Reporter: I'm Wanda Ramey in San Francisco. We're in Golden Gate Park here. Right over there is an area known as Hippie Hill. This flat section down at the bottom of Hippie Hill is an area where the hippies of our city gather for all sorts of meetings, discussions, confrontations, if you will.

Today it's a unique one with Buckminster Fuller. Mr. Fuller, as you know, is the world-famous architect. He developed the geodesic dome that was at Expo '67, the United States exhibit there. He has many other names given to him, many appellations.

This morning I heard a new one-- cosmologist. He's a philosopher. He is, as one hippie just a moment ago put it, "That guy who makes those mind-expanding buildings." The hippies of San Francisco are going to be talking today with Buckminster Fuller about the world of the future and probably a lot of other subjects too.

Let's listen.

Man 1: Come on, pothead.

Man 2: That's Mary Jane.

Man 1: All right, let's start the show.

laughter

Leader: Ladies and gentlemen, here we are, out here in Hippie Hill Park.

Man: It's Summer Hill...

indistinct

Leader: We're all gathered here today to see a great person, Mr. Fuller.

applause

Everybody knows me.

inaudible

Now, do we have any dope?
Laughter and indistinct chatter

Hope this is not on TV, because if it is...

B. Fuller: I'm gathered here to see a great people--
you.

Oh, wow.

That's cool.

You're welcome to Haight-Ashbury.

Speech, speech.

Man: Any man that can grow a thing in the ground...

Leader: How do you know that?

laughter

How do you know that?

Well, that's good.

Is everybody having a good time?

Woman: Yes.

Leader: Are we on TV? I notice a microphone. Are we on TV?

Man: Yes, we are.

Cameraman: Mr. Fuller? Could you turn towards... turn this way.

This way?

That's right.

I've got to get my foot around here somehow.

Okay. Okay?

Boy: Here's the grass.

Leader: Thank you, you little kid. Now we are on TV.

Man: Does anybody have any questions that they would like to ask Mr. Fuller?

You've already asked one.

simultaneous conversation

Who's going to be first beside me here?

Man: I've got a question. I have a question.

Yeah.

I understand you're having a thing about building a geodesic dome in Tokyo Bay. Can you give me any details about it?

Fuller: I can tell you that the geodesic dome for Tokyo Bay is all off, I'm sorry to say. But there was going to be a... It wasn't going to be a geodesic, it would be a tetrahedron, a great big tetrahedron of a city in Tokyo Bay. But the Japanese have decided to do something up in the land, a great tower city and so that... that is not going forward. However, this tetrahedronal floating city is going forward in another big project, so there is such an undertaking. You might like to know what it is. The idea is that the cities, the way we've known them, have grown up as many private, really anarchistic enterprises. Somebody takes some real estate and tries to exploit that, and somebody else is exploiting something else. So the cities haven't been coordinated, not organic. And the cities may be, themselves, be obsolete and just the people who have some property are trying to keep it going. On the other hand, the Queen Mary, as a ship, is an organic city. It's designed as a whole thing, with the energy equipment, all the organic equipment, all beautifully done. I can tell you, as a consequence, the kind of buildings that people build on land have been very inefficient. I took a... compared a big hotel in New York to the Queen

Mary, where the hotel holds exactly the same number of passengers and gives them the same amount of public space. Where the hotel in the city, However, is able to get its food from the city every day, got its power from the city, didn't have to generate that. And the Queen Mary had to generate her own power; she had to have food on board for 30 days. And yet the Queen Mary weighed only one-eighteenth as much per usable cubic foot. Therefore, Queen Mary is able to float and that building wouldn't have been able to float. So that when I talk about, then, a floating city, where you just start…design it organically right from the beginning, and it would be some place that, really enormous... mankind comes together as we've come together here now.

Sometimes he wants to grow apart; sometimes he wants to come together. And there's no reason why we shouldn't have increasing freedom this way. So I see that cities are where people converge, and we come together today not for... in cities, as we used to, for a physical big warehouse and the big exchange of goods and manufacturing. All those things have gone out of

the city, deployed away. People come together in the city for just what we do here, the metaphysical, for the abstract, the weightless-- that's communication.

So that I see, then, a floating city where people can come together in appropriate ways when they want to come together, and nothing more about it than that that I can tell you right now.

Man: Another question? Could I ask you about the emotional aspect of your environments that you would like to see in the future? I feel strongly that the environment is linked to man, and that environment gives man an identity. And that I feel our architecture is architecture of yesterday and not today. And that it does not fit the man's identity needs. And that if you had, say, a sculpture that you lived in, or changed a wall into a painting, that this would allow a man to think in different patterns of thought. A different emotion into each different room would also allow a man to think in different patterns of thought. Because I feel strongly that emotion is... the emotion that we make is also the pattern that we think. What do you feel about that kind

of ideas?

Fuller: Well, I'd say I agree with you about the emotion. I agree that if you had a certain kind of room, you could have a certain kind of emotion. I made experiments to find out exactly what happens in, as I say, a room where you have pink light against blue light, if people not...I made an experiment where people don't realize that you're changing the light. And you go into a pink light and you make love, and you make a blue light and they talk about the stock market. So that you find that those things can go on. In other words, the environment can affect people very much. But if the people are aware of that environment, that being an objective, then they won't let it do that. But I would just say... Isn't it a matter in personal environment whether we let it do it or not?

Don't we live in the same square for the bedroom, the kitchen, the bathroom, made out of planes that form at rigid angles, that have shadows that are hard-edged shadows, so that we think in rigid patterns, that we think in terms of plane, we think in terms of the hero-

villain complex, we think in terms of black and white, rather than any in-betweens? I couldn't be more in agreement with you about this environment thing. So I really spent the second half of... more than that-- the last two-thirds of my life just trying to work on how we would make the environment serve the man instead of the environment pushing him around.

And we just take a very simple thing of... the wall has to be a bearing wall, where the structure is not well understood. So you have many interferences-- so there's a bearing wall, and then you put a bathroom behind or whatever it is, the thing is very arbitrary. I found it possible to enclose enormous amounts of space without any columns or anything so that, in effect, you can return to your Garden of Eden; it just won't rain on you.

And so that I find that it is perfectly possible to make the environment really not only serve man, but really be comfortable. I'll just use, I think, the piano as against a...used to have a player piano where you, whether you liked it or not, was going to play one tune.

It's much better you can play the piano. So that I find we can make the environment that way. I've been in geodesic domes. I find they're too regular to suit me. They don't have many different levels. For instance, if you sculpted a wall, the wall is not only a wall, but it is a sculpture, or it is a chair, too, which it could be made into, where geodesic domes are very, very, very regular, and I find the same rigidity of pattern in thought. What geodesic domes have you been in?

Man: Just a few.

Fuller: Just tell me which. Some put up in pavilions. Some put up in pavilions. Where? One that was on...

Man: The fairgrounds in Washington state. One of them is in the fairgrounds in Washington state.

Fuller: Fairgrounds in Washington, D.C.?

Man: State--Seattle.

Fuller: Oh, Seattle? I've been in a few private

temporary geodesic domes. But you're talking about looking at an instrument. Because a geodesic dome that's any good would be simply an umbrella for the rain, and ought to be invisible. And it isn't an instrument in itself. There's no attempt to make it music. It is purely an instrument. It is purely an instrument. And it should be self-effacing.

Man: Mr. Fuller? Mr. Fuller? It should make it possible for you to have around you what you want with a minimum kind of effort. In other words, It is just a simple unit within which you put your emotional and physical wants.

Fuller: Exactly so. And that's what it is designed for alone. That's right. It's not mea not to put something on you, a kind of rule. I never quite understood that. If, in the end, I can make it invisible, I think we will. We're trying to even get it to where you don't even see it...so that you have what we have here. Yes?

indistinct

Man: If you have an organic city, such as you would like to have us live, does this not involve a political and social problem, or also an economic problem, in that the kind of human relationships that that city demands are antithetical to a democratic form of government, for one thing, because you'd have to regiment people to a certain way of activity. Or you'd have to develop traditions of activity that are antithetical to the democratic process. And secondly, you would have to get rid of the price profit, you know, the profit-- the Adam Smith economic system-- and adopt a Marxian system, where you would have central planning. If, with the kind of city you're referring to, you'd have a commune. And, uh...So, automatically...if you will, the kind of living that you prophesy for us will, assuming that we don't go through some kind of a...and if we get into your kind of living, and assuming that we don't go through some sort of a world convolution, an apocalypse, then, if you will, you're going to have to have a wedding of the communist form of government and the democratic form of government. That is to say, you'd have to have the Marxian piece as an antithesis on the present system. So you'd have a synthesis of a

new form of government, which embraces the United States, Russia and China in one political unity.

Man 2: May I say something? If I answer him...Sure, right. I mean, we still might...You mention what he said--we have this invisible dome. And once you have... you can see the invisible or see the spirit, if you have transcended all thoughts of dualistic concepts, good, bad. The trinity has become one. And therefore, there is no...that world no longer exists for the people who can see this. Once you get in this onsciousness...I think an important way to answer what you're saying, because I find that most planners tend to think of humanity as really having roots and having to stay put. So they plan a city to say, "You're going to go in there, so then I'm going to plan your community and you will eat at this time," and this and that.

I see that this is not what really is going on that we were not born with roots like a tree, but we were born with legs to advance and retreat; we have... mobility is in us. And I find that what humanity is doing, we call it increasing his degrees of freedom.

Fuller: Oh, precisely, oh, absolutely. I'm simply talking about a facility that permits our associating. We've just converged here, haven't we? We've converged here in this grass. And I'm talking about...In a community way...in a very community way. Oh yes, absolutely. I think...Please understand that I'm not talking about even a...Totalitarian...I'm talking about a tool where it makes it possible for us to converge. A heuristic device...And I particularly put it floating because what I like to do is get outside of all the laws for the moment, really give man a chance to get over all the momentum...bad momentum...out of the way. Yeah, the inertia. So you converge because you want to converge and you deploy the minute you want to. You don't have to stay there at all. You don't have to come together. So you and I have come together because we want to here, and it's great.

Yes.

And then when we want to deploy, we deploy. That's the spirit in which I am investigating. I'm not... also, I

don't think that I'm so fancy that I've got all the answers. This is exploration, an exploration. And as I come to exploration, I try to cite what we're exploring. And let's look at it and examine it.

Man: We're all manifestations of great spirit.

Fuller: Yes. E equals MC squared. It's very simple. Like a river flowing, energy. The river flows at certain speeds, like this box is flowing at a certain speed, we are flowing at a certain speed. It's always changing, relative density. That density can be changed by heat... by speed. Speed, light, knowledge, awareness.

Man: Power.

Fuller: I know what you're going to say next, but I don't know what I'm going to say next.

laughter

I didn't know I was going to be sitting beside you. It's great. It certainly is. Like in "Summertime," “My

daddy's rich and my ma is good-looking." Mother Earth, she's groovy and all, but Father's the all light. We're their children, their sons and daughters. And they said, "Children, I'm going to give you this great big green earth to play on, "all these groovy toys "and millions of brothers and sisters "so you won't get lonely. Have fun, it's summertime." Fish are jumping. Aquarian Age. The cotton is high. We're wedges in the cotton blossom. There's hydrogen, carbon, nitrogen, oxygen-- four basic building blocks of organic chemistry, arranged in the most finite molecular structure known to man. Zap, the Star of David. Molecular structure of acid. The whole damn thing is one big acid trip.

laughter and applause

Man: You often speak of making the world work. I was wondering if you could give us all some practical suggestions of how we could help to make the world work.

Fuller: Well, I am convinced that, at least what I'm

talking about here, how you say, make the world work for our physical success. I don't know how good we'll really be using something greater, but we have certain...We didn't design it, we didn't design the whole show. We didn't know how big you were going to be. You weigh in at seven pounds, you don't know whether you're going to go to 170 or what you're really going to, or know or why. But this takes a whole lot of energy.

And so... there's something we call food. And I'm interested in how we would be able to support all the life on earth- all of it--at a higher standard of living than any life has ever known. I'd like to know how...Can we arrange our resources in such a way that any man can enjoy the whole earth without any man interfering with any other? Can we do it in such a way that no man is advantaged at the expense of another? This is what I'm talking about when I'm inquiring into whether we might be able to make the world work. Those are the challenges, as far as I see. And so, first, you have to at least find out what you've got, find out what the spaceship is, because we are on this great spaceship. And something we just don't really tend to recognize,

we are, whether we like it or not, we're all astronauts. We're moving on this at 60,000 miles an hour around the sun, a fantastic speed. And we have just the right equipment. And here's our supply ship up here, the sun. And we have to get that radiation or we won't keep on living.

And so, I'm interested in how we would really organize. We didn't invent the oxygen. We didn't invent the 92 chemical elements, we didn't invent the speed, didn't invent gravity. How could we employ these principles in which we're trying to operate in such a way as to make ourselves successful? And I see the only reason we haven't been in the past is because we really were very ignorant. There was no instruction with the...came along with the spaceship. And we've had to find out--and this... it forced us to use this thing we've got here. At any rate, that's what I'm talking about. And I find it is possible, then, by experiments, to learn a little bit what that oxygen does. So I know how much oxygen do I need.

For instance, I find very few people really know how

much oxygen we do take. I found it very surprising nobody could tell me. But I made measurements, and we take in 54 pounds of air a day, average, each one of us. We take in only two-and-a-half pounds of dry food. We take in six pounds of water--this is average--and 54 pounds of air, out of which we extract seven pounds of oxygen. The thing that we use the most of is the oxygen. Now, most people don't really think about that in that way, because there's so much of it. The food has been very scarce. Something very interesting here. The food, which you use the least of, two-and-a-half pounds, you can go 30 days without actually dying. The water, which you use the middle of, you can go about a week without dying. The air, which you use the most of, you can only go about two minutes without dying. It's a very, very different thing.

And the one that we need so badly, fortunately there's an awful lot of it. Men have competed for that food for a long time. They didn't know where it was, and they found they were running out of it. But you still had 15 days before you were going to perish. You still had (indistinct) power, so you went off and fought with the

other man who had it. These people say, "I won't do it for you, but I'll take it for my kids," and then fight to the death. So I found the men had fought for the food. The water, they would tend to be too weak to really do much about it. Air, they've had so much, nobody's ever thought of putting meters on the air, something to sell. Yet, we'll have a fire in the theater, and all of a sudden, the oxygen is burned up by that fire. And fathers, who would readily give their lives for their kids, run over their own kids, because they've gone mad, because they're so unused to this.

So we find that life will take life where there's sudden challenge of death. Absolutely (inaudible). So I say if we want to make our world work, we've got to find ways in which we can support all that life. The reason there is killing and war is simply because there's not enough to go around. So the way you make the world work is to discover, if you can, by design, improve the performance per the units of invested resources, till you can take care of everybody. And that's exactly what is really going on today.

So in this century, just two-thirds of a century, we've gone from taking care of less than one percent to taking care of 40% of humanity, a higher standard of living any king ever knew, all during the time when the resources for each man have been less. So we didn't do it by finding more resources. We did it by doing more with less. And what I mean by that, with a little transistor instead of a great big pump. With a Telstar weighing one quarter of a ton outperforming 175,000 tons of copper cable for trans-Atlantic. And this is what I mean by more with less. None of the economists, nobody knew that that was coming, that you could ever do more with less. But we've now discovered you can. So, what I want the young world to begin to realize is, they're absolutely right in thinking we oughtn't to have war; they'd like not to have war. The way they're going to get it is by design revolution where you do more with less, because right now, we only... The way we are using design, whether it's an automobile or a pump or electric light, all the resources we have operating at full capacity can only take care of 44% of humanity. That means that 66 are doomed to inadequacy and early death, and great pain.

This can be changed, because we've gone from zero to 44% in half a century, means we can go all the rest of the way if we suddenly realize that because we didn't have more resources, we did it out of more with less, so you see there's a design revolution ahead rather than really a political revolution. If you go out playing politics, you're going to end in guns, because politics always consumes one side or the other.

And so I'll just say that the big... big message coming to us out of our experience is that we have a design revolution ahead. You say, "What do we do about making that world work?" All right, learn how we do more with less. Thank you. Do you think there's more than a design revolution called for? I feel a lot of people have had a lot more than anybody else in any generation. But still yet they're very unsatisfied, completely unsatisfied, with just function alone. And they're... the... I find people always talking in terms of how much space and in terms of figures, but very little in terms of how a mind reacts to a big computer, how alienated our...it could make you feel. And I think that

this quantitative aspect has to be considered, and considered greatly, much more than it has been.

Well, man, I'm going to review what I call tools. We've learned that all biological life is continually altering the landscape-- that is, the trees... roots are getting bigger and heaving up, the earthworm is turning things over. Then we find that the altered landscape is continually altering man. That is, inadvertently, from pure rock we've created a topsoil by which you could generate life. Now, all life is, then, altering the landscape one way or another. Some life alters it more preferred ways--that is, there's always an interchange between the landscape and life. I spent some of my own--I'm 72--I've now processed, I've taken in out of the environment1,000 tons of water, air and food, and processed it and cleaned my hair and got it cut off, and my skin rubbed off--and I just took off 65 pounds. So that wasn't me, either. So that I just--as I said, this is the processing of the environment.

It goes through us...each one of us has some kind of an enormous engagement with the environment. Now,

I've found, then, the bird alters the environment to the extent of making a nest, which is a tool--why?-- it's able, then, to produce a way of taking care of its young, getting out of the womb early, so the bird can keep on flying. Because if it waited until the bird got big, the mother bird couldn't fly. She couldn't get the worm that would be necessary to generate the heat to generate the new life.

So I find, then, that tools are a part of all living species, some of them much clearer than others. The spider's web is very clear. Now, man is unique, not in the making of tools, but the degree to which he employs tools. So I find that the bird carries around an integral tool of wings. Man, instead of doing that, is able to fly, but by separating it out as a tool. So he has a tool which he uses when he wants to fly, and he has a tool when he wants to go under the water. And so he simply becomes sort of a versatile adapter, which can extend itself in these tools. So I've found, then, man, on account of each of his tools, which he does find himself in his experience, suddenly repeating something he'd done before and realizing he's doing it

in a way in which it takes up all of his life. And his process...because we are a process and it takes an awful amount of time, so we take care of being a processor. So when he realizes he's putting too much of his time in that, so he realizes that instead of cupping his hands to find the water like this, he could make a vessel which holds that water and he could take the water with him so he doesn't have to take the time to go out to find out where the water is. He can bring the water to him.

So once I understand what my tools are, that's it. Now, every tool we have is an externalization of an original integral function of the man. So, whether you're talking about your computer is simply--it's not an invention of something new at all. It is simply externalization of...By the way, with a tool...When I make this cup—because I'm going to make that cup, not out of the flesh of my hands, which I was using when I was just cupping my hands, I'm going to make it now, say, out of earth--I can make it take heat that my hands couldn't take. I can make it take acid, so I can extend the limits of that... of the function vessel.

So, the same way that I'm going to externalize the function of the brain, which is simply memory and recall...the brain part is memory and recall, and message retrieval. I can simply...the computer can handle more of those memories and bring them back. But it doesn't do any thinking for us. Well, I understand that. So you needn't feel alienated by that..Do you feel alienated when you have a spoon in front of you instead of using your hands? I understand that, but I understand and I see that people do not understand that. I see people... their motives for using their tools, and using their tools in the wrong way. One of the greatest tools we have, the atomic bomb, is being misused. All of the people who have come to Haight-Ashbury have thrown away the tools. They have thrown away, are throwing away many tools. Speak for yourself. And... (inaudible),they don't want them. They don't understand them. They can't begin to understand them emotionally.

Man: Right, right. I wonder, Mr. Fuller, if you could comment upon something. I had an enlightenment

about it this morning. I wrote a letter to my father in reply to a question he asked me, "What are your plans?" I've dropped out of the academy of doing graduate study in philosophy, and the idea of plans-- that is to say, adopting a role. We spoke of developing an environment in which we can produce better living. And one of the problems that I think the United States is going through, and one of the reasons for the Haight-Ashbury scene, has been that people have been made schizophrenic and they're leading so many different roles. I mean, they have their vocation role, avocation role, and they ask, "Who are..."

Their environment is not one which is conducive to development of the whole person. And I personally went through many toils in trying to do this. And I could not do it within this... the present system. What kind of environment can we create? What do you think some of the structural characteristics of the environment wherein whole people can develop? What do you envisage?

Fuller: Let me start off by saying, you could be a

hermit and develop a rather special environment. You escape from everybody else and say, "All right, to hell with everybody else" but you. Oh, I could do that. I could do that. And I could do that. But I'm not interested. I'm really interested in... because you and I, and you're asking me this question, I'm interested in what we could do, or what the many could do, to really make something work that really would. That's what I'm interested in. Well, I'm thinking of the same thing, too. So that I think that the kind of things we could do together would really involve all the resources of the universe, all our knowledge. Precisely. Yeah. And I feel that your kind of disconnect and so forth is one to do with the fact that the young world is really intuitive and it feels that the older world, and I think very rightly, are actually preoccupied with shortsightedness with the world—just not really understanding where they are. And we're coming to…Evolution has its steps. And so there was an evolutionary step where people have made...done the right things at one time, but that has no momentum. It doesn't carry on today. It's no longer appropriate. So it doesn't mean they necessarily were wrong when they

did what they did, but it's no longer appropriate now. And that's what's bothering you and bothering me.

Now, I'm then interested in what really could come up here. And one of the things about this...you talk about the specialization. And I'll tell you that one thing that's interesting about...our society has been assuming that specialization was logical and necessary and inevitable. When I discovered... you can just look at any child, little child being born. The child is not born with a microscope on one eye. If nature really wanted a human being to be a specialist, then they'd put the microscope on his eye, or put the wing on his back. So I say he's designed to be, really, a generalist, and just exactly the opposite of a specialist. So I find every child really asks fantastically wonderful questions about the whole universe, just as the things that you're talking about, and...(child coos)

Hi. So you're interested in the universe. She really is interested in the universe. So they ask questions about everything. And we say, "All right now, darling, you're big enough now "to get over that nonsense of

being interested "in all the stars and all the birds. "And now you come in and I'm going to give you "an A and a B and a C and you pay no attention to anything else from now on."

laughter

Darlin'. And so, I see that we really put specialization upon her. And I've said, "How did that happen? "Because I think it wasn't natural at all. And how did it happen society got so darn mixed up that it had all its universities full of all these categories and the things in which all the special professors? And I see, all right, in this strange struggle to prove something that's really very unattractive--the idea, who has the right to live? And most of us are supposed to die. What you call earning a living.

laughter

Earning a living, you might, as a specialist, have your own special toll gate that society had to go through and you had a little better chance of surviving that way. So

where did the specialization come from? And I find that it really came out of going back to the old days, and the great pirates, and the great pharaohs. And they said, "I've fought very hard to be top man here, "and I want to do a little sleeping here. "And I can't go to sleep with the bright ones around, "because they'll catch on to what I'm doing and they'll take over while I'm asleep." So they surrounded themselves with dull people who wouldn't catch on to what they're doing.

laughter

And they were only afraid of bright people. So they said, "All right, I want to know "every time there's a bright one over here. Let me know about it." They told all their lieutenants, said, "He's a bright man." He said, "All right, you're a fine young man. "I'm going to make you my court armorer. "I'm going to make you my court historian. "I'm going to make you my court so-and-so "and you're going to prosper. "And I'll make you a knight after a while, "but you mind your own business, and you mind your own business." And the great king said, "I'm the only one who can mind everyone's

business." So the king invented and put up the money for the schools and developed these categories. And so he's able to fight with another king because he has a lot of specialists who, each one, can give him a little special thing. So he made people into...Specialization was a very special form of slavery, a very fancy form. And we're really all full of this slave complex of yesterday, and still thinking about those categories where it's completely inappropriate. So I find that the really good thing that's happening about the computer and man is the computer, inadvertently...We've discovered in biology and anthropology that all the human tribes and all the biological species that have become extinct have all become extinct because of overspecialization. So humanity was on the way to extinction by virtue of getting overspecialized--developing the atomic bomb and no coordinate thinking, how you stop yourself from blowing yourself up.

And so, I see that suddenly nature brought in an antibody, by externalizing our computer. Because the computer is now taking over on the specialization.

They can stay up all night counting the blue from the yellow when you get very sleepy. And they can do it under conditions of heat that you would be killed by. So I find we're being forced back to comprehensivity. We're being forced back to doing exactly what you're thinking about. This is what was bothering your age is that the older people are all on their specialization; you're beginning to think about the whole again. So that evolution is really having man emerge into thinking about everything, doing the kind of thing you'd like to do, rather than being victim of specialization, of that special tool. So I think that evolution is demonstrating an emergency where, say, the specialization is going to be relegated to the tool and we ourselves again are free to be what man really wanted to be. It's that childhood interest in everything.

Man: What steps do you feel education can take to further that evolution?

Fuller: I don't think education, in its own right. I've now visited 264 universities around the world, primarily because I'm invited there by the students, not by the

faculty.

laughter and applause

And after I go away, the students want to have more of this comprehensive stuff and all the faculty are all specialists and they feel very uncomfortable. So they say, "Oh, don't pay attention to that man."

laughter

I would then say that the university is really by way of becoming obsolete in that it's just all the speci...I think nothing is in for a greater revolution ahead than the design of how we really deal with our information and acquire what we really call education. Education is ourselves. We have to do it ourselves. How do we get our information so you and I can be logical, really, with one another and be faithful to one another. This is Haight Street University. This is Summer Hill over here. This is where Zarathustra taught under the trees. This is a great movement.

Man: What do you think of the free universities?

Fuller: It's real...It's not in the future, It's now. This is it.

Woman: Mr. Fuller? Mr. Fuller, do you have any advice to mothers? Do you have any advice to mothers? The last 20 months of raising a son has been the most exciting in my life, and I can see exactly what you're talking about, of the fantastic fascination with being alive. How can we keep children turned on so that they don't have to go through the ridiculous education system that they go through, and then finally rip out all the threads and get turned back on when they're, you know, at our age?

Fuller: I don't think there's any more important...This is what all of us are faced with. Most... Yesterday, we were a child, and we can remember that we had much more than we have now. We got... we're frustrated. You weren't able to really follow all those wonderful trends, spontaneous inclusions. And so, when I told you I've been spending most of my life trying to work around, I've been trying to find how we...because the

environment is there. The environment is everything, but it isn't us. And what could we do to organize the environment so it will be... look out...give the new life that's born a chance to really keep expanding itself and growing its wings without getting frustrated. So I just say, that is the number one challenge we have. We have learned quite a lot about what we were just saying. We've learned, by experiment, some very extraordinary things. I'll tell you just a little about it, because I think everybody ought to know there is such measurement. For instance, from...a human being, of course, is born utterly helpless and stays utterly helpless longer than the young of any other species.

Being utterly helpless, it has to be part of the inventions of being taken care of. Man in his vanity and mother and father--particularly mother with her drive to look out for that new life, sort of feels that she's highly responsible. But she doesn't have to invent a breast. It's just waiting. She doesn't have to invent the oxygen for the child to breathe. Really, the design is there. And primarily, we have parents with loud but great ignorance, carrying forward things they were told by

another generation before them about what you do about it that actually has turned out to be really wrong, and we begin to hurt the new life by a relay of ignorance. And so, then we discovered, for instance, between zero age and four years old, a child...
We all are born with approximately...really exactly the same number of atoms. Just like two eyes, we have the same quadrillion times...a quadrillion atoms in our brain. And those... beautiful design, coordinated. But they're like a telephone switchboard, where you haven't as yet pulled the wire up here and connected this one with that one. You haven't found the connections. So that's exactly what the chromosomes do. They tell the brain when to start this connection. Parents, for a long, long time, have thought, for instance, that their child, have said, "My child..."Other children around here are standing up and walking. "My child doesn't walk, so I got a bad one. So stand up, darlin', and walk." They keep working on it. There's nothing can make that child stand up and walk until the chromosomes tell the brain to actually coordinate and understand gravity and balance. And nothing to stop their child from doing it once the brain says so. The

child is going to talk at different times, but the chromosomic ticker tapes for each one of us are very, very different. So that the time when you're going to make your first sound, that you're going to, could be four and five years apart and not mean anything derogatory to the capability of any of those individuals.

At any rate, I'll go to the point, then, where we're going from zero to four and we find that 50% of the total capacity of the brain to apprehend, comprehend, coordinate and employ information has been brought into play by four years old. Between four and seven, another 30% is brought in. You're up to 80% at seven years old--80% of your total capability to deal with environment has been brought into play. At 17, it's all been brought into play. You get no more, you don't actually get anything from outside. This equipment was there, but it's been hooked up. Now we find that as it's being hooked up, time and again, things in the environment discourage, and you pull out the wires. As, for instance, in the first four years of...there are three really powerful factors that seem to take care of the life. The number one is trust. Inasmuch as you're

utterly helpless, the young life is then dependent on all the...something around it to look out for it. So it has only, really, sounds it can deal with, some smells or something like that. And 'cause there's only one thing to start...always just make some noise if something goes wrong.

At any rate, there's a factor of trust. If a child two years old hears his mother and father in a drunken brawl, the mother's leaving home, you have a certified drop-out, because this kid... the factor of trust is so offended that this child will not trust the environment and he pulls out that wire. He may establish it, but he's not going to trust anybody. He's not going to listen to anybody at school. He'll just...it's built into this kid, "I don't trust." He may find out on his own. He may get... be extraordinarily brilliant. It doesn't mean he isn't going to be brilliant at all, but as far as school goes, he's going to pull out.

Now, there are two other items up to four years old. The other is called initiative and the other is called autonomy. It has been found that simply because you

and I have to breathe--and I spoke about all that air we need--there's deep in us a sense that you have to have enough air. If you get too many of us close together, you intuitively, without doing any measurement, know that you're not getting and you want to get apart. So it is strange, but if two children...several children put in the same bed, the IQ goes down. If they have their own bed, it stays up, their coordination. If they have their own room and their own bed, it stays even higher. That's the autonomy one. The other one is initiative. That child is going to have to go around and actually make a fantastic number of experiments. It's going to try tearing things apart...throwing newspaper, everything up. Why? Because it has to know what holds together. It's going to have to know sometime when you're falling, what do you hold onto that doesn't come apart?

It's a terrific research. Nothing quite like the research work that a kid is doing there. So that he's got to have...and now, if he pulls on the lamp and the lamp comes hit him on the head, then that's very important to the design environment and he then says...he

doesn't say it out loud, but his subconscious coordinates, "Why did my parents have a piece of junk? "When I want to make an experiment of tension, I'm going to get hit over the head." Or if the parents, in their stupid fear, say, "Darling, don't" every time he starts making experiments, someone says "don't"..."I can't use my laboratory." So we find that kids get... nothing really quite shuts them off more than this initiative one. And so I think that's as much as I really need to say. We could say that from four to seven, the most important factor that has been discovered is the speech pattern of the parents or whoever is looking out for the kids. If the people who are looking out for the kids are...by virtue of their words are clear to this kid that they tell him to be interested in what you can do with this thing because they've been experimenting with...and everything and making the sounds...If the parents are using their brain to formulate their own thoughts of trying to find the right word, the child becomes absolutely fascinated and inspired to use its highest capability. If the parents are using nothing but clichés and repeating what they ought to think about a political situation with the man in the local corner bar,

then the kids quit using it, too, and they revert to muscle and cunning. These are fantastic, but these are some things we've learned about environment.

So we say, "What could we do about the young?" In that kind of information, I could certainly see ways in which I would like to...I would at least try to make experiments. When I get an envi...geodesic...I like to get in big sort of (inaudible),completely away from frustrating in any possible way...At least keep the rain off you, I see that in the environment...The environment
is a set of events--things that happen to us. It isn't a lot of things. It's frequencies of events of various magnitudes.
So I see, then, that there are things...big things that happen once in a while, and a lot of little things that happen very frequently. And I see, then, that things that happen to us can happen to us from outside ourselves and happen from inside ourselves. So I see, what can I do on behalf of my fellow man without trespassing on him? What can I do that is not taking away his freedom?

I can certainly give him way so he's not going to get hit over the head. I'll say certain things are going to kill him. So I'll at least be able to provide that so if he wants to kill himself, he can go and kill himself. But I don't make it mandatory to be killed. So those are the things I see. I see there also being a process. Anything I do that gives him...takes care of his time, handles the process for him chemically, this would at least give him some time. If he wants to monkey around in the process, fine. That's his job. But the kind of things I could do, then, would be to deal with the environment about these mandatories, and just at least give him a better break if he'd like to have it. But you don't force him to use it.

Woman: You say that at a certain age, most people have been given all their potentialities, and that that happens at a very young age.

Fuller: I say you're born with them, dear, but...

Woman: Right, but what happens...and what are some

of the methods that you've personally found help a person to become aware o f his psychic energy, since that's one of the important tools that man has, that the rest of the environment doesn't have?

Fuller: I think we have t hat psychic one right from the very start. But very few people use it. In fact, everything we have, we have right from the start. But what I've been talking about is, there is a series of events where we begin. So that for a while, you're not...you're still inside the womb, but you haven't started using your nose, because you don't need the oxygen yet, because you're getting your oxygen through your mother's blood.

What? Don't you feel that most people stop using their potential at a very young age?

Yes, but I don't think it's because they, as an individual, deliberately stop. I think it's because the environment puts things upon them that tends to discourage them. How can you break through that, so that you can become whole? So I've found one thing we do...we

have the ability to alter our environment. So we spend...that's what I'm really trying to commit myself- how I can... what can I do with the environment on behalf of my fellow man without trespassing on him? That's the big question.

I don't know that I can, but I at least try.

End