.

Y: And only that.

B: And only that.

Y: Yes. That's useful that there is only one.

B: Yes. It is not easy to find it. But it is possible because it is, so to say, unique. It is not possible to mix it with something else. It is possible it's just a matter of time and already I have this.

Y: What is...you had another dimension in matrices, a third dimension?

B: If I had third dimension, then I shall observe the projections of those three dimensions, the projections.

## Y: (acknowledges)

B: I observe this projection, this projection; they're three of them and this. This, this, and this. Then I observe the projections. Or maybe cut and obtain many intersections. But it will take years in order to develop because we start from scratch, from zero. So this is the way pattern recognition should be done. And out of this a picture could be obtained. Now I say... whenever you find a structure like this because you have...in first row you have zero, zero,

Y: Ok. Now what we want is to randomly put these ones and zeros into a graph and then recognize the pattern and count how many arrows we had to put, how many ones we had to put in the graph before we get one like this. And it will be done by Monte Carlo method. And by...it will be done by Monte Carlo method and by defining ranges of probability due to whatever Baker had and done so far. And something else should be added to Baker's. But he has done a lot. But he didn't do the eschew, and the eschew is if you change the ranges to change the probability, you have to know what those...that distribution would be.

B: You know how it works. For instance, I have, first I have F of one is one, isn't so.

Y: Yes.

B: F of 2 is square of two one, then F of three is third square root of six (N) square. F of four is four square root of 24 and third. And we might add this although this is possibly for chaos. Once we have, we might have this doubling of the periods I was explaining. And doubling of the periods could lead to the edge of chaos. But another

story. Then F of five is fifth one hundred and two four. F of six is sixty of seven hundred twenty and to fifth. This is one table; this is probability. Now second table is cumulative probability. In this cumulative probability, let me use this. I have one here. Now I have one plus square root of two (N). Now I have one plus square root of two (N) plus third square of six (N) squared. Now I have one plus two (N) plus of six (which will be numbers) plus four of twenty four and third. Now I have all this, one plus of two (N) plus third plus forth plus fifth square of hundred and forth. And now I have all this one plus third plus fifth plus sixth of seven twenty and (twelve). This is bigger than that one. This is bigger than that one. This is bigger; this is bigger. And now I produce a random number. And I find that the first random number belongs to these range here from here to here. First I actually...first I determine the ranges. And I see the first is one. This is, for instance, A. This is the range A; and this one the range B. Then this is the range C; then this is the range D. And I find the random numbers; there are random numbers. And I see this belongs to this area here. This belongs to this area here. This belongs to this. And once I reach the probability for a forked structure to appear which will be somewhere in the table, then I say, "Now I have a forked structure."

Y: Yes, you can expect it anyway.

B: It will appear randomly. Maybe it will appear the very first. You don't know because it is random. But then ten thousand years after, it will not appear. It might happen; but this is a simulation. This is why always when you have simulation, you must have, what is the word? One is assessment and one is estimation, the other validation. You must validate the model. And it should be done properly. You must because this is the first question asked when, for instance, these candidates will be defending their thesis. One member of the committee will ask, "You have here simulation, what is the validation?" This is how they think. How do you validate this model to be true? Although they spent three years to build it, it is very easy to ask how do you validate. So it is another year maybe. Validation. But once we have these fork structures, then it is... We draw it like this one. Zero, zero, zero etc. because it has been found into this range in which it is the expected number for such structure to appear.

Y: I see the potential.

B: And now we have the whole picture.

Y: Got it.

B: Now can you answer.

Bret: What's the question?

Y: The question is, is that how you have done it?

Bret: The computational is very expensive.

Y: Expensive in terms of numbers of operations.

Bret: We... you have... Sorry a couple of things that are true about the question you have asked so far although it's not correct. We have always used an evenly distributed random number. That's not appropriate. It won't give us correct results as we realize now. But that is what we have done so far. That's always been a back ground assumption. I have always generated a series of choices as a number of pairs. Each individual is assigned a number to provide uniqueness. And then I just use a random generator that's built into the programming language to generate a sequence of pairs. And that sequence of pairs is written off to a file so it can be analyzed although we haven't done that. And then depending on the particular question we are asking. I'll populate a universe according to those groups of pairs and start looking for whatever pattern we're interested in at the time. We haven't very much asked to look for structures except for circuits so far although the first simulation was an exception to that and very different from the others. Mostly we have been asking for circuits and when do circuits appear. The...I have used object oriented languages, first C++ and then Java so I am working with objects. There is an administration object that handles everything that book keeping doesn't that doesn't fit into one of the others, find set that aside. There's a god object or universe object or the Lila object as the terminology has developed down through the years that has the bird's-eye view of everything.

### B: The what?

Y: The bird's-eye view, the God's eye view of everything, the place the computer is essentially standing to look at everything, to look where the algorithm is. And then there is a series of individuals or of ones that I usually call them that was the terminology that was in fashion at the time. And each one among other things has a primary vector the length which is the entire population. And each entry represents whether this particular one does or doesn't connect to anything, anyone, other than that particular one in that position. Taken together, all of the ones form that primary matrix. But then depending on the particular question we are trying to solve, each one will also have a number of auxiliary matrices. In most cases, there 's the primary matrix where this one accepts that one ,chooses that one, chooses this one, doesn't choose that one, those ones and zeros, true and false. But then there'll be a secondary matrix, for instance, that says for this one that one, chooses me. That one chooses me too. So I always know how to climb back through the pattern quickly. And then they'll be another matrix that says this one eventually indirectly accepts. And this one eventually indirectly accepts me. That way as I add each arrow, I can immediately tell whether a circuit has been formed. When a new arrow comes in, I go to the one and put in the note that says I am accepting this one. But I also go to that one and say, "This one accepted me."

And if the entries are already there, I can tell immediately when the circuit has been formed. I don't have to parch the tree at all. I don't have to look for patterns or crawl through the pathways or anything. I'm building the, what's the word? the predictive matrix as I go. So I don't have to trigger. I don't have to either always go all of the patterns with each step to see if anything has occurred. And I don't have to come up with some criteria by which to decide whether it's time to stop and look through the pattern. I immediately know when the structure is formed. In the case of circuits which is most all of the questions we have asked so far, the first one was very unusual. With the first one, I don't know. Let's get the words first. If you have a structure with five arrows in it, a directed graph with five arrows, what would be the

term for that regardless of how those arrows are connected as long as they proceed from one individual and it's a proper directed graph? Is that degree or is that something else? What word would you use?

B: The number of ones in one and all shows me when I have arising three, five arrows from one.

Bret: Rather I am asking you, "Is there already a term for what I am saying which is if you have five arrows in a row or five arrows like a tau particle, they both have five arrows and they are both legal constructions, what do they have in common? What's the word that describes both of them, the word degree of five or is there another word."

B: Degree, Yes.

Bret: Ok.

B: There is result in-degree and out-degree.

Bret: Since we are talking directed graphs, we'll talk about just out-degrees. The first simulation and what you ask for was that if I make and average of three choices per individual in the universe. How many at each step as each choice is made, how many valid threes of a certain degree exist regardless of how they are connected whether it is straight lines or forks or whatever but of degree three involving three arrows, degree five involving five arrow? At the time I had a Pentium 120 and 48 megabytes of Ram. And so it was pretty limited as to what it could do. I ended up the largest simulation I could run in that case was nine individuals making twenty seven choices in all. The counts got upwards of six million valid graphs within that one. So its computation was quite expensive. And that one was very tricky because I needed to recognize valid threes by the number of arrows in them regardless of how they were connected. What I did in that case was similar to what is done in Lie algebra. For in some ways, I was thinking in terms states (based?) at the time. What I did was I took the threes. And I instead made ones and zeros for the nodes. And then I took just the number of arrows that were in the graph and I arranged those as a binary number, ones and zeros. So I was reflecting into a different sort of geometry. And then I looked at the binary number and starting from the right there would be one, one, one. And if there were no zeros in there that was a valid three, it was correctly connected if there was a zero part way along that was an invalid three. So I simply ran through all the count of the binary numbers and considered all the possibilities that came out of the actual arrows that exist. And if the zero appeared, then I knew that it wasn't connected. There was a break in the connection.

Y: That's what you told me at the time.

Bret: And you know pages of results from the five individual units that to validate the algorithm.

Y: I have got them right here.

Bret: It is a pain to validate that. But from what you just said, I solved the problem I believe of how to recognize the structures rapidly. I think I have. I will have to implement it to find out if there is a problem; but it's a topological problem. I mean you can map it into a visual space, and then use the visual tools to solve it just like when I mentioned yesterday the example you had where you created a shape that expressed the results that you found, and then found the center point of it. You had essentially created an analog.

### B: Ah, yes, defuzzification.

Bret: My mapping into valid physical rules, you know, even distribution and more length means more. Then you can apply the physical rules to find the answer. And in a similar way, by mapping this into a visual space, you can then legally and correctly apply valid visual tools to make it work. But it's essentially...it is a topological problem in the first place. And it is an expensive notation. It uses a lot of bits. It also uses a statistical method. But while you were talking about it, I though of a way to do it in terms node count. If you have a... because this is a fairly simple structure it has two levels and it is expressed fairly flatly sort of. But I was thinking about in order to deal with things like motion, we are dealing with circuits and sub structures within the Lila comparison. And we are probably dealing with fairly complicated...

B: I have algorithm, cheap algorithm as you say to find this. I have this; this was done. Now I was trying to make step further in order to feed these magnitudes. I have a method for this, to recognize this in terms of matrices, yes, because once I have, once I have defined this is the out-going arrows, a line or a Li and this La or column are the incoming, then what I do, I am searching for this structure. This has three ones, one, one, one. For instance, I have found a Li or a row with three ones. This is a potentially this one. Maybe it is not, maybe it is. This is ending here. This precedes somewhere else. So this is potential. This is possibility that I could have a fork structure here. What I am searching for now, I am searching for incoming. If I am searching for incoming this is, for instance, the K row. I go to the K column and I search for the first one, the first one because the column are showing me the incoming arrows. The first one is this one which includes consciousness. The perception of this two dimensional appears. So this is the way how to do it. And if I have four ones, then this is a four structure. So this is cheap. This is very cheap.

Bret: Yes, I agree.

B: This was done and I... This was done. This is why I skip it over and went to other.

Bret: Right, yep.

B: To other ideas. This was done. I have explain it when in my letters, maybe not just these structures, how it is done in general. Maybe I should broaden it with introducing into picture all this. For me, it is clear; it is the same pattern. But maybe it is not clear.

Y: I can estimate it and I think it is good enough. Ok. Anything else that you guys have got? Got anything? Anything else?

Bret: I made a couple of notes.

Y: Then we'll meet tomorrow morning at nine o'clock. I hope to have some more things ready.

(End of session)

Today instead of freezing, my eyes have started to burn.

Bret: Is this an improvement?

Y: It is burning like it was, like the mucus was full of tear gas, acid or something.

B: But the voice is improved.

Y: Voice has improved.

B: I noticed even without you mentioning, but it is great. It will improve further on, I am sure.

Y: Yes, it is also related to my sadhana that this things are happening in the sadhana when the act.