#57S
Formal talk
Lila Recordings
14-11-06 PM
1 Hr 15 min
Recording 57

Y: …study and configurations of N arrows by Donald. And it goes: two times two, four; and two times four is eight; and two times eight is sixteen. So I just kept going with my little calculator till I got to F27 (B acknowledges.) when the first circuit would be expected right after that and noted how many it would be. (B acknowledges.) Then I realized that this is like our referent Individual. And he has a particle here and a particle here, each one of these arrow points that referent Individual would be conscious of particle. (B acknowledges.) Now… (Time passes with paper noises.) What happened to it?

B: I'm following you. I'll find it. Aha! Here

Y: So, he'd be conscious of a particle and in a circuit acting as a substate in that circuit, this would be the antiparticle – the referent Individual. Well, I don't know if you're aware of it, but...aware if this…that (B acknowledges.) the ratio of the number of particles in the universe to the number of antiparticles is pretty well known by measurements, by several different measurement means. And it's just over a billion to one. When you get to F27, (B acknowledges.) the number of particles that the Individual will be conscious of – the referent Individual – is just over a billion. (B acknowledges.) So the antiparticles…they've been trying to figure out why is it that number? And I feel that the odds are quite good that he's discovered the reason why. (B acknowledges.) Can you write the equation for the ratio, the general equation?

B: Shall I write it now?

Y: Yes.

B: For instance, F of 27 is 27 degree of 27 factorial N to the 26^{th}. And we might find with Mathematica the number, the exact number.

Y: I wanted the general equation.

B: F of I. We have here e to the M over n, **[Recording time 3:46]** if this is correct.

Punita: That's to the F number. (B acknowledges). Are you asking about the power of 2 here?

Y: Yes. I'm not sure…maybe she's doing it. I don't know. I take 2 and multiply it by 2. (P acknowledges).

B: Actually, because these are crossovers and we see now that we have squares here, actually, they are squares. (P acknowledges.) They are squares. And remember when we were discussing the number of non-physical Individuals being key to the 10 to the e to the pi when we came to conclusion that pi is due to crossovers? (Y acknowledges.) And these are the numbers leading to pi although not normalized for one Individual. So…

Y: Yes, but that's what I wanted. I want it for one Individual.

B: Yes, for one Individual. But my idea is when we have just one crossover, this is one.

When we have one Individual in regarding to two other Individuals – making origination to two other Individuals, meaning two crossovers, we have two square combinations which is visible also here. For the first one is two, then four, then eight, then sixteen. It is the same considerations because these are crossovers actually, somehow. We shall go maybe deeper.

Y: I don't…

B: Then to 27, maybe 27 squared.

Y: That's not 27 squared.

B: It should be factorial something.

Y: I don't think so.

B: Yes, yes. It's not so?

Y: 27 squared is…

B: But a…not just squared, but the sum leading to 27 squared. For instance, one plus two squared plus three squared plus four squared, plus and so on; plus 27 squared.

Y: Yes. What's the general term?

Punita: Yes, this is just 2 to the n minus one. That's 2 to the n minus one.

Y: Two to the n minus one.

Punita: Yes, where n is the number of arrows. (B acknowledges.)

Y: So, two the n minus one, in this case, would be twenty six, two to the 26. So I take two to the 26; and I get a different number.

Punita: Well, what do you get?

B: We may check with Mathematica. Just a minute…

Y: It's 67 million.

Punita: 67 million?

Y: Two…and 26. Two to the 27^{th}… Aha! It's still only 134 million (P acknowledges.) where when I did it, I took 2 times 2; and then times 2; twenty-seven times. So 2…maybe I've made an error and miscounted. That's possible.

B: I'll open Mathematica to check.

Punita: Yes. I have 2 to the 30 is about a billion, I think.

Y: Yes, it's just over a billion (P acknowledges.) to the 30^{th}.

B: Two, two…Ah, this is the number: 6.7 times 10 to the 7^{th}. (P acknowledges.) Six point 71089, 6.71089 and seven zeros, one, two, three, four, five, six, seven. Three, three, three,

three. So we have millions. You say 'American billions'…

Y: Billions

B: …trillions.

Y: You've got 6 trillion. That's not what it says here.

B: Billion, million, trillion.

Y: And what was that?

B: It is 2 to the degree of 26 because this is the law. **[Recording time 9:06]** For instance, here, 2 is…

Y: …So if I take 2 to the 26, I get 6.7.

B: Yes, exactly, 6.7 times 10 to the 7^{th} taken to the seven degree.

Y: Yes. That's only 67 million.

Punita: Mmm…

Y: Yes!

B: Aha! Ah, sorry, sorry. I ah…6 7 1 8 – we have one, two, three, four, five, six, seven… (P acknowledges.) …ten to the first, 10 to the second, third, four, five, six, seven. So this is 67 billions.

Punita: 67…

B: Millions

Y: Millions

Punita: American million

Y: Yes, American million

B: American million, 67 million.

Punita: Yes. Well, 2 to the 30^{th} is about an American billion.

Y: So that's not the number I got. Now, let me try once more.
B: But you know, you are taking into account just the number of 27 which is the first…which is…

Punita: The first circuit.

B: The first circuit.

Punita: It's somewhat after that.

B: But, isn't the case that even with the first circuit, you have…with the first…one dimensionality with the first crossover when you introduce one dimensional space, you have some particles even earlier than 27?

Y: Well, my calculation was wrong. So, it takes two to the 30th to get just over a billion.

B: Maybe we should get over a billion if we take into account that not just 27, but when we have 26 arrows, we also have a lot of particles until that moment, that state of affairs. I don't want to introduce time. It is not just the number 27, but all of the structures before 27.

Y: All of the what before them?

B: Many structures before 27. It is not just 27. Twenty seven is…

Y: Aha.

B: There are many structures before that even when you have with seven or eight, you have your first circuit.

Y: So you'd have to add these to this, to this, to this.

B: Maybe not all of them, but some of them, yes. It is not just 27. Twenty seven is very characteristic number. But before that, we have a lot of particles.

Y: So I think it is on the right track.

Punita: We just have to think about it some more.

B: Yes.

Y: OK, a ratio of particles to antiparticles (B laughs.) …could be.

B: It's beautiful.

Y: All right, now. You have anything to share with us this afternoon? If you don't, that's all right. But if you do, if you wanted to just share in order to discover things about Lila Paradigm in connection with it, that might be useful. Or I can just carry on where we were going from this morning. (B acknowledges.)

B: Maybe for now we should proceed. Then later on, maybe inspiration will come.

Y: OK. **Radical Theory** (P laughs.)

B: It's really radical. (B laughs.)

Punita: Yes, that's what I think. People say radical, but they don't know what radical means. (P & B laugh.)

B: They are far from radical.

Punita: Not even close.

B: The beginning **[Recording time 13:16]** of the universe.

Y: Where'd we leave off? The Point of Inflection? (B acknowledges.) Number 10 on page 30. (Bellbirds in the background) The point of inflection of this inflationary curve is pi over 2 times n time quanta which is about 2 times 10 the 23rd time quanta which is about two and a half times 10 to the minus 32nd of a second from the start of time. At this time, about 1.1 times 10 to the 23rd agents are in the largest giant circuit. In other words, that's the value for little n. (B acknowledges.) Thus, little n at this time is less than the n in the extant circuit arrangement.

Now, I calculated that. I showed you that table one day (B acknowledges.) about different values for little n, that's if we go backwards in time, n getting smaller and smaller. K gets smaller and smaller. The speed of light gets smaller and smaller, and so on. (B acknowledges.) Since K **[Recording time 15:20]** which is pi over 2, which is pi over two at this time, times the n at this time, cubed is the magnitude of space generated by the arrangement, (See equation 2) the size of the universe that all of the agents in this circuit monopole are conscious of…the size is about 17.14 centimeters. That's if…well, it would be at that point since at this point, we have three-dimensional space. I think we did this before. Seventeen and a half centimeters is that much (B acknowledges.) about the size of a big grapefruit or…

Punita: Cantaloupe.

Y: …big cantaloupe or rock melon.

Punita: Rock melon, yes. (P laughs.)

B: Unbounded. (All laugh.) Unbounded

Y: Uh Oh! (All laugh.) When we're talking about three dimensions, we don't have any problem. (B acknowledges.) This is essentially the end of inflation. In the GUT's estimate for the size of the universe at the end of inflation, it's about 10 to 15 centimeters. By this time, just after the point of **[Recording time 17:08]** inflation, most of the baby sub-universe monopoles have merged into the largest circuit. And during this period of time, multiple versions of the agents appear to be being created as the various fermions. I've never done a calculation about that. But it's…the number of variations of the fermions is right around n cubed, the number of fermions. The fermions do not include things like photons which are bosons. (B acknowledges.) But I think it's due to the various pathways. So each Individual would appear in the other agents' consciousness as about 10 cubed--no…n cubed--fermions because the one dimensional space-time circuit monopole is imbedded in the two-dimensional space-time monopole sphere. Now isn't that a contradiction…two-dimensional space-time monopole sphere? (P acknowledges.) A sphere has got to be three dimensional. (P acknowledges.)

B: But also the circuit is not one dimensional. (Laughs)

Y: No, it's not. The circuit is three dimensional at that point.

B: If you follow that logic but…

Y: And both are embedded in a 3-D monopole sphere, **[Recording time 19:20]** the agents then connected to this largest circuit which are 99.99 percent of all the agents are each conscious of those dimensions of both space and time in a single state of consciousness that includes 1-D separation between physical things; two dimensional areas which includes the

energies; one and two dimensional motion; all in a three-dimensional unbounded space continuum in which it's own view point of these things is located. The temporal consequences of this embedding of monopoles will be covered progressively until the end of this section. It is? (All laugh.) I'm not…maybe it's not. I can't remember.

B: It shall be. It's future time – future tense.

Y: In future, yes. Yet to be done! (All laugh.)

B: Future tense. (Laughs)

Y: The temporal aspect of the space-time produced by the 1-D monopole begins with the first singularly crossed over circuit and lasts up to about 2 times… **[Recording time 20:52] …**no, lasts up to kn over pi over 2 time quanta, the time when the inflation curve joins the standard Big Bang curve which is described in the next section eleven (11). I think Newton's Three Laws are easily accounted for, the laws of motion and also Euclid's analysis of space like a space and area in the line. One dimensional, two dimensional, three dimensional are all embedded in each other in this space we have here. And it explains why motion, if it's un-accelerated or decelerated, is always a straight line. I remember in intermediate school when they taught us about Newton's Laws of Motion in science class… (B acknowledges.) …and wondering, "Why does it go in a straight line?" The professor says – or the teacher actually – says, "Because it does go in a straight line..." (P laughs.)

B: The **[Recording time 22:32]** third law of inertia or…

Y: "…and we're just describing what it does, not why it does it." And I said, "But I want to know why." (All laugh.) Well, actually, it doesn't do it. It's just a situation of motion; and it's the very nature of motion. And this is as good a time as any to discuss the subject of motion. (B acknowledges.) I have a circuit. This is going to take a while. Now, I'll put this guy here. These are particles associated with each one. Now these are all in present time. (B acknowledges.) And we have a distance between A here and W here, and also one like this. But these are all 1 *lq*. Now for this particle to be at a different distance than 1 *lq,* we're going to have to use some substates. So, I may have to do these twice if we have to take substates, and more of them. (B acknowledges.) I'm just not going to draw them all.

B**: [Recording time 24:44]** One here with C

Y: All right I'll draw one more in. Now, if we merge or combine these substates (B acknowledges.) like this, our distance will come up to be something like 4 *lq* in the consciousness of those particular substates, all merged together.

B: It will be more than 4 *lq*.

Y: Well, I haven't figured it out. (P laughs.) I said something like…

B: Yes, yes. OK.

Y: …whatever it is.

B: Yes. It will be factorial.

Y: And we compare that one with… So, the time would appear to change over those going from one substate, to the next substate, to the next substate, to the lesser substate. We're

going backwards in time. Going this way, we'd be going forward in time. But they're all in present time, (B acknowledges.) but the memories of it. So this gives the appearance of this distance increasing. (B acknowledges.) But it only works in a circuit. You can't take that off by itself because they're not all in…

Punita: …present time.

Y: …in the same present time. (P acknowledges.) I think if you did this (draws) for this guy, would that do the same thing? I don't know. But this is the basic thing about motion…is (B acknowledges.) comparing substates. And it's what I didn't explain to Stapp. (Henry P, Stapp) **[Recording time 27:00]** (B acknowledges.) It's also what's on my piece of paper from several years ago…

B: Yes. That's great.

Y: …when I could think without pain.

B: You know, maybe, here it is good…if I may say something?

Y: Yes, please.

B: It is good to present this on a cylinder, and then the illusionary time – actually, the comparison of substates in the consciousness of a referent Individual and their memory will be visible. For instance, we have here some initial circuit and referent Individual A. And then we have all this for crossovers. And then for the first substate, for instance… illusionary; this is not in a background of time-space.

Y: Ah, I see what you're doing. Yes.

B: And now the first will be here, for instance…the projection of first one because this is somehow projection in the consciousness, so-to-say, the comparison of the substates in the consciousness of the Individual in (Y acknowledges.) comparison with the direct knowledge. So we have here one. And then the other twos which are the same but just the projections will be at another level. This should be levels, for instance. (Y acknowledges.) So the second level, we have two of them. On the third level, we have three of them…

Y: And so on.

B: And so on because they are projections. And also this will make easier for us to find out the numbers because all this could be combined. For instance, A to B with A to C with B to C. (Y acknowledges.) So this is three factorial, actually, because also C to B and B to A, also here, A to B, B to A, two factorial, also here, one factorial. **[Recording time 29:20]**

Y: And you…

B: Unfortunately, I don't have now colors. And so... because all is present time, for instance, the surface of the…it should be explained…that the surface…that these are actually cylindric coordinates and the surface is present…is time. (Y acknowledges.) It is all present time. It is all…the whole…the whole surface because they are cylindrical coordinates, it's present time. In cylindrical coordinates, it is just one time. So it's all in present time; but this comparison of substates creates – because all is present time and you compare with the, for instance, with the third one and all of the previous, so-to-say illusionary previous--come into the consciousness of the referent Individual as memories further and further away--illusionary.

And so we have notion of passage of time. **[Recording time: 30:32]**

Y: So our motion between these will be discrete. (P acknowledges.)

B: Yes, exactly. Yes, yes, states. (P acknowledges.)

Punita: Just like on the movies…the flickers, remember?

Y: Yes. Just like the flicks. (Punita acknowledges.) You can get a lot out of this. Not only will you get motion, you'll get the descriptions of various particles and all their resonances, all the quarks…(B acknowledges.)

B: Ahhh. And speed.

Y: …and all the leptons (B acknowledges.) that same model will produce depends on which thing you hold still. (B acknowledges.) In this case, you're causing…saying the cylinder of time. (B acknowledges.) But you could also have it be space. (B acknowledges.)

B: Yes, passage of time…

Y: ...and have time moving through it. (B acknowledges.) OK. So although there is linear motion, it is discrete. OK. That's where we left off in our reading, Number eleven (11). The total number of extant non-denials that form our universe is Kn over 2 pi time quanta.

Punita: Ah…number of non-denials is time quanta? (B acknowledges.)

Y: It doesn't make sense.

B: But ah…once we stated this. I have here a sine which says this.
Y: …that the total number of extant non-denials – it would form…

B: …it would form…

Y: …the time duration of our universe as **[Recording time 32:45]** …which isn't in there. (P laughs.)

Punita: OK. It would have to be reworded.

B: That we stated it, yes. It should…

Y: …where K is the value given there and little n…so the number turns out to be about 1.3 times 10 to the 31st second. That's, of course, unrecursed. The size of the universe at that point is Kn cubed *lq* which is about – so that's about 100 times 1000. It's about (point two) .2 kilometers on the original pattern.

P: Hmm…

B: Yes. 1.8…1

Punita: No, it's 182 meters.

Y: It's about .18 kilometers, isn't it?

Punita: No…

B: 0.182

Punita: Yes. 0.18 meters

B: Kilometers.

Punita: Kilometer.

Y: A kilometer is a thousand. Ten to the 3rd of centimeters is 10 to the 2nd…10 to the 5th . It's (point one eight) .18 kilometers, is that right? (P and B acknowledge.) OK.

B: (Zero point one eight) 0.18

Y: All but about three ten thousandths percent of all n agents are in this largest and now only circuit. Well, it's probably the only one. (P acknowledges.) But technically there's enough agents that still...there's, ah, 10 to the 17th agents that are not in that largest circuit. So they could form smaller circuits (P acknowledges.) and start different 'cadres.'

B: Different what?

Y: Cadres? …a group of people for a common purpose to take over the big circuit. (All laugh.) So that's an error there. The **[Recording time 35:32]** word 'only' should come out since all the smaller circuits…well, that most of the smaller circuits …would have merged into this largest circuit forming one nonphysical circuit monopole that produces the electric and color charges. The electric charges is formed by the ratio between… (Y is drawing.) between…this substate and this substate. That ratio gives you the electric charge; whereas, the color charge is simply the ratio of all the combinations of these. (B acknowledges.)

B: Six of them, huh?

Y: This one, this one, these two, these two and these two...and that makes the strength of the color charge just over 100 times that of the electric charge…all the combinations. Even though a time aspect of the space-time generated by a single crossover ends at about 10 to the minus 31st of a second, the time aspect of the space-time generated by the monopole formed by the two crossovers continues until color confinement which is described in paragraph 12.

The color confinement is also called the cheril confinement and also called the Hadron confinement (B acknowledges.) where all color means the strong force, the gluons. And the gluons are never found outside of this containment. And they're contained in…they're trapped in two dimensions. The two-dimension recursion – which is the first recursion – is embedded in the three dimensional caused by two crossovers…three crossovers. It's the second recursion. And so the two-dimensional space which contains the strong force and everything that goes with it, all the color dynamics--*that* is embedded in three dimensions. So it seems like their Hadron bags are capsules, are encapsulated. I don't think to this day they've found any other explanation or possible explanation for that color confinement although they have all these scientists at CERN and all that equipment (B laughs.) and at Permilab south of Chicago, etc. etc., and all the top theorists in the world. They haven't been able to figure that out…that doesn't make sense in terms of strings or membranes. (B acknowledges.) It doesn't make any sense at all except this is the only explanation I've found for it. **[Recording time 40:09]**

B: Yes, illusionary.

Y: And that could be proven mathematically, I think. I can't think of any other way to prove it. OK, Page 31, Paragraph 12. See graph D. You don't have D there?

B: Right here.

Y: Yes. That's for you to look at. The duration of the two-crossover monopole is up to Kn squared over 2 pi *tq*.

B: Pi over **[Recording time 41:28]**

Y: Over pi over 2, yes. And that's from equation one alright. And it fits right on the curve where it belongs. But in our reasoning…that we had last week sometime or the week before, …was that it shouldn't be that formula, that it should be the arc tangent value…ah…squared.

B: Aha, yes, the second crossover.

Y: But the thing is, I'm not sure of that, that that is so. One of them is probably so and I'm not sure which one it is. And I've said that I will work that out when I'm in Perth. I'm going to sit down with this and when the grandchildren are not (Laughs)…are all asleep; and I'm feeling well enough, I'll do it. Or you can work it out, any of you guys; those included listening to this (All laugh.) 10,000 years from now, still trying to work it out. So anyway, using this formula, it turns out to be about 2 times 10 to the 48^{th} which is about 10 to the minus 7 seconds. So if you look at the bottom of the graph and go 10 to the minus 7 seconds and go up, you find a line that says that's the end of the first recursion. (B acknowledges.) You don't have formulas on there, do you?

B: But it is clear it is here because if we take in the logarithmic scale, logarithm of two is (Y acknowledges.) 0.30103. So at one third, we have eighty here because the segment is forty to fifty.

Y: So seven would be right about there…

B: …So seven is here...

Y: …which should be right about here. (B acknowledges.) But the formula that I've written that gets that is the one that is in the text here, Kn squared over pi over 2.

B: Aha! I have it here but with K minus one because it was first time when I was looking at the article. It referred to the equation where there is K minus one…

Y: …minus one.

B: …which should be K. [**Recording time 44:27]**

Y: I'm not sure I agree with that. It might be. **[Recording time 44:36]** In any case, there's also a formula here I have for the size of the universe at that point which is Kn cubed times the square root of 2n *lq*. That many *lq* and those two intersect exactly on the standard Big Bang Expansion Curve…or line…and log log. This is the instant in time of the confinement of the quark and Hadron bags, the chiral confinement, or the color confinement. The standard theory estimates this time to be roughly 10 to the minus 6 seconds, plus or minus a little. Well, their standard theory is just an estimate, a calculation based upon 13 different

parameters, nine of which are guessed at.

What happens is that the quarks, which are in the 2-D space aspect of the two-crossover circuit monopole produced space-time continuum, get embedded in (that is bagged) by the 3-D space-time continuum because the two-crossover monopole is embedded in the three-crossover monopole. The size of the universe produced by the two-dimension aspects of the two-crossover circuit monopole is Kn cubed times the square root of 2…

And that should be little n *lq* because it only goes to the spaces created only to the number of Individuals in the largest circuit. That's from equation 2 which is about 5 times 10 to the 15th centimeters which is exactly on the standard Big Bang Expansion Curve at that time at the above time. (B acknowledges.) The time aspect of the three-crossover monopole produces time that continues beyond the end of the time produced by the two-crossover monopole which is described in paragraph 13. So this is in better shape than I thought the other day. In paragraph 13, the time aspect of the three-dimension space-time continuum continues up to K little n cubed over…divided by pi over 2 time quanta... **[Recording time 47:48]**

B: *lq*

Y: Hmm?
B: Ah, the time aspect. Yes.

Y: Yes. This is time first which is about 12.7 billion sidereal years. This is a prediction of the age of our universe at the current time in which alpha to the minus one is measured at that value. Recent measurements for the age of our universe… What have you got? You've got the revised version there?

Punita: Yep.

Y: Would you read it?

Punita: Well, the revised version, this is the one I scanned.

Y: Oh, you just scanned it, huh?

Punita: Yes. I haven't updated this.

Y: You haven't updated this part?

Punita: No. (Y acknowledges.) I didn't know I was suppose to. (Laughs)

Y: The size of the universe this time is about one and a half times 10 to the 96 *lq* **[Recording time 49:14]** which should be the number of photons. So if you have a circuit and all the *lq's* of all the total number of crossover arrows, each one of them has gotten n *lq's* at cubed – this whole thing is cubed – and that should…each one of those space relationships between the particles in the circuit, each one should be a photon. And it's interesting that the number of photons recently estimated is about 10 to the 96. This value is exactly on the… when that's summed up for the total size of the universe, then it matches the standard Big Bang Curve and the current best estimates or measurements for this order of magnitude.

What isn't included in this 1998 paper is all the five different ways of measuring the age of the universe, one of them being WMAP and four others – very different measurements. And they all come out to be just over 13 billion years. And they all have a flop of about plus or

minus point three of a billion years which, therefore, the 12.7 billion years that I've predicted is within that error margin.

Then I say: Any crossover arrows in excess of three in the original pattern only produce in the consciousness a greater strength of the electromagnetic and color forces, but do not increase the number of spatial dimensions. I just say that. I don't defend it. I think it was yesterday I defended it a little bit. And I don't remember what I said. (So Paracetamol) Now that we've been over all this a couple, three times, I'm going to read the conclusion again.

The Lila Paradigm percentage here is meant only as a cursory framework of a new radical theory for understanding consciousness of physicality; and all that comes from that. We consider that the theory shows enough promise to warrant further investigation. I'm glad to see that you think so too. (P laughs.)

B: Yes, yes. I, of course, a great field. I was thinking about this, why the recursion does not produce new dimensions. But it is…

Y: Why don't we have nine dimensions, huh? (B laughs.)

B: It is just reinforcement of the information seemingly (Y acknowledges.) moving around the monopole. It is just reinforcement. It is a new origination. Now when I have introduced these vectors into the picture, I am using this observation. When you have a new origination, then it originates…

Y: So the origination, there's no increase in the number of originations.

B: No, not the originations, crossovers.

Y: The crossovers. Well, there's no new crossovers.

B: This is what I say.

Y: Yes. That's what you were saying. Yes, we're agreed.

B: This is what I say. Yes. I say it is just reinforcement of…

Y: But there's new vectors.

B: There are no new vectors. It is just… now it is speculative, so-to-say, because we introduce illusionary…

Y: But they're called different things.

B: …moving around the circuit. (Y acknowledges.) The information circulates anew…is doing a new movement around the circuit and reinforces somehow, just reinforces the same substates which…

Y: Yes, but the scientists call it a different thing. (B acknowledges.) They give it a different name instead of calling it an electron; call it a muon or a tauon.

B: Yes, the third crossover, a tauon the same as muon…

Y: …because it's just stronger. But it's the same thing reinforced. (B acknowledges). That's

what you call it. (B acknowledges.)

B: So this is clearly explained in Lila. It is clearly explained.

Y: Say it again. I missed your…

B: I say, it is clearly explained in Lila. (Y acknowledges.) Lila gives a perfect background for it.

Y: And you're seeing that clearer.

B: Yes, yes. Exactly. In order to have another dimension, it is something different, you get…

Y: Beautiful! Now it is my turn to say 'beautiful'. (All laugh.) That's great! Or, as they say in Sanskrit, "Maha! Maha!"

B: "Maha! Jaya! Jaya!" (All laugh.)

Darshana: "Jaya!"

B: "Jaya!"

Y: "Jaya Bhagawan!"

B:" Jaya Bhagawan!" Yes. "Jaya Buddha!" But also these vectors are beautiful. I really like them. They…

Y: So do I. (B acknowledges.) I told you this morning, you're on to something.

B: Yes, yes. You have clear observation of what is difference in waves which produces, for instance, boson or a photon or a carrier **[Recording time 57:24]** of force – W boson or… It is origination that does it which is a force which is a vector. A new vector introduced, produces a carrier, a messenger, so-to-say, from the knower to the known. The knower and the known are particles; but the messenger is the relation. Once again, we have relation and *relata*.

Y: Yeah!

B: And this is clearly described by this picture because we have seemingly – now I stress always – we have illusionary moving around the largest circuit. And then when we have a new origination, we have also moving around the smaller circuit and the difference in the sines. But I'll stress because I know you are… I differ between the sine formed by the projection of a moving of a representative point around the circuit and the wavelength of a new produced particle because the difference in sines will produce the boson. The difference in the wavelengths of the sine which is moving across the circuit which is different, their difference produces… So this left **[Recording time 58:56]** over of a circuit, for instance, if we look of the moving that the moving around the circuit goes in this direction, this leftover of the monopole creates wavelength, (Y acknowledges.) as you use to say. It creates wavelength because it is like in Feynman's diagrams. It is sum over history, literally, (Y acknowledges.) because we have histories here. And we summarize the histories which I have done if you remember a week ago with these wavelengths. And it produced a wavelength. But now if we observe it as a vector on the other side of the circuit, we have reinforcement of the illusionary signal or information. And this reinforcement couldn't be a new dimension. There is no new dimension. In order to get new dimension, we have new

vector and the vector product. And the vector product produces… Or simply, it is reinforcement. It is no new crossover to produce a difference in the…

Y: …the pattern's the same. (B acknowledges.) But it's reinforced.

B: It is reinforced. Yes. In order to have a new dimension, we should have one common present time. And then the mechanism which will separate the seemingly distance between the known Individuals by a knower which is the referent in his consciousness, this comparison which creates space. But also every new dimension creates orthogonal perception of space. Not just… This is what gives the new dimension, the orthogonality. And it could be… This is why it should be always presented on sphere because otherwise… Yes, it is clear for the reader who clearly understands what is consciousness, that consciousness is comparison. It is likeness always. We, once again, …we have relation and *relata* and because all happens in present time in order to differentiate between the substates, the comparison between substates creates space and new dimensions, and finally also movement when we have sufficient number of the substates. But it should either on the cylinder or on the sphere to be clearly…

Y: …to be able to go out on a two-dimensional piece of paper. (P acknowledges.)

B: Yes. …to be able to move. **[Recording time 62:06]** And this is where the vectors come into picture because we introduced elementary unit of time. We introduced elementary unit of length; but the origination could be seen also as an elementary force.

Y: Yes. Oh, yes.

B: Yes. And when you have two of them, we have a vector product and the vector product is always a new…represents a new direction in illusionary space, I emphasize. (Y acknowledges.) It is always by the rule of the fingers. You know the rule. (Y acknowledges.) The vector product of A cross B is if A moves toward B, the direction is like the screw goes. Or from the viewpoint of the observer, this movement is counter clock movement always.

Y: That's what's called 'chiral' in physics.

B: Aha! This is chiral. Maybe in this manner, this confinement, color confinement or … **[Recording time 63:44]** confinement should be clearly explained to be seen why it couldn't be before this period. And why it couldn't be after this period, somehow to distinguish. (Y acknowledges.)

Y: Yes. I'll be right back. (B acknowledges.)

Punita: Biljana, (B acknowledges.) it's spelled chiral; it's pronounced in English *kirel*. So if you hear people referring to kirel, – the science – (B acknowledges.) that's from here. (He shows her in dictionary.) See.

B: Aha; kirel.

Punita: With a K.

B: Not super imposable on its mirror image.

Punita: Yes, so it's not super imposable on its mirror image. It's from the Greek *chir.* (B acknowledges.) Just letting you know, in case you hear it being referred to, that's kirel. (B

acknowledges.)

B: Not super imposable on its mirror image. …Kirel because *kir* in Greek means mister. (All laugh.) Or...*kira* is Mrs. or God, for that matter (P acknowledges.) because when you say in Islamic languages [**Recording time 65:37]** *Gospod* is God and *Gospodi* is mister. So it's in Greek.

Punita**:** That's … *Ponbu*
B: In what?

Punita: Chec.

B: Ah! Chec. Ah yes**,** *Panbu*

Punita**:** *Panbufi* – God knows. (B acknowledges.) And the term is *Pana* for Mr. and *Pani* for Mrs. (B acknowledges.)

(Yogeshwar returns.)

Y: So, we have a little bit left for tomorrow. And if you want more time on Thursday, you could have it all off. You've done so well today in spite of the difficulties sometimes. And maybe you could go around and look at more things.

B: OK, thank you.

Y: I don't know if you're finished with your shopping yet; but Darshana could take you around.

B: Thank you so much. (D acknowledges.)

(More socializing talk)

Y: Ramana Maharshi lived in a cave overlooking the temple in South India. (B acknowledges.) He fixed it up or his disciples, his followers, fixed it up for him. But he stayed there for 27 years. Then one day his mother died. And she died; and they brought her body for the ritual to burn the body (B acknowledges.) at the bottom of the hill. But they couldn't do it up at the cave; it was on a hillside. So after 27 years, he walked down to attend that ritual. And he stayed there (All laugh.) until the end of his life. In other words, he had no desire to go anywhere, to do anything, but out of being pious-full **[Recording time 68:52]** to his mother. He would do that one exception because in India the mother is Goddess. (B acknowledges.)

B: It reminds me on Dogen Zenji. Dogen Zenji, the founder of Soto Zen, who lived in the 12th century. And he has written *Shobogenzo* which is the True Eye teaching or the Great Treasure teaching. And when his mother died, he sat by her dead body. And he was in sorrow and so on. And he has seen smoke from the incense which was lit up, the incense. (Y acknowledges.) And then by her dead body and the smoke of the incense, he had a fully understanding, a very deep understanding, of the impermanence because his mother's body died and the smoke is such a pure presentation of the impermanence of everything that exists. It's like smoke. (Y acknowledges.) And so his whole poetry is based on this, the impermanence of everything in the manifested world, not in the ultimate reality. It's very beautiful picture. **[Recording time 1:10:42]**

Y: That connection with mother is very important. When my mother died, she was staying with my sister about one hour automobile drive on the other side of Los Angeles. (B acknowledges.) And my sister called me up and said she had died. And I said, "All right, I'll be coming to the funeral arrangements."

So I was just fine. And then, she asked me if I would do the eulogy at the ceremony at the funeral. (B acknowledges.) So I said. "Yes." And when the time came, I drove there and everything was fine and the funeral was fine. I gave the eulogy and everything was fine. I looked at her dead body; and it was just a body; and I was fine. And I got in the car and I cried for 2 hours. (B and P acknowledge.) I almost ran off the freeway. And I barely made it to a stop. And I just laid there with my head on the steering wheel. And it was like a silver cord was ripped right out of the gut of this body. A silver cord was just stretched to the limit and 'snap' it went. And I just fell to pieces. After that was over, then that was that. And I went on my way. (B acknowledges.) But I had a very close connection with her. (B acknowledges.) It changed my outlook.

B: A few hours before my mother died, it was 4 years ago, I felt like she put her hand on my hand. And she said… I was like in lucid dream state, you know… (Y acknowledges.) It is dream, but lucid, when you are fully conscious. And she just put her hand on my hand and she said, "This which lies there," showing her body in the hospital, "This is not me," she said.

Y: Aha! (Laughs)

B: This is not me.

Y: Bravo!

B: And then few hours after that she passed away. She was mathematician, great mathematician.

(Darshana shares an experience she had with her mother.)

Y: OK, rap it up.