#30
Formal talk-01112006 Afternoon day 12
Lila recording day 12, afternoon
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1 Hr 25 min
Recording 30

Don: Yes.

Y: Ok. Did you have anything over the break that you wanted to share?

B: Just wish to have this *diviyavyakta* in Sanskrit you know. Just as we have Li and La to find how this is written in Sanskrit. Maybe think over state of knowledge, what this would be.

Y: Darshana will be back after awhile. I am going to go over a few odds and ends that I think might or might not be important. I can't tell. This is a paper called *The Emergence of Connectivity and Fractal Time in the evolution of random graphs (random diagraphs).* This is by Doug Seeley and his doctorate student Simon Ronald, School of Computer and Information Science; University of South Australia. You've seen Doug Seeley's name before.

B: Yes.

Y: But I don't think you've seen this paper.

B: No.

Y: And he refers to Erdos and Renyi (Paul Erdős and Alfréd Rény) who wrote the seminal paper on random graphs. So you might want to look through that. If you want we can make a copy for you.

B: Thank you, yes, it is very important because if he joins together fractals, connective graphs…

Y: They actually wrote a program for this and their graphs are right off the screen.

B: This is very important, emergence of the first Hamiltonian all right in this graph. This is directly connected to Lila. This is what we should do actually. It is nice if… And actually we in one way or another, we have been discussing the difficulty when we have… or whether it is cheaper or expensive when we have a great number of rows and columns into the matrix, then this will emerge…this difficulty to find out the greatest spanning Hamiltonian. We shall be able to find many; but then we bump into fractal time and so on and so on.

> A new connection resulting in a sub-circuit and the probability of connection, Wheeler said, "Are billions upon billions of acts of observer participants…

Y: Wheeler. He is quoting from my paper in which I was quoting from Wheeler's paper.

B:

> …are billions upon billions of acts of observer participants the foundation of everything."

Excellent.

Y: You can have that to look over overnight. And if you decide you want a copy, we'll make one for you.

Don: It's up to you. Ok.

B: Yes.

Y: Have you seen these formulas for *pi*?

B: Similar to this one, yes, this not. Pity I don't have with me. I have something similar.

Y: That's Fibonacci.

B: Fibonacci. I have shown to you. I have this, ahh, this is… yes, this is what we are using. So this is John Wallace?
05.06
Y: I don't think there is anything new really. That's not in the *pi* book.

B: Ok, Ok.

Y: So I think… I just wondered if there was anything startlingly new.

B: I have shown to you this formula. 2 + ½ √ of 2 + ½√ of 2 + ½√ of 2 for *pi*. This is valid.

Y: Why would that be?

B: All very strange.

Y: Why would that be similar? We only have one in 2 and square root. It should be a simple pattern in the Lila pattern in the Lila Paradigm. And you take this out 2 times and stop and should give you that exact number.

B: It will be exact but not finite, not an integer.

Y: No, if you stop, you just stop.

B: Then it is not… it is not irrational, but still it is fractal. It is not an integer; but ,yes, it should be some pattern. It should be (have) some meaning.

Bret: *Pi* won’t be an integer even in a Lila universe; it will just have a terminating decimal.

Y: Then it will terminate with a decimal.

Bret: A terminating decimal, it won’t be transcendental although it might be a repeating decimal.

Y: Because you stop.

Bret: Right. It has a conclusive value.

Y: Now, I didn’t like Michael’s explanation in his Appendix on the Lila Paradigm when it came to the number of arrows that are necessary to expect the first crossover of a circuit. So I ask him to do it again. There is no change in numbers; but there is a different explanation here. I don’t know if you want to see that or not.

When I asked him what I ask you, I got the same drawings both times for an explanation of the distribution. But this was in 1991. Now this is important. This shows the effect on (N) different (N’s) effect the steepness or lack of steepness of the slope of the connectivity curve. It was by looking at this is where I got the idea that this could be inflation.

B: Ah, yes.

Y: I thought maybe this could be inflation. Well, then I went to work on that approach. And I think I have found more things than I thought. But you can see within this five… and then it gets… by the time we are talking about 10^{23} , you couldn’t even get a molecule in there. The line wouldn’t be one molecule or one atom wide.

B: Average number of direct acceptances is here.

Y: Yes.

B: Arrows practically.

Y: Arrows, yes.

B: Because when we have two arrows, they all meet somehow. They all have… although for a… they have…

Y: *Pi* over 2N.

B: A over N. This point is something special and what is it actually?

Y: Yes. That’s the point of inflection. But these are not large scales.

B: This is like 50/50 somehow, connectivity.

Y: 50/50 what?

B: Here, because he has 50 percent.

Y: Yes, but the number of arrows to get to that place.

B: A is the number of arrows.

Y: Yes, and he has two here.

Bret: Average.

B: But here it is normalized somehow over (N).

Bret: Two per individual.

Y: He calls them rounds, I think.

B: Ah, rounds.

Bret: Two arrows per individual. Three arrows per individual on average so...

B: Like this.

Y: So it is 1.7…1.87 is this point, 1.87 which is *pi* over two. That's the point of inflection.

B: *Pi* over two is 1.57.

Y: 1.57 yes, that's what he…

Bret: That's interesting. It makes me think that either time or distance is not equally summed. It is somehow recursive.

Y: Well, this is wrong then. It's wrong, wrong. This scale is wrong. So I wouldn't spend too much time on it since you pointed that out.

B: Ok.

Y: This may affect you, Bret, this next paper. It says, "This is my formula for lengths." He calls them lengths; and I call them length quanta. And I could… he could never convince me that he is right. And I might have been wrong. So do you think he is right about length? Or is that too hard to tell?

B: Maybe we should go line by line and clarify it.

Y: I can't. He wrote it; he couldn't explain it to me. I couldn't follow him.

Bret: It says above; but it is not associated with some other paper obviously. It is just by itself. It says something Z above.

Y: Well, yes, but God knows. I think he burned all his papers.

Bret: I could make a copy of this for you.

B: Ok, yes.

Bret: Bring it tomorrow or do you want to look at to night?

B: Tomorrow is fine and maybe the connectivity.

Bret: That's interesting. We can simulate that.

B: Yes.

Y: This may be of interest.
16:28
B: () large circuit is two NTQ around small circuit in two N minus F of [I] T Q. One every X times around large circuit will go around small circuit X plus one times Y. (one ?) theory two times N is two times X plus one N minus X. And out of this, he found N.
17:04
Y: Yes.

B: So this is very significant. But why does he say, "One every X times around big circuit?"

Y: He must be putting in a measurement somewhere. Right here, what is that? He must have a measurement of something. Otherwise, he could never figure out anything.

B: Maybe something like a Planck time or because he has… ah, no, he…Planck lengths because he has LP here.

Y: Yes, you can figure it out from LP.

Bret: He is asserting that for every number of times X goes around the big one, he will go around X plus one around the small one.

B: And this is why I ask why?

Bret: And then beat like beat of a drum. And he gets down into frequencies and somehow uses that to derive time. And then from time, I think he gets into frequencies of time. And then…

B: One over F, Lambda is one over F because Lambda is the length of the wave.

Y: The wave length, yes.

B: And F is the frequency.

Bret: So he is asserting there is an inherent frequency that you can say things about. And that leads to…

B: So this is F of [I]… (N) are all around the circle. F of [I] is probability that F of 1, F of 2, F of some [I] will occur. And then, this is N minus F [I]. The whole is (N), this is F and N minus F [I] is this one. But then, he says, "One every X times around large circuit will go around small circuit two times."

Bret: Well, just one more time.

B: Because here we are actually introducing space into picture, space. And he…for instance, if I have two…I have this circuit and, and this circuit and then while this goes once like this…

Bret: That is assuming a constant velocity for both of them and that the relative size decides the relative terms. I think that this is considered one cross over.

Y: Yes, it is.

Bret: One individual less. F is frequency. So frequency around the big is F and N minus F [I] is frequency around the small in some way.

Y: That makes a high wave length, a shorter wave length.

Bret: He is saying, there is one, just a difference of one because somehow even though you only… somehow even though there is one crossover…and I am not sure why that it says, "Just one more time around the small circuit," for the same frequency. But that appears to be the kind of thing he is saying. I don't quite get it. He is suggesting some kind of inherent frequency due to the number of individuals? And that this frequency is shorter by one and therefore… or this transit is shorter by one, and therefore higher frequency by one goes around more times on the smaller one is what he is saying.

B: Frequency is F small and this capital F in his writings…F is probability.

Bret: Well, he is using it here in some particular way. Time per beat for one beat. Somehow we are relating that to beats of frequency around the thing, F of [I] …time around large circuit is two N times time quanta. Around small circuit is N minus F of [I] times two times quanta. So just taking F of [I] for the small circuit whatever this is… F… F… number of individuals so that the smaller circuit is… subtract that number of individuals from the total and calculate the time inherent in the smaller circuit, the time inherent in the larger circuit, and therefore come up with a relationship of sort of base frequency of the circuit.

B: This is actually similar to his thinking.

Bret: (acknowledges) Yep, yep.

B: Because… but I always imagine that this will… for instance, he supposes that these are somehow synchronized. This is in…this is…I twice around…I go twice round this circle and this is…at that time, I go just one over this circuit. It is like I have here… I have one sine; but I have another like this one, and another like this one. This is what he is supposed.

Bret: What here suggests that it is twice particularly? What do you see that suggests that it is twice specifically?

B: Moving through this circuit twice.

Bret: But twice? How about 10 to 9, or 1000 to 999. Why twice?

B: This is what he supposed. I am trying to find out why.

Bret: I only see a difference of one rather than the two times factor.

B: But two times he has here. He has written time around large circuit is two N T Q; around small circuit is two N minus F of [I] TQ.

Bret: And from that. the same thing you stated.

B: One beat every two N is two X plus one N minus. Because when I was picturing in my mind what radiation is…radiation is due to difference in this.

Bret: That maybe true. He may be wrong; but in terms of his analysis, I am not seeing a two. I am seeing a different of one.

B: But he is obtaining N, you know.

Bret: He is suggesting there is an inherent frequency due to the geometry, such that you can derive the difference in frequency and relate it to distance. Therefore, work out distance so that no matter what N is, there is still a relationship between the frequency here if you have a difference of one individual, it looks like. He says that's one. Oh no, that's just dividing. I don't know. Yes, it is. No, it's not…

B: X is how many times you go around the circuit. This is X.

Bret: Right.

B: X is how many times you go around the circuit. And he says one every X times around large circuit, (and it is connected with frequency because it is connected) will go around the small circuit X plus one times. This is how he introduces. He says, I suppose one smaller circuit for which I know that while you go X times over the bigger circuit. You go X plus one over the smaller circuit. This is his assumption I believe.

Bret: I thought he was saying that it is so. I don't see that it is so inherently; but you may be right.

B: He says, “While I go X times over the larger circuit, the same times I go X plus one over the small circuit.” And this is somehow connected to the number of individuals. For instance, over the big circuit I have N individuals; and then what is this? Then this is somehow F of something. But he says F of [I]. And later on what happens with [I]? Later on, Ah ha! I know, I know! Later on he…to [I] he gives a value of three because F of three is third factorial of three factorial N two squared. Three factorial is six. So this here is F of three. Now he has to…here F of three for Lambda. Now he goes with a specific number. This is general; and then he goes to specific number. And here he puts three for [I]; and now we have three; but we should know now what is this. So F of [I] is F of [I]. In his writings, F of [I] is probability that a structure that is three individuals should be in a state of direct knowledge of one reference individual. So F of three are…F of three is referring to this situations, either this one, three incoming arrows, or three out-going arrows of reference, or three in a row. Then why not this one also? Maybe, this one also. But nevertheless, F of three is probability that we shall have three arrows pointing to a reference individual. And N is the whole because when I was having this picture into mind, I knew that a moment will come when we should determine exactly. And I image that. For instance, if I have this finite projections of a moving through the…this is what he is doing. He is moving through this one. And I was just looking at it in a…as projected. But, for instance, how I imagined, how I pictured radiation is to have a difference in the waves; and this is radiation. The difference in waves will give us radiation which is weak force and so on and could somehow connect it to the particles as we have in this Feynman diagrams. We have two particles interacting and then there is a…

Y: Boson.

B: Boson. And so this difference might be boson or something. This is how I imagined.

Y: Could be a photon which is one type. It’s…an electromagnetic boson is a photon.

B: And now here he identifies this. This is interesting. This is a special case somehow.

Y: He says, “Why is it two N?”

B: Who says, in the first place, it is two N?

Y: He did that is his writing.

B: Why? Ah ha! He was fitting. He wanted to get this number which he got otherwise.

Y: Yes.

B: Ok, but it is two N because maybe we have the whole. In order to go around the whole circuit, you have this and this half wave and the other half wave. It’s very nice to understand. To be…Ah ha! Here maybe. Here he has X plus one or…the number of circuits I should circle around the smaller circuit is the ratio between the whole, the number whole individuals and the probability to have structures like this one for a specific... or any other because he uses F of [I] which is general. So far we have two ways to find N. One with rest masses and the other one though crossovers and bifurcated sub-states.

Y: In principle, every measurement that is universal should be able to reverse it; and you should find N.

B: Yes.

Y: And I did some of those in Radical Theory. I took the electron and worked it backwards to find N. The reason it comes out so close is…the reason it is so accurate is because I use Alpha to find N in the first place, 10 to the (e) to the *pi*. And I had to have K off of Alpha. And so Alpha is an electromagnetic constant; and I used it to find N. So, therefore, you would think, I could use N to find Alpha. And they can. They go back and forth either way. And it comes out 1.38 times $(N)^{23}$. So he is on to something here. I like this analysis. So if you want to copy it that would…

B: Yes.

Y: Rather than you bothering to copy. Now I have something else here that just shows you some of the history.

> The following statements…

This is written by me.

> The following statements are meant to be exactly equivalent.

- An individual can decide that a specific other individual exists.

- An individual can or can not choose to be in a state wherein it believes that a specific individual has the ability or the power to also so choose.

Another way of saying the same thing. So these are…all these statements are suppose to be equivalent.

- An individual has the ability to directly know a specific individual or not.

- An individual can deny so far as itself is concerned that a specific individual exists.

- An individual can put himself into a state wherein it is acknowledging that a specific individual has the equivalent ability to himself.

- What an individual is, is that which decides (chooses) or independently initiates that itself is in the state wherein itself is related with, believes that, acknowledges that, knows that, a specific individual has the same ability to so decide, choose, and initiate, etc. An individual is not more or less than this.

And then, said another way:

- An individual is no more or less than that which independently initiated, chooses to be in, or decides it is in, itself into a state wherein it knows or acknowledges or believes or accepts, that a specific individual has that ability, or initiates itself into a state wherein it does not know that specific individual has that ability.

36:50
These are all ways of saying the same thing. And in book of Philosophy on knowledge, they use these kind of terms. Belief…if you wonder what belief has to do with knowledge, well, it depends what you mean by belief. If you mean decides for yourself that it is so, well, that's belief. But they don't say that. I said that. Other terms here is used is acknowledge…to acknowledge that another is (exists). That is like me. That's another way of putting it--or accept and deny. I use all those terms. But I feel that it is better to say 'originates itself to be in a state of knowledge.' But I am just giving you some of the history of what we went through. My idea of reading it, is to see if it would spare you going through all that trouble to read all the philosophy books on epistemology.

Ok. Now I have completed this folder. I said I had some odds and ends that I wanted to take up. You might have found one or two things that might be of use. And I have some more questions. This is from the Republic of Macedonia, Percinkova.

B: Percinkova.

Y: Funny you don't sound the "R". Pa jinkova. Not Per jinkova.

B: Parrjinkova.

Y: Parrjinkova. Ah, I had to be a Slav. Then I can talk like this.
39:44
B: Slavic letters. (Slavitic letters?)

Y: I suggest a formalism of adjacency matrices added to graphs maybe just as an appendix. What is a formalism of adjacency?

B: You are asking me?

Y: Yes.

B: This is just arrangement of the non-physical individuals.

Y: Well, that's a matrices, but… yes.

B: But this is what I meant. This is what they mean actually in discrete mathematics when they say adjacency matrices. You know, I could show you. I'll show you just right away. Just… simply an arrangement in plane adjacency. I remember you asking in your letter whether adjacency means something. Adjacency of the non-physical individuals which is…it includes space and so on or just arrangements. And I answered to it , "Is just arrangements." This is just mathematical way to (say/see) things differently than in graphs.

Y: Well, I understand that the matrices do that. But I am not sure what the word adjacency means.

B: This is what they use in discrete mathematics. It is commonly used in discrete mathematics.

Y: That’s good. It doesn’t tell me what adjacency is.

Bret: What does it mean?

Y: Adjacency. What does the word mean in this… with regard to a matrix? Adjacent, something is adjacent to something else.

B: Yes. It is. This is adjacency; this arrow is adjacency. This is adjacent to this.

Y: It is?

B: Yes.

Bret: Topologically, it is.

B: This is how they use it. For instance, I have L here; I have L here. L is followed by Q. Or L is in the state of knowledge of Q. Then if Q is here, I put one here. And this is called adjacency matrix.

Y: So they think of this as adjacency.

B: Yes. I may show you. You know, I have whole book of discrete mathematics.

Y: Yeah, but that’s no good unless I understand this. I have to understand what they mean by adjacent. To me if this here and this book is here, they are not adjacent. But if this is like that, now it is adjacent. And in my diagraphs something can be anywhere; and it wouldn’t be adjacent.

42:35

B: And still unadjacent. I know you are asking me this question. And I was really amazed. I said, “Yes, really one should think about this.” But this is how they use it, and how I used it. I have here. This morning I presented.

Y: I have understood what you’re saying.

B: Yes, yes, I know. This, simply this, simply this is adjacency matrix of this situation here.

Y: Yes, but I am asking, “What is adjacency?” And you are saying that this is adjacent to this?

Bret: (acknowledges)

Y: But what if…if there were…

Bret: Not adjacent to that.

Y: It's not adjacent.

Bret: No connection.

Y: Yeah, well, I can understand that. But what if we have another one here? Would you say, "This is not adjacent to that?"

B: Yes. If you have another one here, I add another column and another row like this. I have now another column and another row, another Li another La.

Y: So, is that what the physicists call 'local'... is adjacency? It has to be next to it like in the automatons of artificial life?

B: Yes, I have…

Y: Then this one is always next to this one. And they are talking about if this one is blue. this one turns green.

B: Yes.

Y: Is that adjacency? And that… but this one is not adjacent to that?

B: Yes. If we have here C is adjacent to K, C is pointing to K, then we have, because this is the knower, C is the knower and K is the known for Li. I put one here. And all the others are zeros. This is just a way to represent this. It could have many different physical meanings. For instance, this could be a telephone network. And I have, for instance, this is Chicago; this is Los Angeles; and I have connection between Chicago and Los Angeles. They are not adjacent , but in context of the network, they are.

Y: In the network, they are.

B: In the network, they are. This is Chicago; this is Los Angles. Chicago is connected to Los Angles and usually the other way around. But…

Y: But if there is one more, this is not adjacent to that.

B: If it is one more, I add another…

Y: But it would be. It would be, just not quite as adjacent. It is almost adjacent. We got ten billion of them out here. And this one looks like it is adjacent to that if you compare that to ten billion. No?

Y: I just want to make sure how you are using it.

B: Yes.

Y: Because if I read a paper and they use the term adjacency in matrix, it will stop me if I don't understand what adjacency is. And I do now.

B: Yes. First of all, I could drop this term. This is what mathematicians are using. But I could just drop it and not use it if it is not in sense to Lila.

Y: No, that is fine. You can use it now because you explained it to me.

Bret: The integers two is adjacent to one. But three is not adjacent to one because you have to go through two to get to three.

B: In …

Y: I wouldn't take that for granted especially with what I am going t talk about next.

Bret: Ah.

B: There is a question whether two notes of the diagraph are indirectly connected or directly. And this could be discussed also in terms of matrices.

Y: That's right.

B: And I have…

Y: Depends on how you define…

B: Yes, I have answer to it. This is how we are finding Hamiltonians. I am moving through the allowed connections. For instance, here we have notion of time which could also be used. So far we are using these to introduce time.

Y: (acknowledges)

B: And it is great. But we could further on…we could think of this also as A, in terms of time, because it is also time. So what is time in terms of matrices? In terms of matrices, I start from A. And I see whether A is fully isolated or it is in state of direct knowledge of any other individual. And I find, yes, there is one, one. So this knower is a knower of B who is the known *diviyavyakta (*Divine Individual*)*. And now I go to B because I want to see if B is in state of something.

Y: (acknowledges)

B: In order to have time, then I browse. I search through B for a potential knower and I find one. Ah ha! B is in a state of direct knowledge of another individual. Who is this another individual? I go to the row and I find it is C. So it is C. So I say, "Now I have one unit of illusionary time", introduced into picture.

Y: Yes, I understand that. And that… I was just after the word adjacency. Now if we are in a circuit, and we go all the way around here and come to here and this one accepts that one…

B: Yes.

Y: Are they adjacent?

B: It is a spanning Hamiltonian. You know matrices won't help me to see the non-physical behind it.

Y: Ok.
49:31
B: Additional life force is needed. This is just a presentation.

Y: Yes, I am not…

B: But it is useful because… Ah ha! I have another insight. Maybe not… I have said it but in different way. If…whether this individual is indirectly directly know, this is why I purpose transitivity because it mathematical term. If there is transitivity introduced into picture, this means it is in state of knowledge of itself but through other individuals. This is another question to differentiate between this state and the state of self-enlightenment. But in terms of matrices, it is solved. This means, for instance, I want to see if B is in a state of indirect direct knowledge of itself whether it is so or not. I'll just check. If there is one in the Li, so he is a knower. This means in the row. I search and search and search and I found. Ah ha! Yes, there is one. So he is a knower. So there is out-going arrow starting from B. And it goes, goes, goes, goes, around. And the algorithm for this is known. The algorithm is…I find one. I see which column. I jump to this row, to the appropriate row. This is the column; I jump to the row. I don't find any other ones here. So this is not a closed circuit. This is the notion of time and end of story. But if I want to check if B is in state of indirect direct knowledge of itself, what I should do is check if it is at the same time a knower and a known, no matter how many individuals are included into the picture. And I say, "I see, yes, it is." Because here, I have B isn't…he is a knower of C; and he is known by A. But in order to be known both by B and in order to be…and that's the end. This just shows me that there is an arrow ending in B; and there is an arrow starting for B.

Y: Good.

B: So B is both known and knower. And whether this circuit is closed or not, this is another story, this is another algorithm.

Y: Yes, that's right.

Bret: But you can eliminate the cases where B can't be in a circuit because it doesn't have an in or an out. In that case, you know it can't be in a circuit. So you could quickly eliminate those.

B: Yes, yes, I could quickly eliminate. This is why I purpose ( )

Y: And all this came from the adjacency.

B: I could show you how they introduce it.

Bret: It came from him not knowing what the word ‘adjacency’ meant.
52:44
Y: And then you say, “This would be valuable because it allows easier understanding of the computations of magnitudes.” We have yet to work that out. That’s a little project.

B: Yes, I thought it is easier to think about probabilities at that point.

Y: Right, that I can see; you have shown me that.

B: Yes, yes. You know you send me Baker papers.

Y: Yes.

B: Later on I had. So first was this letter and then Baker’s paper.

Y: Fair enough. Ok, that takes care of that one.

B: I look for these suggestion in matrices since they came into picture and… and I might not use the term really because if it is not in the non-physics of Lila, we drop it *ad finito*.

Y: Yeah, no problem. I am not trying to catch you out. I am just trying to understand some things I missed.

B: Yes.

Y: I didn’t understand at the time; and you showed us the PowerPoint and the wave function.

B: Tedious.

Y: Ah. Yes, this is one. I want you guys to listen to this. You write this down, one plus one equals one plus one, to jump to instead. One plus one equals two requires a level of abstraction that might leads us to a state similar to the one in Zen. When we say before enlightenment, mountains are mountains and rivers are rivers. And after enlightenment, mountains are mountains and river are rivers. The collapse of the wave function could only be as Lila reveals. You say, “More non-physical individuals that act by choosing to be in a state of direct knowledge of each other,” a step more towards perfection. That’s true. Now, I want to take this up, that as I said to you, “There is a missing operator here.” How do we? It’s a mathematical operator that is in explicable unless you understand consciousness. To get two, two is a different concept than one plus one. You have to take…if you have…you are conscious of one's state. And you are conscious of another state; that’s two ones. Then to add them, you have to reduce that to a single state. Well, they don’t have…they don’t show in this addition in arithmetic. They don’t show the reduction to a single state. So arithmetic can not be used to describe the Lila Paradigm, mathematically. In fact I think we should work on trying to develop another symbol for the sub-sumption or… do to the unitaryness of an individual whether it is two conscious states being reduced to one or two states of knowledge that are being reduced to one; and it is an additional state. Two is a state to itself. So one plus one reduced to a single state, put a symbol for that, equals two. Now we could think up a symbol for reduction or sub-sumption. And it would be the beginning of a new mathematics.

Bret: The mathematics of unenlightenment.

Y: So we could then talk about subtraction and what would that consist of, and square root, and what does minus mean if anything. Are there any minuses in a Lila Paradigm?

B: We shouldn't try to associate the operation you are talking about to what already exist in mathematics. We should say, "This operation means this and this." And we shall come out with symbol. For instance, this is the symbol for that operation Li or La or Lila. We are not obliged to take minus or to take plus or to take multiply or square root. We are not obliged to since we are creating something new. We are the creators we have freedom. We could say, this for me will be sub-sumption. This will be whatever you want it to be. This will mean for me sub-sumption of this and this. And this is the operation for it.

Y: So you put one there.

B: I put one there. I put the knower…

Y: And we need another one…

B: Another one, and this is what? We should decide. This is what?

Y: This is two.

B: Is two, so this equals two and this operation is operation we introduce. And we should find a name for it.

Y: Well, it could be called S for sub-sumption or it could be R for reduction. Or it could some arbitrary symbol. I wouldn't use Li or La.

B: Ok, because it has a particular meaning. And we already introduced it into picture. We have matrix Li and La and this consistent.

Y: Ok, now how could we show…well, we'll think of some symbol for it right now--any symbol.

Bret: Two SS superimposed for sub-sumed.
1:01.16
Y: That's…

B: Like in Sanskrit.

Bret: But you know crossing each other; so you know.

B: This is not …(?)

Y: I would say a plus sine with a circle around it.

B: Maybe, yes, plus yes.

Bret: That's used.

B: Yes.

Y: And then how would that relate to this? How do we show sub-sumption in the matrix? Or can we?

B: This is another point we discussed at one point when we said, "Maybe three dimensional matrix should be used."

Y: Yes.

B: Because here existence is implicitly introduced. And 'who' is implicitly introduced by each; and one individual being with different letter from another, but not explicitly.

Y: So if we get a one and a one.

B: This is why…

Y: In this line and we go over some place and find a two.

B: We could find two. We could find to which individual this one is in state of direct knowledge. But we have not all the sub-state. We have it, but very implicitly.

Bret: For every succeeding level of sub-sumption, you have to add another dimension just as you added the third one there. And it's variable depending on how complex the arrangement you're trying to reduce is. You just… by adding the dimension you added the first level of sub-sumption, these two together. But then, from the stand point of the individual you're interested in, that individual has to sub-sume everything else. And you keep adding right angles onto it. And you got multiple variable numbers of axis and dimensions.

Y: I am not sure.
1:03.26
Bret: Unless you arbitrary stop to…

Y: I think it might be. We might find an underlying principle that will get around that point. I am just not sure. That's all. You might be right.
1:04.06
B: At one point I have showed in my letter that, for instance, when I am searching for spanning Hamiltonians, for instance, I find one. And then in order to know that this … has been used, I change this one to two. And then I search, I search, I search, I search, I search for another one. And in order to be sure, I compare these two. I see that the second one is bigger than the first. And first is dropped because I am

searching for the largest spanning Hamiltonian. And then I go; I find another one. Then I change this number to three or somehow.

Y: Yes. Something like that.

B: If something like that could be used, for instance, since we include…

Y: If we could represent it in a diagraph presentation, it should be able to transform into matrix.

B: Into matrices. Basically all the information that we have when the graph…

Y: It is just…

B: They are present. It is just question of time when shall we find them. But we should have clear definitions.

Y: So if we can work out the A → B• →C• that would be useful because in graph form it is not completely clear what is embedded in what like he sees it differently. He has it C is embedded in B. Or B is embedded in C; or C is in the past. And B is not; it's in the present. He says he gets the same thing out of the A → B• →C• diagram.

B: We might make it clear by stressing in this arrangement A → B• →C•, for instance, this concrete…this particular case. We could stress somehow that A, that the present time of C and of A is the same. Then B automatically is in the past.

Y: Well, we can make a rule to that effect, yes. But on a basis of understanding what time passing is. I don't thing that shows that. Now, I was thinking maybe a matrix would show it. Would show what we mean by sub-states? Would show what we mean by sub-sumption?

B: Let us go back to the simple or draw it again and see.

Y: We can just A → B• →C•

B: It is A → B• →C•. Maybe it is better to be written this way, A → B• →C• . And let us see now. It should be visible. So I start from A; and I find that B follows. I go to B; I find that C follows. So B…so…but I introduce something new into the picture. If I suppose that A and the present time of C is the present time of A, then B is in the past.

Bret: What about the diagram demonstrates that?

B: I am thinking how to do it, maybe this presentation. But this is also a graph. Only it could be this…

Y: I don't think so.

B: Ok, this is the higher level of consciousness.

Y: Yes.

B: Now we are on the level of knowledge.

Y: We are on the level of knowledge.

B: Ah ha! You know at one point of time, I supposed to you; but it was to difficult to draw it--a cylindric.

Y: Ah!   You did mention that.

B: I have mentioned to you. It could explain, for instance, notion of space and of the crossovers because once I have a circuit, it is a common present time. And this common present time is presented by a plane intersected.

Y: This is used by physicists.

B: (acknowledges) and then when I have crossover, I go to another level. And that's another plane intersecting although I have one point here. And so this is a notion of one dimensional space.

Y: So this would be one extant pattern…

B: I have one dimension…

Y: And this would be another extant pattern.

B: Yes. And I have 1-D. And then if I have a second crossover, I have one. This is this picture. This and this and this, only spread out on cylinder. And I have one level, two level, three level. And this is clearly now two dimension. This is two dimension now.

Y: Which is not this example.

B: It is in a way because this matrix I could bend it like this; and A and C come into present time. And then B is in the past.

Y: (acknowledges) that might work.

B: It is A and B. This is how I tried here to present.   I have a closed circuit, this cylinder. This is not a circle, a circuit; and so the cylinder is… somehow it is not (what is the word?) it is not smooth; it is rough. But still when it closes, it is a circuit. And then I have a common present time. So for all of them, the time is present. I mean…

Y: Ah ha!

B: And the…so this is, for instance, this is the T axis. And for all the participants into the circuit, this is one present time.

Y: You are on to something.

B: At least this is picture which could be added to the article to explain to people.

Y: I wonder, do we only get time then? When you have a common present time that way, you can get time. When you get a circuit, and a crossover, I would think you would get time that somebody could understand.

B: ?

Y: I think you are on to something. Darshana said this also. She said, "You have to explain time in a circuit. You do that then they will understand. "

B: Yes. It should be stressed that it is a common present time.

Y: Yes.

B: And it is a way to do it… we have.

Y: Yes, I see. So I'll think about that overnight. I have one more line here, not technical, but interest in what you want to do with it. I'll write about my personal love affair with God later on.

B: Because you mentioned somehow. You mentioned in natural meditation.

Y: Yes, I did; but I haven't seen the letter. I read your book that gave me some idea of your love affair with God.

B: It is just that the first chapters you read, not the whole book.

Y: I read five chapters.

B: Five.

Y: In English.

B: Just 1/5.

Y: Maybe not in this situation. Ok, I'll let you off the hook. Now we've already discussed the underlying undirected graph. We discussed that.

B: Actually I agreed with you. I was amazed I agreed, you know. Maybe it is not stressed here.

Y: Yes, you did. And then when you came here, I started hearing something else. Then we had to go through it again.

B: Ah! No, I was just trying to find something new, trying to contribute new, not just the common knowledge, but something new.

Y: Ok, I accept that. I think you are right. And then you give the algorithm for finding the Hamiltonian.

B: I should have been much careful if I knew it to be examined so carefully. I sit down and write.

Bret: People are going to be writing their thesis about you for the next hundred years, biographies.
1:14.13
Y: (Suzuki Ropi?) Nirvana is to see things all the way through. You have mentioned that. That's clear.

B: Yes.

Y: Ah. This is…you've seen this?

Bret: Can't see it clearly, I am not too sure.

B: Equation for the non-physical individual.

Y: It is a definition of the square root of minus one. But we still don't know what it is. We know that the square root of minus one is this.

B: Then you put the whole thing into this. And Don also suggested.

Don: I did it the opposite way.

B: Yes, you did it the opposite way.

Y: We have that here also. Address, is that clear?

B: Don't ask me for… So this is ( ) just to Don.

Y: Telephone number, oh.

B: It was phone numbers and addresses. Equation asking who am I? The self reference.
1:16
Y: Look at this. Got N in it. I am reading, reading. That's all of them.

B: (acknowledges) This is the structures found by this algorithm for space in a way, or for finding structures like this one row by row.

Y: Yes, that's a three.

B: (acknowledges) And they are very difficult to spot on the graphs only.

Y: Yes.

B: By the matrices, you can find them.

Y: You convinced me.

B: Ah, yes, this is derivation.

Y: Derivation avoidance.

B: Ah, you know this is. When we have 10 to (e) to P equals N, then (e) to *pi* is cosine *p*i plus (e) sine *pi*. It is know in electronics. And it is also Gauss formula; and here the same procedure if I have logarithm of N is (e) to *pi*. I put this to the degree of *pi*. I have logarithm of N to [I] is (e) to [I] *pi*. So logarithm of N to square root of minus one equals cosine *pi* plus (e) sine *pi*. Sine *pi*. So this shows like wave. And cosine *pi* is minus one; and this is zero.

Y: But all we have done is just changed the sequence. We haven't accomplished anything by that. We just moved the terms around.

B: Yes, yes.

Y: We are after the understanding.

B: Yes but it… this is something maybe similar to what Baker is doing in this formula of his. It is very significant. I very much want to understand it. And I am sure I will.

Y: I believe you that if you say you will, you will.

B: I am close to it.

Y: You will.

B: And so this is F of [I]. The whole thing is N; and he equalizes this moving with this one. This is very interesting because…the probability to have structures like… Ah ha! But it is strange to me, you know?   These are like two different things, you know. N is number of individuals, not number of relations. If he has here N squared, then it is clear to me because you know these are two different qualities. One thing is to have number of non-physical individuals (*diviyavyakta*). And another thing is to know F of [I] which are structure which are relations. These are numbers of individuals. These are nodes, agents; and these are relations, states of direct knowledge.

Y: Yes.

B: If he have here N squared for the number of total relations, it is closer to truth. Maybe this is why he wonders why 2N? Why 2N?

Y: Yes.

B: Because 2N is somehow…

Y: If I knew the answer to that, I would know the answer to the…

B: 2N.

Y: Yes.

B: Because he mixes. He puts into one bag although ingeniously. I admire him, I…really he has done a great job. It is easy to find mistakes. it is difficult to write it.

Y: Yes.

B: So once I have said this, but he mixes now number of individuals with relations. Isn't it so?

Y: It is.

B: So this is why 2N; and he wonders why 2N? Why 2N? It is like logarithm of N, of N square. It should be relations. If he had here…but in a way, also what we move though is relations, not individuals.

Y: That's right.

B: So it should be always.

Y: But moving through means their states changing, not the individuals.

B: Yes, their states, not individuals. So he couldn't mix number of individuals with number of relations. F[I] is number of relations; N is number of individuals. It should be either N square if he wants to put some relation. And then he always works with logarithms. Logarithm of N square is 2N, yes. This is why he put why is? Why is?

Y: Why is, why is that?

B: Why is because this, I am sure of it because he couldn't possibly do this. And this is why it puzzled me, you know. He couldn't possible mix number of individuals with number of relations. F of [I] is number of relations; it is in-going arrows or out-going arrows. Li's…

Y: Well, in the circuit, the number in the circuit is… in the largest circuit is equal to the number of individuals also.

B: But F of [I] number of individuals while it is this are excluded.

Y: Yes.

B: And in F of [I], these are including.

Y: Yes. Exactly! What you are saying is right. I was just saying…

B: In F of [I], we have all these crossovers.

Y: Yes.

B: All these crossovers and all these out-going. So he is mixing two things. You know, he always work in logarithm. Logarithm of N squared is two. Logarithm of N… And Logarithm of N, and N is the same thing only on different scale. In any case, this couldn't be N over F of [I]. It couldn't be. It will be either N square over F of [I] meaning some probability although the other way around, probability is the extant relations over all possible relations. But it should be either N to N minus one or whatever. But these are two possible, two different qualities into same picture.

Y: Yes.

B: Although ingenious, this is ingenious. Now I still have to know why this is a whole number and not a fraction.

Y: Yes. That's a big question. Ok. We didn't get to my project, but maybe we'll get to it tomorrow. I think we will. I'll probably take one tablet tomorrow. Paracetamol because I have been a good boy today and sort of put up with it but will try to do that workshop on the inflation curve because we should look at it because there's so many wonderful things in it. And by getting familiar enough with it, you will be able to think in those terms and satisfy that this possibility and that possibility are not so. Or correct me if I am wrong, I am looking for that. Either way, we'll deal with it. I want to get these other things out of the way. So we'll take a break now until tomorrow at nine o'clock in the morning. And we have a half hour left if you want to do anything else that doesn't require my attention.

B: Thank you.