UNIVERSE: BASIC DEFINITIONS

A lecture give on 7 April 1954

And this is April the 7th, 1954.

I want to talk to you about some of the basic definitions of Scientology. If you will look in the Encyclopaedia Britannica as early, I think, as the ninth edition, certainly in the eleventh and thirteenth editions, you will find an article on time and space. This article is quite important. I do not know who wrote that article. I shall look it up, because it is the wisest observation I know of in the field of physics or psychology.

The article states, in so many words, that space and time are a matter for the psychologist, not for the physicist. It states that in the Encyclopaedia Britannica. Evidently, that statement has been in existence since 1875, 1880, somewhere in that vicinity.

People a little bit earlier on the track had a tendency to be a little bit smarter about things, in that they weren't so pinned down by a series of arbitraries and agreements. And the person who wrote that actually stuck a crowbar into the entire problem of existence. Of course, he left it sticking there. He didn't pull on it or push on it or do anything else about it. He simply made the statement that time and space are a problem for the psychologist, not for the physicist.

The physicist has adequately, if unknowingly, embraced this. He has not defined time or space, except in terms of energy and matter. The physicist has started in with an unreasonable assumption that somebody knows what time and space are or that they actually exist, and then he continues to work with them. This would of course bring about, inevitably, a failure in the field of physics. And that failure has come about very markedly since the laws of physics, as such, have been going by the boards for some little time, ever since the first atom bomb was put together.

The finite physics, you might say, are still true. The laws of fulcrums and balances and that sort of thing are still true. But many of the upper-range material has suffered very markedly and very considerably.

But regardless of whether physics is right or wrong, or whether it has departed here and there, it is... becomes quite obvious that somebody neglected a duty which had already been pointed out. And the people who neglected that duty were the psychologists. Here were people studying in universities, working, priding themselves, writing books, doing all sorts of things for a half a century without once embracing the most vital problem before them and not even knowing that the problem existed. This is a crime of omission. Therefore, that is a failed field. It'll even be a failed word in another two or three decades. People will be saying, "Psychology, what was that?" Why? Because its primary duty to this universe and to thought at large, of course, was to organize the necessities, the necessary data for the resolution of problems relating to the mind. By definition; this was what it was supposed to do. And no matter what any psychologist cares to tell you, he's failed.

He was in existence in the late part of the nineteenth century. There was his opportunity. Time and space - had he resolved time and space he would have resolved the field of psychology and we wouldn't have had a half a century of buffoonery with rats.

Therefore, I am a little bit angry with psychology because I walked onto the stage as a nuclear physicist in 1932 wanting to know something about the mind. And here were some of the largest and best endowed departments of the greatest universities of the world, pretending they knew something about the mind, knowing nothing. Knowing nothing but their own shallow pomposity, to be very, very brutal. Little men with big heads. They caused me more trouble than

I care to be caused. Simply because I asked this single solitary problem: "What is the smallest energy unit?"

Well, the smallest energy unit must therefore be something related to thought. Why? Because here we have individuals of a finite size walking around thinking. And these people are remembering and they are remembering with pictures. If they are remembering with pictures and if these pictures seem to have a considerable dimension to them, then we must be dealing with a size of energy which I know nothing about. And in the interests of studying energy let us see if we can discover what is this small unit of energy.

So I walked over to these psychology departments and I found out they didn't even know the human mind ran on energy. They had no idea about the human mind seeing pictures. In other words, in a few hours of observation in a physics laboratory it had been possible to exceed the entire investigation of psychology.

Well, this was remarkable. What business does a nuclear physicist have, in the first place, investigating in the field of psychology? Obviously that should be investigated. Somebody should have observed something. And he sits down at a laboratory bench and he looks over the problem and he says, "Well, now, let's see. Pictures? Let's see if these fellows around here... Say Joe, when you think of something, do you see a picture?"

"Yeah," Joe says.

"Well now, that's funny. Let's see, what's the size of your head? What's the length of a neuron? Hm."

Now, columns and columns of figures. "How many neurons in the body? There is ten to the twenty-first power binary digits. That's a big number. Now, let's see. How many memories. Well, let's see. How many memories do you have, Joe? Let's see what you can remember." Agnes and Bill and other people in the laboratory. "What can you remember?" "Oh, so-and-so and so-and-so."

"Holy cats!" More and more and more. "Well, let's see. How many perceptions are there in that? Holy cats! There must be about... You must be seeing, feeling, hearing. Whee! Well, you must be doing at least twelve or fifteen various recordings. Hey, there's twelve or fifteen various recordings for each one of these memories and time is flicking at the rate of one over c, so therefore... Say, you know, you haven't got enough brain capacity if every neuron you have has shot holes in it where you have a hundred memories stored in each shot bole and so forth and... Hey! Hey, hey, hey. You know you can't possibly remember anything earlier than three months ago because you don't have enough energy storage. And furthermore, I don't know of an energy this small. Well, we've got to do something about this."

And I go over to the psychology department and find out I was already about five hundred years ahead of them with just that set of questions. And I was upset mostly because they were so mean.

"What are you doing fooling around about the human mind? We don't study the human mind anyway. That isn't the problem of psychology."

"Well, what is the problem of psychology?"

"Well, observe uh... Well, it's not the human mind."

I said, "Well, what are you guys supposed to be doing over here?" So I dropped by the president's office and found out what their - huh! - what their budget was. It was bigger than the physics department. This was upsetting.

You know, that was the first time I found out that there were an awful lot of problems that weren't solved, because I'd been brought up to believe it was a nice, modern, scientific - world. Nice big, beautiful, shiny world where everybody had everything licked and Mama and Papa knew best and so forth. It was a very orderly world I was brought up in. I was not brought up in a very psychotic agitated atmosphere. And people were very nice to me.

My father was a naval officer, shipped around various places. Well thought of. It was a calm world. I didn't have any business worrying about this sort of a problem, because it wasn't a personal problem. Whether people went mad or stayed sane was very, very little to me. It meant really nothing. And I figured everything in the world's all nailed down.

Well, here's the very problem of thinkingness itself with which we are dealing continually in the field of science, not nailed down - not even vaguely nailed down. Nobody even adventuring to solve it. Well, how can you go anyplace in the field of physics if you don't know the smallest unit of energy? How small can energy get?

Here was a stumbler. Here was a big idea there - sitting there, of "There must be more in the field of physics than we know about. And if there is so much more in the field of physics than we know about we must be studying one tiny little piece of the spectrum." Therefore, what is the field of physics? It has demonstrated that the human mind evidently uses and stores energy smaller than anything we know about.

Well, I went around in circles for a while and threw the whole problem in the ashcan and went on with my studies in an orderly fashion. Perfectly happy to observe Brownian movements and other things.

And I had, however, a little more background on it. Commander Thompson had studied with Freud and he was a good friend of mine and he talked to me a great deal about having psychoanalysis. So I went back and reviewed a bunch of the stuff which he'd talked to me about and studied it over again. Hopeful, you see, that there was some clue there.

Well, there wasn't any clue there. This was not... this was not the sort of orderly thinking which can be embraced by a solid science like physics. And... because physics may have a great many things wrong with it, but it does have this: it of necessity continues to be reasonable. It insists on workability. It won't take wild shots and theories just on their face value. These things have to work. And that is the one thing which physics can contribute. Things have to work in the real universe. You either get an effect or you don't. You can't guess that you get an effect, you see. An engineer building a tunnel can't just guess that he's built a tunnel. When the train goes through the thing, it will either go through a tunnel or hit a solid mountain. And it's not healthy to hit solid mountains with trains. You get fired for having such things happen.

So the point is, is here we have a test of workability, which of course is a whole methodology of thought.

Well, I went over to a fellow over at Saint Elizabeth's, William Allen White. I talked to him for a little while and I became... He was very reasonable fellow, nice guy. He'd been a friend of mine before this, by the way, and a very, very nice fellow. And we were having a very informal discussion this way and that, and he was unfortunate enough however to throw me a few tidbits which tended to put me in my place about the field of the human mind, you see. So I sat down and proved to him that the human mind couldn't possibly remember anything. Demonstrated it to him conclusively. And he looked at this and the man went almost white. He was a very brilliant man. He had no difficulty in assimilating this material. But he had just been presented with the fact that if the mind does run on energy, if it is contained in the body, if neurons do think, if people do remember, if there's life at all, the human brain has very little to do with it.

Well, of course I might very well have upset the man more than necessary because this is not necessarily a horribly world-shaking conclusion, but William Allen White chose to consider it and have weather than in his day, on the subject of the human mind, being utterly

confounded. Why was he being confounded? He was looking at the scientific methodology of physics suddenly applied to the field of the mind. And of course, it's like taking a bright, sharp, new sword that nobody knew was there and just slicing everything up. It was a great shock. "Well, you know," he said "if you care to," he said, "you go on with this." He said, "It's out of my depth already." He says, "You realize nobody in medicine is trained in mathematics. Nobody is trained in physics, logic, geometry, energy, any one of these things." And he said, "What you've got in front of you there seems to prove that the research of the mind itself belongs in the field of mathematics, energy, geometry, not in the field of philosophy and speculation." Quite interesting. He gave up the ghost. I don't think he ever did much more research after that either.

But it wasn't until 1938 that I had any kind of an inkling of what was going on. In 1938 I found out there was something wrong with hypnotism.

Now, I'd been in the East when I was a kid and all these various good parlor tricks were very amusing. And I'd watched hypnotism of the Indian sort work and work beautifully. And Western hypnotism is quite different and not anywhere near as effective. But I found out that we had and were working with a variable.

Now, any time you show a physical scientist a variable which is wild and unpredictable, he'll dive for it. Something is moving, and he's going to stop it moving, believe me! And here you have a variable - hypnotism which is fantastic.

Some people can be hypnotized. And when hypnotized and given suggestions, they get well. Some people can be hypnotized and when given suggestions which are calculated to make them well, get ill. Some people can be hypnotized and never come out of it. Some people can be hypnotized hardly at all. And some people are definitely negative on hypnotism.

Say, this is an interesting thing, isn't it? I mean, this thing called hypnotism which is one modus operandi producing all these various results on person after person, different results from person to person.

Well, so I went out and I hypnotized a lot of people - using Indian hypnotism, not using Western hypnotism. And I found out that when you are plumbing for the subconscious, or something of this sort, with hypnotism, you have to beware, because you can give the fellow more delusions in a minute than you can pull out in an hour. See, what do you do? You pour it to him on suggestions and this sort of thing and, golly, these things will stick, they'll last. Hypnotism isn't this delicate, easy to work, harmless, little tool. It's dynamite!

Well, this was very confusing to me that we'd have a variable of this character. And again I went to the books of the philosophers and the psychologists to see if I couldn't find out something about hypnotism. And I went to some hypnotists to see if I couldn't find out about hypnotism and so forth. And nobody knew hypnotism. Nobody knew why hypnotism worked, what mechanics were involved with hypnotism, what was the ultimate effect of hypnotism, if there was any therapeutic value in hypnotism. Holy cats! I've hit another blank field.

And you know by this time I began... I'm rather prone to being somewhat cocky and overbearingly self-assertive sometimes, but I had the feeling - the feeling that I very definitely - that I was living in a very stupid world. Here was something as well known as hypnotism and here were fields which were advertisedly expert in the field of the mind - which hypnotism affects - and they didn't know anything about hypnotism or what it did. Oh no!

Well, up to that time I was actually doing a backslide on the time track, really. Because I had been born into this century feeling, you know, that this was nice, bright, new and modern, and every time I took a deeper look I found out that we were just a little bit further into the dark ages.

Why, certainly, you can't go around tailoring up tremendous weapons of enormous caliber and so forth and putting it into people's hands this way and that, if you don't know how these people work and if you can't predict what they'll do with them. Because there was where I finally divided company with the people building atom bombs. Right there.

We can build an atom bomb. There is no question about the control of this here atom bomb. "You push this here button here and it goes boom! If you don't push the button it doesn't go boom!" You see, that's real simple. But there is nothing about the control of the atom bomb which is puzzling. If you take an atom bomb and lay it down on its target with its controls pulled, it of course will explode. But if you laid it on its targets without its controls pulled, it wouldn't explode even though you laid it on its target. And its perfect control here. When you put it in a place it'll stay there. When you move it, it moves. Is there any trouble here with the control of the atom bomb? Not a doggone bit.

The control of the atom is not even vaguely a problem. But by golly, the control of the men who punch the buttons to control the atom - that's the problem. And nobody had even bothered to solve it. How could you tell whether the president or the dictator of the country was responsible or not? By experience? Well, this was not a good test since the individual could be engaged in an automobile accident or a divorce or something and immediately after this incident be quite insane, no matter what his past record was. See that?

So what's this business about the control of the atom bomb? It certainly has to do with the control of the mind. Well, my fellows, we're having a very interesting time building atom bombs - very interesting time. To do what with them? To put them in the hands of things which are evidently totally out of control. I mean, let's take .45 pistols, load them, cock them and stand down here on the corner and hand them to three- and four-year-old kids.

Looked to me like nuclear physicists had stepped in ahead of itself a long way. The physical sciences had advanced markedly and had achieved considerable goals, and what we call the humanities had not advanced at all. It had been standing still or going backwards. They were going backwards, really, because we had come up to a point where nobody would even admit the existence of a human soul. Once upon a time people at least could have a human soul, you see. But in modern science when you're dead you're dead, and that's all you are, dead. So I find, for instance, that in the field of the humanities - let's take the Encyclopaedia Britannica again - you will find the articles on the humanities are, in the early editions of the encyclopedia, long and informative. And in modern editions you'll find them absent or very brief And so, the humanities were losing. Well, they were losing because you couldn't predict what people were going to do with weapons.

Here was Hotchkiss. Great guy, Hotchkiss. He invented a weapon to make war so horrible that nobody would fight it. Do you know the number of machine guns used in World War II?

There's a fellow by the name of Nobel who was going to invent an explosive so horrible that nobody would dare wage war. He now gives Peace Prizes for the best suggestions as to how not to use nitroglycerin and dynamite. Here is this continuous failure of the mind in the face of the encroaching sciences. Well, enough of that.

Hypnotism said that there was a big, big variable here, and I went ahead and studied hypnotism. I couldn't find a lot of things that were supposed to be there. The main thing that was supposed to be there was a censor. Did you ever hear of the censor? Well, I don't know. That's Freud in Mama's valence, I guess.

But here we have the censor. The censor is supposed to stand up there and when you think, "Gee, what a nice looking babe," its supposed to say, "Dut-dut-dut-dut-dut-dut." That's the mission of the censor. I don't know. I never managed to find this item. I found the pineal inside the head, but not the censor. Anyway, it wasn't there.

All right, so we're going to look now for the unconscious mind. We don't find any unconscious mind; we find a lot of unconsciousness. Well, all right. Well, let's look for the subconscious mind then. Okay, let's look around real good. Let's find these horrible barbaric thoughts, and so forth, and these hidden impulses and influences, and so forth. There's no such mind present.

But we did find a tremendous flood of hidden orders. Orders which evidently had no easily established source. A person was evidently being subjected to a continuous bombardment of commands, which he had no choice about, of which he was only vaguely aware. Now, you'd say, "Well, that must be coming from this thing called the subconscious mind." Well, what an easy way to throw a problem away. Let's just give it a name and say, "That's solved," and go on to the next problem. This is monkey research - give it a name and go on.

We were investigating something we'd captured from the Germans. And it has a whirligig on the top of it, and it has a lot of tubes, and it has a lot of connections, and it has a sort of an end to it that goes bong, bong, bong, bong. We don't know what it is. It might be something that... Maybe they've invented a death ray, who knows? I mean, they got a... found a wave that would paralyze people or... Who knows what the devil Buck Rogers equipment the Germans might have thought up, because Lord knows, we were thinking up enough. And so you say to yourself, "Well, all right, we will call it a Dongerbat and put it over on that shelf. Well, that problem is solved." Well, this was the way the humanities were conducting investigation. Let's give it a name, put it on the shelf and skip it. Well, this death ray, as we will. .. might facetiously call it, that we captured from the Germans is pretty analogous to something that would be around the human being all the time which would be saying, "Do this, do that. Kill your wife. Go jump in the bay. Cut your throat. Oh, you're no good. You know that. You'd better - What the devil is this all about?

Well, if we assumed that it was a mind, a separate mind, that we would call a subconscious mind, we would be validating and giving a lot of power to some hidden livingness. In other words, we might as well say there's a live beast that walks around everybody giving him various orders. Well, that's... let's all go back to 1620 and burn witches in Salem, saying everybody has one of these things that haunts him all the time and tells him to do things which are contrary to his survival.

Oh, no. Sorry, but that one won't go. Let's look a little bit further and find out what the devil this is. There is a bombardment of orders. There is, obviously. People are working on impulses and they're obeying things that are not of their own choice. Let's take a look and find out what it is. And we found out that it was sheets of energy on which were engraved perceptions of past incidents, including the pain. Sheets of energy. Today we call them facsimiles. They're actual sheets of energy - as actual as anything else is actual in terms of energy. And this plate of energy is capable of exerting pain against the individual. Um-hm.

Okay, if it can exert pain against him then in some fashion or another it can also exert command power against him. Are there ideas in these things? You bet there are. There are full phrases, ideas, everything that you can think of in one of these sheets of energy. Originally called the engram because the worst part of it, the worst kind of this sheet of energy is that one received under terrific duress. Well, now, the individual takes a picture of moments of great stress. The body, the person in resisting the great stress with energy, unwittingly takes a picture of it.

Now, let's look at that a little stronger. And let's say you were sitting here and you had some kind of a beam arrangement in your hand which actually could hold back a wall or something. And you saw that wall start to move in on you. You would take this beam arrangement and try to hold the wall up. What would result? Let's say the wall fell down. Well, all right, but you've still got a beam there. And by throwing out this vast mass of energy in an effort to hold the wall up, you actually took a picture of the wall. You unwittingly took a picture of the wall and every part of the wall. And because you exerted that much effort and afterwards didn't want to have the wall at all, you said, "Well, that picture is not mine and I haven't anything to do with it."

Well, that is the anatomy of the facsimile. That is how it is made. Also the wall starts to fall away from you and you want the wall. You're liable to put a big bunch of energy on the other side of the wall to try to hold it up, see and that's an inpull. And the wall falls down anyway and the picture hits you splat! You say, "Something has hit me I don't have anything to do with." You see that? Well, what's that picture contain? That picture contains the total impression of the other side of the wall. It's a picture. It's just as much as a picture as though you'd made a plaster cast, where plaster would be the energy. See this?

Well, hypnotism throws these things into violent restimulation by changing the person's viewpoint of time. It gives him the idea that he's not here in present time. It can push him elsewhere. And his elsewheres are all contained in these pictures. So we have a facsimile bank.

Let's say here was somebody living who had taken a thousand of these pictures and he's got the walls plated with them. And you go over and you move him in front of one of these pictures and reduce his awareness and you say, "That's it fella. There you are." Well, he looks at the picture and says, "Yes, so I am. I'm in 19... 1939" or something like that, you see. This is when he tried to hold the wall from falling down or tried to keep two cars from coming together in 1939. And because they're on his wavelength and so forth, he can look at them and they'll match up and he will actually feel again the pain he felt when those two cars hit each other.

How does he do this? Because he used energy in order to prevent something from happening and made thereby and therewith a complete picture, even a moving picture, in that he made a sequence of pictures, you see. And having made these pictures he has in them, of course, everything that was present in the scene, simply because he was resisting the scene.

Now, let's take somebody who burns his finger on a stove. He comes along and he puts his finger on the hot stove and he pulls it off again. Well, the moment he pulls it off he is of course pulling hard. He tries to push his hand away from a hot stove. He carries a hot piece of stove on his finger for some little time. See?

This is real remarkable how he would do this and the proof of it is, can you do anything about a burn or about an automobile accident which has happened in the past? Yes, you can. You can simply - to get him to duplicate what he refused to duplicate in the past. And when he duplicates it again, it of course blows up, because he stops resisting it. And because there isn't anything there his resistance alone was all that kept it in restimulation.

So, as a net result, somebody burns his finger on a stove, you actually have him apply hot stoves to his finger for a while and apply burned fingers to his hand for a while. You know, just mock them up and put them there, energy pictures. Put some more there and some more there and some more there, and all of a sudden boof! and the burn heals up right away. I've seen a burn which should have gone into a second degree burn heal up in a matter of about half an hour, blisters gone and everything else, just on the application of this principle.

Well, these are the pictures which give forth the commands. When an individual looks at them, they start to dissolve or go into action. See? He chips away some of them. And when he chips away some of them, the energy hits him anew, he resists it anew and he builds up a picture of the picture. See? So you start to look around at the engram bank and you pick up pains, commands, voices, crashes, heat, saline solutions, anything, everything that was resisted in the past, anything. When you look at it again it goes into restimulation.

Now, worse than that, a person gets so confused after a while about doing this that when he looks around the room and sees a picture of a wall, this of course makes him duplicate with a picture of the wall which he had before, a wall which he tried to keep from falling down. So he looks at the wall and gets a pain. But, of course, that wall is not hitting him, it's not hurting him. Oh, yes it is. He'll tell you, if you really made him spot it. No, it's not that wall. It's another wall. He's made a slight mistake. He's unwilling to duplicate this exact wall. He's using some old picture. See he picked up the old picture and says. "I cold communication. All right Loop

echo this wall. I can make an exact duplicate of this wall. I'll pick up this facsimile, this old energy sheet and hold it up in front of the wall and we will get a perfect duplicate." Only we don't. And there is the mechanism, you might say, of restimulation and engrams.

This came out of... directly really, out of a study of hypnotism and a study of the mind and general observation. How many things can you do to these pictures? Well, boy, you can do an awful lot of these things.

You'll find out a long time ago that somebody in psychology wrote a book called Eidetic Recall. It shows the searching observational quality of a mole who is very dead.

There are at least fifty-five perceptions in these energy pictures. At least fifty-five perceptions. That's an awful lot of perceptions. When you look up in the Encyclopaedia Britannica, which I was just praising before, you find out that there are five. There aren't five; there's fifty-five.

There's all sorts of interesting perceptions. They say, "Well, the perceptions of the individual are sight, hearing, smell, touch and organic sensation." Well, let's just throw the dictionary away and take the vocabulary of a babu and say, "Now, this is the English language."

You're just not going to get there on that basis, because it wouldn't explain... You see, if they'd really looked and taken a look at lookingness, they would have found there was heat in these things. Thermal. One of the most important things in them - thermal. How do you suppose a kid gets a fever?

What is fever? What's pain? Well, pain of course is just a stored conflict of sensations which are so conflicting that it's impossible to differentiate, and so an individual just backs up off of them. This is pain. As far as fever is concerned, it's simply a thermal. A fellow's got a lot of hot pictures, that's all.

In processing somebody... I had a medical doctor - he saw his opportunity to wreck a preclear, so he really dived in. I was processing a preclear and the preclear was just doing fine - running an engram and just doing fine. And all of a sudden the medical doctor walked over and said, "Let me take his temperature." So, I said all right. And the doctor took his temperature and found out that he was running a temperature of 104 and said, "This man will have to go to bed immediately. I just can't permit this to go on."

And I said, "You can't permit this to go on. Sit down in that chair." And in a few minutes, having run out the engram, the preclear's temperature was 98.6. And this doctor sat there stunned! He had seen a 104 degree temperature turned on and turned off by artificial means, which is to say just a guy talking to another guy.

And he finally told me the next day, "You couldn't do it again." So he had a temperature of 104 very shortly, very immediately. And I let him go to bed. Next day, when he was feeling a little bit better and wasn't coughing quite so hard and so forth, I said, "Well, it's a good idea when you're running an engram to run them out, all the way out." He never forgot the lesson. He became obsessed on running the engrams all the way out.

Well, here's your... here's a quick look at the anatomy of this mind. Now, how many interpretations have been given this? Of course, what we're giving it is a mechanical interpretation. Don't lose sight of that. But it's a very, very good interpretation, in that you can see what somebody else can see. You don't have to have seven opinions on somebody else's seven opinions. And the main test of it is can you make somebody well? Yes, you can.

Now, if we just had that and we were just studying that mechanism, why, we'd be all right. We'd be a couple thousand years ahead of the crowd. We would. Just the anatomy of pictures and how you erase them and how you take care of the preclear and bring him back up the line. But there'd be a lot of cases we couldn't clip. Be a lot of cases we couldn't do anything for,

simply because their pictures are so smashed in and so disarranged that they can no longer differentiate between one picture and another picture.

So picture therapy, you might say - as you would've called Dianetics - picture therapy is not universally applicable. It hits at the outside probably 50 percent. Of course, that's pretty good. But that's not good enough. Because in the first place we're not really trying for just a broad psychotherapy. We're not really trying for that. We're trying for a lot of other things. We're trying for a greater freedom. We're trying for some test of rationality which would be sufficient as to know... let you know, whether or not an atom bomb would be safe in a president's hands or not. We're trying for a lot of things.

So picture therapy - let's make them well; we can turn off chronic somatics and so forth - this is not a total effectiveness. Now, we've got to go on someplace else.

Well, the years went along and wars went along and a lot of things happened, but most important of these things was the realization that there was something very, very haywire with time - something very, very wrong with time. There is no physicist's definition for time. "Time is rate of change of particles in space," which is the same as saying "Time is time." You're actually defining it by itself. You're saying rate of change. Rate is something that includes the word time. When you define rate you find out you've said the same thing again. It's not an adequate definition, so therefore, if we're to go on in the field of physics at all, we certainly have to go back and pick up the other thing the Encyclopaedia Britannica said, which was simply this: Time and space are the problem of a psychologist. Okay, if they're a problem of a psychologist we'd better go into this.

Well, I started defining time, fooling around with time, trying to do something about it, and ran into the fact that there was a barrier on its definition. One first had to know what space was. Well, this was a shocker, having to know what space was. This is too much. Because here I found Newton and the rest of the boys so silent. Oh, the oppressive, doomlike silence entirely through the field of philosophy and physics and everything else on what space is. What's space?

"Well, sure. We know what space is. It's around us all the time. It's big cubes or something, isn't it?" Oh, yeah? Because space behaves in a crazy fashion. The second you begin to exceed the speed of light, space starts doing peculiar things. Space isn't a constant. The moment you walked into nuclear physics, any earlier concept of space ceased to be adequate, because space is... it just goes to pieces.

Speed of light, the second you go above the speed of light, of course, you - if you're using MEST universe waves, you go above the speed of perception. So if you go above the speed of perception, why, naturally, inevitably space is going to go by the boards. You see that? The second that you exceed the speed of perception you're going to exceed space. Lord knows what'll happen. It's not predictable then, simply because there aren't adequate postulates to cover this situation. Adequate postulates, not adequate definitions, it finally works out.

A fellow hasn't made up his mind what he ought to have happen now after he's going the speed of light. Now, what should he have happen? He'd have to make a brand-new series of postulates. He'd find out, however, that they would stick - these new postulates. He could do whatever he wanted with these new postulates, because he's not in an agreed-upon field, even vaguely. He's not even vaguely limited. The second you exceed the speed of a photon, you naturally exceed the agreement of space. So you could make any kind of a new postulate you want to.

If you're depending upon photons to tell you that the dimension is there, you know, if you're going to see with photons, why, then you exceed the speed of light and your definition of space is just up to you. Make up your mind. What's it going to be? "Space above the speed of light is octagonally quadruped." Anything you want.

Of course, there's nothing sounds sillier than a physicist trying to theorize when he gets above the speed of light, naturally, because he depends utterly for his vision and perception upon photons. And depending utterly upon photons, naturally - voila, we have no space above that speed of space. What's the speed of light? The speed of space.

Now, let's not be very deep and complex; let's find out if there's anything else missing around here besides the definition of space. Yes, there sure is. There are two other things which are misdefined and one of those things is a very simple thing - a static.

What is a static? Well, a static is something that's motionless, of course. Oh my! Are we going to be this theoretical? What do you mean theoretical? A static is something which is in an equilibrium of forces. Now, every once in a while here you're going to meet an engineer or somebody, and he's going to say... you're going to say, "Static," and he's going to say, "Yes, a static," and all of a sudden give you a terrible argument. Why is he going to give you an argument? Because he's going to say, "Well, look, you see that package there? That's a static. It's in an equilibrium of forces. What do you mean we didn't have this definition for a static? That's equilibrium force. That's there, it's motionless."

Oh, yes, by what theoretical means do we consider that package motionless? By its own definitions that package is traveling in eight directions. One direction alone it's traveling at a thousand miles an hour through space. That's the speed of the Earth. It's not in an equilibrium of forces then; it's traveling in one direction alone, one thousand miles an hour. And then there's the speed of the... the orbital speed besides the rotational speed. And then there's the speed of the solar system itself and... Oh, boy. There are more speeds. There are eight speeds just because of Earth and the solar system that this thing is taking. This is in about the maddest state of motion you ever heard of anything being in, by physical definition.

In other words, there is no such thing as something in an equilibrium of forces, except a theoretical thing. You couldn't have anything on this Earth in an equilibrium of forces, so therefore that is a limited definition. And it's not an adequate definition. So if it's not an adequate definition for heaven's sakes what is a static? Well, a static would have to be something which was not located in space, which had no mass, which had no wavelength and had no position in time. In other words, let's reduce it all the way down. The second I'd reduced it all the way down, I found I had a definition for zero, and I never realized it before but the real wild variable in this universe is zero.

Your mathematician happily slaps zero into all of his equations. Your arithmetic teacher stands up there and handles zero just as though she was handling something that was as secure and sound as the Empire State Building. Everybody is saying, "This good, old, solid friend of ours, zero." And yet they knew in algebra that whenever they divided by zero or multiplied by zero, everything went to hell. They know this, and yet they're saying, "There's zero."

Well, your boy working quantum mechanics down in the laboratory, every time he puts a zero in an equation he introduces into it a wild variable and this alone, really, is enough to account for all the bugger factors you have to use to get quantum mechanics to balance. Zero - it's a wild variable. What do you mean a wild variable? Zero's zero. Well, we'll have to define zero. The first time we get a definition for zero.

Now, we're at the threshold of mathematics and physics. With that definition of zero, we're standing there with mathematics and physics grouped together for the first time. And we find out that zero, to be zero, couldn't have an... See, we already had a static. Well, we found that we were defining zero. All right, it couldn't have a position - couldn't have a position in space - because it would be a qualified zero then. It would have... The second you gave it a location you would say, "The zero at... Hollywood and Vine." See? That would be a qualified zero. Well, we'd have to say, "The zero at Hollywood and Vine when," to really qualify the zero, and then "At Hollywood and Vine when, but a zero of what."

In other words, every time you put a zero into a mathematical equation you would have to add a paragraph onto it to say a zero of what, where and at what time.

Your teacher of arithmetic does this all the time. She says, "Two apples subtracted from two apples give you zero." But it's understood, you see, zero apples. Well, of course that's not real good. That's very, very theoretical. You say, "Zero apples where?" "Well, on the blackboard." Ha! She's answered all of the qualifications for having put down zero to keep it from being a wild variable. But the second it's allowed to float without adequate definition - she said a zero of apples on the blackboard right now - all right, qualified. But did she put down "A zero of apples right now on the blackboard," or ever mention this to her class? No, she does not. She said, "That's zero. That's good old solid zero, you see. It looks like an egg stood on end."

And that's just where mathematics laid an egg. They had no definition for zero. Zero would have to be without a place in time, without a connotation of condition or quantity. That is to say it couldn't be a zero of something to have an absolute zero. You'd just have a zero. Not a zero of apples or a zero of this and that. And a time - you couldn't have any time in it.

Because you see the second you allow one of these conditions to exist then it becomes variable. It becomes variable because you have permitted to sit, in that zero, an inarticulate condition. You know, two minus two equals zero. That's not good enough. I'm saying this of course the sound waves of it are right here but it's not a zero of anything. So, we divide by zero we can get zero equals one. We can get zero equals this, zero equals that. It's one of the most confounding problems of the mathematician.

A zero has to be without position in space, without position in any space, without a location in time, must contain no actual or understood mass and no actual or understood wavelength. And that's zero. No mass, no wavelength, no time, no location in space, and we've got zero. The second we permit one of these things to exist in it as a condition we no longer have zero. We have an understood somethingness which happens to be absent at the moment and thus which we have to mention. And there is where mathematics had been falling on their faces. Mathematics only work very finitely, see. They're easily exceeded.

All right. What other thing would we have to know to solve this? Well, we'd have to know a little bit more about space. Now, we've got a zero. For the first time we've got a zero. We've got a nothingness. What is nothingness? It's without time. And boy, you'd better know this. Without time. No past, present or future. This nothingness has no past, present or future. It has no location in space; it has no wavelength; it has no mass. See? Zero. And we're looking right straight into the teeth of what life is. It is something which is not located in space, which has no real position in time, which has no inherent wavelength and which has no mass. That's life. And that's why it's incomprehensible and can never be equated by earlier formulations. Because everybody was locating it someplace and then forgetting that they had located it anywhere.

They were attributing energies and masses to it and then never saying they were contributing masses or energy to it, but that the energies and the masses were the thing.

So we have the answer to the smallest wavelength of thought, don't we? That's a long communication lag, I'm ashamed of it - twenty-five years. I asked a question in 1932 and I get it answered about twenty-three, twenty-four years later. But that's because the answer was so darned obvious. It's the obvious answer that's always the useful one. An individual could not be something composed of energy, object, so forth. We've got space nailed down right there.

If life does not have to have a position in space, to be a life, of course we are looking at what space is - which is what it is: a viewpoint of dimension. Here is something without wavelength, without energy, without mass, which can yet assume that there is a dimension. And assuming that there is a dimension it can then utilize energy and perceive.

It's remarkable. That tells you why an individual, when he's exteriorized, can be in this room and he on More hing hing this room and he isn't on More There is no mass or

energy moving from this room to Mars and back here again, see? There isn't any energy motion. And all he's got to do is just assume a new viewpoint. Bang, bang.

Every time he assumes a new viewpoint he can have a new space too and if you get somebody beautifully exteriorized, why, he can assume viewpoints of eighteen planets that aren't there. The only difference is he's got to know he's assuming the viewpoint that is different than other people's viewpoint, when he assumes one that's different than other people's viewpoints. He can see a much more beautiful universe than this universe right here, simply by assuming its existence and taking a viewpoint of it. He assumes it exists and looks at it. So it's there.

And out of this horrible mass of data called physics and psychology and the rest of it, we get down to the most simple simplicity there is, which is the fact that life does not have mass... Boy, know this please. Don't ever make a mistake on this. Life does not have wavelength. It does not have mass. It has no position in time. It has no location in space. Because time, space, energy, mass are all conditional postulates which units of life have agreed on with units of life. And so we got a universe.

Every one of these things is conditional to the ability of life to make a postulate and make it stick. Viewpoint of dimension. When you first entered the MEST universe it looked like a vast and terrific secret. There was some enormous secret connected with the MEST universe. Here it was. And yet what was easier. Somebody told you about the MEST universe. You had to assume that somebody was telling you about something in the first place. And he told you, communicated to you about the MEST universe or you communicated to yourself about the MEST universe. And the next thing you knew, you were able to bridge a gap and communicate with some other unit or some other individual-unit of life or individual - about what they were seeing in the MEST universe. You'll find out the first entrance engram into the MEST universe is a tremendous argument concerning the MEST universe itself - in which you lose!

If you hadn't lost that argument you wouldn't be looking at it now. You see that? You never would have seen it at all. What an interesting trick. You had to buy somebody else's viewpoint before you could view it. In other words, we're dealing then with problems in universes. There's your universe and everybody else's universe and there's the MEST universe and other universes. But the first condition of the universe is that one have a viewpoint and assume there is a dimension.

So this problem wraps itself up pretty tight. The pat phrase that resolves all this is "Where are viewpoints safe?" In other words, "Where are viewpoints ... " - my own or others; it doesn't matter. "Where are these viewpoints surviving that I can do nothing about?" Because as long as other viewpoints survive that you can do nothing about, there's going to be space you can do nothing about and therefore objects that you can do nothing about and energy you can do nothing about and everything is safe because you're no longer dangerous to anything. Their space. That's why a kid runs away from home, runs away from Mama and Papa and so forth. It's their space, their viewpoints. Just a viewpoint is enough to have space, to have a universe. So we split up these universes.

How do you tear these universes apart and straighten the preclear out and square the whole problem up all the way down the line, including physics and the atom bomb? It's "Where are viewpoints safe?" And you, of course, will blow up space in all directions till an individual can make and tailor space or agree with it and disagree with it at will. And all you're trying to return to the preclear is to be able to do it at will, not on somebody else's will.

(end of lecture)