TONE SCALE CHARACTERISTICS FLOWS - PART I

A lecture given on
22 September 1952

Note: The recording from which this lecture was transcribed begins with the leccture already in progress.

We're dealing with a very, very high-frequency manifestation of the basic causation of electricity or energy or matter. We're talking now, when we talk about energy, we're talking about the gradient scale of motion from the highest possible wavelength down to the lowest possible wavelength. As those wavelengths go up and down the scale, as we have different wavelengths on different parts of the scale, we also have different wave patterns, and different wave activities. And these wave activities at the lowest part of the scale are, you might consider, an all motion. And at the very top of the scale would be no motion.

The essential element of the production of energy can be postulated to be a static—a complete, perfect static, theoretically—a static. No motion, no wavelength, nothing but the potential of placing in time and space. That is its one potential: it can place in time and space, but it is not itself motion. Therefore this static is an intentional thing; it is an intention.

Now, we have, then, that thing which can place in time and space, but what—has no motion, to an all-motion thing which can do all the motions, but can place nothing in time and space. The two opposite ends of the spectrum. If you want to know what the Tone Scale looks like: Along about the range of 1000.0 we have the static with the potential of placing in time and space, and down, perhaps—it must be somewhere in the vicinity of about -50.0, something like that on the Tone Scale, we have matter. Matter is all motion with no capability of placing in time and space. And the interactions between the all-motion and the no-motion cause energy flows; that's very simple, really.

You have the static—this is all very theoretical, but it's quite workable—you have the static at one end up here at 1000 and it can place in time and space, then you have the all-motion down here which can't place in time and space, and now you could actually interact this static with this motion and you get here, action.

But unless you get this static and this motion in action one to the other, you cannot get, then, action. There is not any motion; there is no interchange of energy. Now, action could be defined as an inter change of motion. Action is an interchange of motion. Now, that would be changing a motion from Point A to Point B: that's action. Change is what you have here, you see.

The essential, then, in the production of action is the ability to change. Not trying to go over your heads any at all—this becomes terribly simple.

Here is a street and here is an automobile there on the street and you actually have to get some determinism from somebody or something in order to get that automobile here on the same street—very simple. So the static up there determines change in time and space, and change in time and space is action. And the manifestation of action is energy, or energy is action. All of this—you see, we're in difficulty here because all the things I'm saying are all the same thing.

Now, we can take this gradient scale up here of static, and now as long as we have something—take this point in between, and that point in between could just sit there, you see, and nothing would happen at that point in between. This point in between is part of the all-motion, and it's part of the static at once. There's not going to be any action, there's not going to be any change, as long as you have just one point sitting there.

If you exert some self-determinism, some determinism, that is to say, "determinism"—that is the capability of this static to place in time and space—on this, in order to do this, you have to have two points. You have to have two levels. So here we have this level here which we will call "A." Now that would be a static level, that is, it would not mote, no motion, wouldn't change; it could sit there forevermore at that level unless unbalanced from another level.

You could theoretically, then, go anyplace on this gradient scale— anywhere—and put a point down, put a level down, and unless some other level intervened, that level would stay there forever like the pyr amide And even the pyramids aren't staying there forever. What's happening to the pyramids? You're getting another potential at work there—you're getting wind and sand are blowing from high to low pressure areas across the pyramids and so eroding them away. And it may take 100,000 years to do it, but someday the pyramids too will be dust.

Now, you get, then, a change here at "A" only in the presence of another level. Now you can have a change between "A" and, up here, "A prime" and "A prime prime." [marking on blackboard] Now, here's three possible combinations. "A prime" and "A prime prime" are different. What's different about them?. It's very, very simple, what's different about them. This has more static in it—"A prime" has more static in it than "A prime prime," and "A prime prime" has more motion in it than "A prime," see—"A prime prime" being lower on the Tone Scale; this is the Tone Scale up here.

So that when you put "A prime" and "A prime prime" in proximity—put them close to each other—they're not going to stay static; there's going to be a change. You're going to have "A prime" and "A prime prime" trying to combine to become "A." It's a very funny thing, but any point on this Tone Scale has an enormous thirst and desire to be its own point.

The static, for instance—the goal of a static is static. The goal of a static is to be a static; the goal of all-motion is to be all-motion. Now the lower we go on this Tone Scale, the more motion we get and the less determinism, and the higher we go on this Tone Scale the more determinism we get and the less motion—the two are separating from each other.

It should be very simple to you; actually, what we are doing at this time is going actually in behind nuclear physics, now—by this representation. So you have a static with no motion but an ability to place in time and space, and here you have an all-motion which has no ability to place in time and space. And you get an interaction between the no-motion and the all-motion.

Now, here we have three possible actions here: "A; prime" can sort of leak through to "A prime prime" and affect everything in between them, such as "A." Or you could get "A prime prime" putting motion in toward this static of "A prime" going up scale toward that motion and again influencing it. Or actually, you can have "A" interacting with "A prime prime" or "A" interacting with "A prime." This is very—awfully simple. You can watch this happen, fortunately. Fortunately you can see this.

The best example here—let's take on the Tone Scale two points now, and let's say that "A prime" here is at 4.0. "A prime" is at 4.0. And that's enthusiasm, that's pleasure, that's going to have a big time and so forth. And we're going to say that "A prime prime," lower than that, is the day of beautiful sadness when our dear old nurse passed away. Fine. All right. That's—it's sadness.

Unless acted upon by some other area, this business here about the nurse will just stay static, and if this person, for instance, is permitted to sit still in a chair somewhere and think about the poor old nurse, you'd think that offhand, sooner or later, this person would blow the incident. That's not true; they won't. They'll just keep on and on and on and on and on, more and more down tone—until they just sort of solidify at that point on the Tone Scale—there they are.

But when you take up this preclear and start this, what do we find? We get a very interesting manifestation here. We say, "We're going to run a pleasure incident on you today! Now, let's go back to the point when you were in swimming. La-di-da, rah-rah," and he starts off with a pow! Oh, he's in fine shape, and he's going to run this incident—and there he sits crying. And you say, "Come on, now, let's run the pleasure incident." And he'll start out again, "Rah-rah, something"—there he is, crying. And you say, "Come on, let's run this—pleasure incidents! Don't worry around about these grief inci dents." And he'll start running that again, and he'll get more cheerful.

Practically 90 percent of the preclears you get hold of and try to run a pleasure moment out of will wind up in something else. They'll wind up in some cruel moment of something or other, or some moment of loss, or they'll go into complete apathy. They start right out, they say "Rah-rah-rah-rah-rah—rrrrowwww."

Now, this is what you're going to observe. You see, you said, "Be 4.0 on the Tone Scale," and they insist on being somewhere around about 0.5, just like that. They don't insist on it at all. You've got an interchange of energy there, and you have this facsimile you're trying to run, and the second you activate this facsimile, both halt on the Tone Scale at present! Let us say, over here on the right—about two points off the starboard bow of your preclear is an incident about the dear old nurse. And right here, about a point off the port bow, is this wonderful incident about swimming—"Rah-rah, swimming. Everything's fine." And you make them start to agitate this incident about swim ming and, depending on the amount of actual energy in it, it will either discharge into a death, or the death will begin to discharge into the swimming. You've got an energy flow.

And if you have this person on an E-Meter, or if you have them earthed properly with a meter reading, you can watch that thing flow. And it will flow until their potentials are balanced again. You actually can run this swimming incident and insist on running the swimming incident and insist on running it until you can—almost exhausted a grief charge over here. By just being hard-boiled about it—you just keep on and you won't let them cry; they'll cry.

Now, the other thing starts to occur; every one of these points overflows. That is to say, it gets going in a certain direction and it has a persistency. It wants to go—the goal of a flow is to flow.

We used to have a tribe of Indians in the States and they had a wonderful lot of maxims. Wonderful maxims, and one of these maxims was the same as any other one: "The way to shoot a duck is shoot a duck. The way to cross a river is to cross a river. The way to get married is to get married." They just loved this. But it's awfully applicable here "The goal of all-motion is to be all-motion. The goal of the static is to be a static. The goal of a grief charge is to be a grief charge. The goal of a pleasure charge is to be a pleasure charge. And the goal of a flow is to flow." Sounds silly, but there's terrible, awful persistency in this, and it gets so mechanical to you, that as you sit there and you feel like—you're running the preclear you're playing the piano with one finger. You have, then—nothing to it.

He starts to flow in some direction; you say, "All right, he's flowing in that direction." You let him flow in that direction, what's going to happen? "The goal of a flow is to flow." All right, it will go on and it will flow in spite of anything that anybody does. It will go on and it will flow and flow and flow.

Tone 4.0 here will flow into tone 0.5, and it will flow down here and it will keep on flowing and it will overflow. It will actually have an inertia of flow. It has a flow—once it starts flowing, it flows further than it should have gone. Its goal, its intention, its direction is too persistent, and will continue too long, and it will not flow to simply a point "A" in between. No. The pleasure charge here at point "A prime" will flow down to point "A prime prime," on and on and on, until all of a sudden "A prime prime" is all charged up, and "A prime" is all charged down. The potential motion, you might say— the amount of potential or the force,

or the potential of beingness— of"A prime" becomes much less under this flow than it should, and the potential of "A prime prime" becomes much greater than it should because the inertia of the flow—it just kept flowing.

The pleasure charge flowing into the grief charge just flowed and flowed and flowed and flowed and flowed and flowed. And right about there, see, it should stop and balance, but it doesn't—it goes on and it flows and it flows and it flows, and it all of a sudden bogbog-bog. Stupidly, it's sort of saying to itself, you might say, "You know, I should have stopped back there flowing a few minutes ago."

It's like the comedian on the stage doing the double take Some body says something to him, you know, and two or three seconds afterwards—he continues on with his conversation, you know, and then all of a sudden he goes, "Tsk! What was that?" He's been insulted or something.

Well, there's always this overrun. It's quite important to you that there's always an overrun on this thing. Its inertia goes too long in that direction and it leaves "A prime prime" all charged up. So that you could theoretically find a pleasure moment "A prime," and then you could find another pleasure moment "A prime," and your preclear still insists on crying. And you could find another pleasure moment along about the level of "A prime," and another pleasure moment, and another pleasure moment, and all the time forbidding him to do any crying, and you're just discharging down into "A prime prime," "A prime prime," grief—you won't let him get into grief, and he will practically blow up in your face.

Did you ever try to cheer up anybody who was sad? The more you cheered them up, the sadder they seemed to get. Well, what you're getting there is your energy potentials discharging into their energy potential, you see. And their energy potential is grief. And you come around and you say, "Well, old boy, it sure couldn't be that much. Why don't you cheer up? Life is worth living after all!" And if you keep on talking like this to him, he'll go and blow his brains out.

You just keep it up, you'll overflow too. If you've noticed this, you'll flow too long in that direction. You'll see that nothing you could possibly do is going to help this fellow out, just nothing, and yet you keep right on trying to cheer him up. And then you go off someplace—you go off someplace and you say, "You know, I don't feel so good." Somebody comes along and starts to cheer you up, and you say, "Oh, beat it!" What's happened there is just your relative inter actions of flow.

All right, "A prime" to "A prime prime." Well, you get an over flow down here at "A prime prime." Now what have you got to do? Let's start with what you have to do as an auditor. You know that if you've run this charge that long in that direction it's going to be a higher potential on "A prime prime" than there is on "A prime," and you'll have to turn around, and now look at "A prime prime" and run it. And you'll run "A prime prime" and it will go back here and you'll get an overcharge on "A prime." Have you ever noticed that the preclear—you keep running this grief on him, and he'd say, "Ha-ha!" And you'd say, "Go on, be serious. Please, won't you be serious? Under no circumstances should you laugh about this. After all, your dear old grandmother died in agony. And there she was lying under the omnibus and wasn't it pathetic the way she gave her all and so forth." And the fellow— "Ha ha-ha-ha-ha-ha!" And you say, "This is very unseemly; why don't you be more serious about this?" He goes on, and the more you tell him that, the more he'll line charge; he'll blow his whole track if you keep that up.

Why? You're feeding in energy here at "A prime prime" and it's springing up the bank and it's going to 4.0. Now, you mustn't get the notion that the only interchange possible is between 4.0 and 0.5. There are very tiny grades of energy present. It's just that "A" all by itself won't flow. But 2.0 will interchange and discharge most aptly against 2.5. Now we're getting them nice and close together.

And you go around somebody who is a chronic 2.0 and you say, "I'm bored with life." Just try it sometime. And you start acting bored—bored with him, bored with what he's thinking about, bored with what he's doing—and he'll practically eat you up and spit you out; he gets in a frightful state. He just gets more and more and more, because you're permitting a downflow into him from 2.5. You're saying, "Well, ho-hum, what's the use pushing around like you're doing anyhow, and trying to run over everything that comes through? That's nonsense. Well, that's the thing about life is it doesn't matter much anyhow. Life is sort of dull anyway, and so forth."

"Rawwwww." You really charge him up. He'll charge up until he's ready for a condenser flash; and that's actually a way of processing.

Now, 2.0 does a wonderful engagement with 1. 5. Oh, fellow comes around and starts getting angry and trying to hold and destroy around a 2.0, and the 2.0 will just attack, attack, attack, attack. You get terrific interchange, and the fellow who is at 1.5 simply insists on holding on and destroying 2.0; you'll get the most wonderful fights.

The only way familial peace is restored, actually, when you have a 2.0 married to a 1.5, is to get one or the other of them to shift potential down to 0.375—that's good, solid apathy—and if they shift potential down there, then there's peace. But let them try to come up out of that—the second they start to come out of that, you'll start to get an interaction. You get an interaction of potential. Your potential starts to change and there starts dynamite.

What do you find in processing preclears? You find that you've upset one side of the family; if you don't fix up the other side of the family and change its potential too, the whole marriage will blow up. There's actually a technique for doing this. You just make sure that you run out as many overt acts as you run out motivators on a pre clear. Just run out as many overt acts as you run out motivators and you'll keep them fairly well balanced in tone, but you're taking the intensity out of their tone and they'll go on up the Tone Scale eventually.

But if you were to take both the husband and the wife and process them, process them carefully, running off as many overt acts as you ran off motivators—in other words, keeping them nicely bat anced—they'll stay compatible. Otherwise there's going to be at least one period when they practically blow up in each other's face because one of them is higher-toned than the other.

But this gives the manifestation of one person holding another one down. You would be surprised at the oppression somebody at 1.5 or at 1.0 feels in the face of 4.0. It's just too wide; it's just a crushing height to them, and they become furious at them. I mean even down there at 1.0, they become so covert—they become so 1.1, you might say—when they're hit with too high a tone level as a constant flow, that that level is much too much for them.

Now, here, [marking on blackboard] actually, is potential. And I don't care if you say, "Here is a terminal in a generator, and here's another terminal in a generator, and we'll call this one minus and we'll call this one plus." All we have to do is change potential, one On the other, and we'll get a current flow between those two lines. And if we go and hook these lines up to an electric light bulb out here, and—here's your electric light bulb—the bulb would light. You'd get an interchange going here: change of potential, change of potential, change of potential, change of potential, and you'd get a flow between them, and that flow is represented as an electric light bulb—that electric light bulb. You change potential, change poten tial between the two, they're going to shift potential. You do it with mechanical energy, and you shift their potential—it's high, and you'd shift it and change it the other way, and you could do it with magnets, fields and mechanical energy, and you get—an electric light will burn out there on the other end of the line; there is an energy change.

And what happens to a preclear when you've got him hooked up? Very interesting; you get him to shifting potentials around and changing potentials around, you'll see an E-Meter fly back and forth one way or the other. But if that isn't good enough for you, you can actually

set up a Decca voltmeter, and if he's a Theta Clear, he can change his potential from facsimile "A prime" to facsimile "A prime prime." You can have him throw energy at the Decca voltmeter which is not otherwise connected to anything, but is grounded—have him flow energy at one of the terminals and you'll get a reading on the meter. That's all—it's just electricity. It's just electricity.

And what you can say about electricity is the fact that electricity is an energy flow manifestation, an energy flow manifestation caused by an interchange between two different potentials. Sounds awfully complex.

Well, if you have a bucket of water that's full and a bucket of water that's empty, that one bucket of water will flow down into the other bucket of water . . . And by the way, if you connect these two buckets of water with a pipe and then you open the pipe—you see, there's a bucket of water, and here's a bucket of water. [marking on blackboard] You got the base of the thing here in water, and we've got a pipe here with a little petcock on it. Well, we open that up. This bucket of water is full and this bucket of water is empty, and we open that up, and the water rushes like mad through that little pipe and it starts filling up this empty bucket. And the bucket fills up and fills up, and what do you know? It will invariably fill up too full and then flow back again. And then it will flow back again too much and it will overflow, and then you can get a flow back again. And your flow goes zing, zing, zing, zing, then finally no flow—zero flow. Now, that's what I mean by "overflowing." And that actually is—this full bucket of water is a facsimile which has a lot of charge on it. That is to say, there was a lot of action—there was a lot of energy present at the time a picture was taken of this. And that picture that is taken is an actual picture of energy flows and is itself, and does contain, a mass of energy units which remain unmoving and undisturbed until acted upon by a live flow, or until they are connected to a ground—and then they'll flow.

A facsimile is spatial—a facsimile is spatial. It sits in space and it sits in time. There is a geographical location for every facsimile which your preclear or you have—geographical location. And the flow of energy is between facsimiles, because you have facsimiles of heavy high potential and facsimiles of heavy low potential. You see, there would be one thing, is "How much action is wrapped up and insulated into and bound up and bandaged into this facsimile?" on the one hand, and there's "What level is that energy at?" or "What potential flow does that energy have in terms of wavelength or in terms of frequency ?"

We don't have to go into wavelength or frequency here.

So here's a facsimile here and another facsimile over here on the other side, and let's say they're both fairly heavily charged and one of them has a low, heavy wave and the other has a high, light wave. If they're close enough together in terms of wavelength, they will flow one to the other—zing-zing. Each time, they overflow, and you'll get a current going back and forth.

Now, it's terribly germane to running because this is Black and White Processing. You get a current flow to run as long as it will run, and thetawise—and actually very easily—you can see the flow. As long as it's flowing, it's white, and when it's not flowing anymore it looks black.

So you flow it in one direction as long as it will flow white, and then it turns around and flows back as long as it flows white. Each time it reaches its terminal of flow, it overruns its flow, it has a tendency to stick. It takes you a bit of static application, positioning in time and space, to get the flow started again.

So your flow starts here at "A prime," [marking on blackboard] it flows here into "A," let us say, and as long as it flows it looks white— should look white; it's energy, live energy flowing. And it flows and flows and flows and flows and flows into "A," and then all of a sudden doesn't flow into "A" anymore. Well, it would be very nice if all of "A prime" had just flowed out and was now all contained in "A," but that isn't the case. It not only flowed

out, it flowed out so much as to leave what you could call—a horrible term, something that would cause a physicist to hold his head in agony—a vacuum, an electronic vacuum. A vacuum with potential; it's flowed too far. Now you've got to fill in the vacuum. Very interesting. But you can watch these things.

So "A prime" flows to "A"—flows, flows, flows and flows, and then "A" flows back here to "A prime," and flows and flows and flows and flows. And each time you get your preclear to track it; you can actually see a flow. He'll see a flow. He'll see a flow running from himself or from something close up to him into the facsimile and then it goes black on him. He says, "It's black."

"Well," you say, "all right. Now get it flowing the opposite direction." He tries that for a moment; it's a little bit sticky at first and all of a sudden—there, he's got it flowing in the opposite direction. And it flows whiter—gray or white—back, back, and it flows back, back, back, back, back. And then all of a sudden it's black again. And he says, "It's black."

So is your E-Meter. Every time it goes black, your E-Meter sticks—the needle freezes. And as long as it's flowing, your needle is changing. And when the facsimiles are run out, that flow is really exhausted and discharged and bled off, evaporated—it goes off in the form of body heat, or body manifestation of electricity, or body cold, or if he gets smart enough and up the Tone Scale high enough, he just hooks them up to the steam radiator, and lets them blow. It's very silly.

Fellow working on this facsimile, works on this facsimile, and he works on it, and ohh! And you say, "Well, why don't you put it over against the water tap?"

"I couldn't do that."

"Well, go on, why don't you put that ridge over next to the water tap?" It's a very silly-sounding thing to him.

The first time you try and get him to do this, probably too lowtoned to do it. He'll say, "Oh, no. No, no. I couldn't do that."

Well, one of these times you're suddenly going to get him to pick that facsimile up and move it over against the water tap, and then he'll feel it go zzzz—it'll flow just so long into the water tap, and he'll say, "It's gone all black." And you say, "Well, pull it off the water tap." Let it flow—zzzzmm.

He says, "I've got a pain in my back." Because what he's done, he's still connected up to the facsimile because he's holding it over there and it starts to change the energy potentials in him as it flows down. It's a very silly—sounds very silly. It's very fortunate that it's so workable. Your preclear after he does this for a while, he says, "My God, I'm just an electric eel."

See, he's been struggling with this back ridge. He's just been struggling with it and struggling with it and struggling with it and trying to get it to flow, and he gets it white and then it goes black and then the reverse flow comes in on him and he gets frightened to death. And then he gets flowing again and it upsets him some more. You'll finally say, "Push it over up against the water pipe," or "Put it over there—you see that steam radiator pipe, or you see that hook-up over there? Go ahead, push it over there and let it ground out."

"Well, I'll try it."

He moves it over and he sees it over there, and sees it draining real fast, and then it goes black and he pulls it off and it charges up the other way again and then he hooks it on to the steam radiator again and it drains all down, and all of a sudden it's gone.

Now, when he's real heavy and real high and he's out of his body and he's doing real processing, what he does when he's processing a preclear is he'll put a line between the preclear and a ground, and he'll let the energy flow along that line. And you'll alter it enough to drain them off. Actually, the poor preclear can sit there feeling him self getting somatics all over the place, not even the slightest bit aware of what's happening to him. Of course, you're upsetting his self determinism like mad when you do something like that. But you can educate a preclear to do this.

Now, don't think I'm not going to mention these things again. Don't think this is a life-and-death proposition, that we just must get all of this right this instant or strain at it terribly hard, because this is processing—a relatively fast rundown.

I've got to go in, now, to the manifestations of the energy itself and show you how they wind up on ridges and so forth. But let's go look back at this again.

You want to know where the preclear is on the Tone Scale. Well, you could measure it. You could measure where he is on the Tone Scale—you could measure it two ways: you could take a high frequency meter and you could get him flowing back and forth on the high-frequency meter a little bit, and you could probably read him directly, just straight frequency, and it would tell you a position on the Tone Scale. The other way you can do it is to find out how much resistance he has, because the amount of density—which is to say, the number of ridges which he had—impede the flow of a trickle of electricity through his body, and you can read by this impedance how thick he is.

Now, there's an old joke about "He's so dense, he couldn't. . ." and so forth. Well, that's literally true. When a person gets just so many ridges in them and those ridges get just so thick, he can't think anymore; that's how dense a person can get.

How dense can a person get? Well, he can get ridges from about two inches in front of his face to about four or five inches or two feet behind his back, and have all those ridges interconnected and com pletely thick, and he'll feel like he's in a sort of a chunk of concrete. There's no action—no action possible under this superfluity of ridges.

And if you get that case who is that thick and that heavy with ridges, really, there's really only one thing you can do. Good Theta Clear processing—just hook him up to something—hook him up to the water pipes yourself, and let the energy fly and sizzle and crack around. Believe me, there's lots of energy present.

Now, fortunately, we know exactly how that energy gets there, exactly how it piles up, exactly where it's located, and exactly how to get rid of it. And we know exactly what will happen to the preclear if we do get rid of it and we know what will happen to him while he's getting rid of it. These things we know; we're not fighting a bunch of unknowns.

Now, energy flow, then, is only possible between two different frequencies or potentials. Now you could have a terminal here—you see, there is another condition. You could have a terminal here at "A prime" and another terminal here at "A prime"—"Terminal One" and "Terminal Two"—and you could have these things separated. You'd have them separate and you could get a very high amount of action on"One" and no action on "Two," practically at the same wavelength, and the two would balance out but the person would not change in tone. Do you see how that would be?

You could have two different levels of water in a bucket, or you could simply have the same bucket with a compartment in the bucket. See, you could have a compartment in this side, and a leak down here, and you have one side way up and one side way down. That would be the same level on the Tone Scale, but you just have a badly distributed proposition.

You get this with many precleans You're all set now, you've found an incident that is just so hot that it just is going to run the second that you tap it, and after you've run it and run it and run it and run it and run it, what you've got is more of the same preclear.

You've just taken the left-hand ridge and the right-hand ridge, and you've short-circuited the left-hand ridge and the right-hand ridge together, and the right-hand ridge was more energy of the same kind of the left-hand ridge and you've just balanced it out. Now it's all along the ridge and all the energy is the same along the ridge, and the preclear is just the preclear on both sides of the ridge instead of just one side of it. You see, it would be the same wavelength, the same— and so on.

These wavelengths have been very, very crudely estimated—the most awfully crude method of estimating. It's totally unreliable, and it's just given as this awful dearth of material with which—meters and things like that—we've actually got to build a science called "electronics" before we can go into this very far. The present tools are terribly crude. Best they can do with them is to build bombs to kill people with—the highest level they have. But fortunately there is a higher level attainable.

By the way, nuclear physics in general does move into these categories and moves in and out of them; there's several very fabu lous writers in the past who have described this and that and so forth. "What if?" and "possible that," and so on. The material is very shaky because they didn't have anything emanating at these high frequencies.

Now, we have here, then, a frequency—let us say the emotional scale (and this is really almost just for fun)—the middle of the emotional band would be something like .034 centimeters, something like that. The effort band would be down there around—oh, maybe two, three, four centimeters. It's pretty heavy, but it's very random when you get them down in the effort band.

Now, we go up along the line a little bit higher—energy, you see, has a tendency to become more and more confused the lower you go. The higher you go on this Tone Scale, the greater directional character that energy has.

Radar, which is a—half an inch is about the smallest radar they have, I think—this wavelength. "Wavelength," you know, is just merely the difference between the bumps on the wave—the nodes. Node to node is what that is.

You get a wavelength, then, of a half an inch radar; it's terrifically directional. You get frequency modulation broadcasting—it's very horizon line. Television, so forth—terrifically directional. It has to be shot out in the right direction or in a 360 degree direction, and it doesn't go through buildings or anything like that. If you had a tree between you and the early television sets, you would see a tree on your screen, see?

The waves, however, have gotten better and better and they've worked this out more and more, but it's awfully directional. It's horizon line—just goes out to the horizon and keeps on going.

Now, that doesn't mean that it isn't a strong wave, and that it doesn't keep on going. It's probable that our radio broadcast beams and so on, aren't even vaguely receivable on something like the moon— very common radio broadcasts—unless you have a terrific setup up there, there's some little echo would come through but that would be about all. But that's a different thing with television. Every television program going out here on Earth is probably receivable on the moon. It would go right straight through the ionosphere, the stratosphere, your Heaviside layer in the ionosphere. It can probably—you get wave penetration. And although it's horizon line here, it starts out there and practically goes on forever. Because the shorter the wavelength you get, the easier it is to penetrate through and keep on going in a straight line; you see how this adds up to self-determinism? Time and

space: places time, places space, and the higher the wavelength, the greater directional force you get. All right.

The analytical thought, almost a joke, is about point fifteen zeros five [.0000000000000005], something like that, centimeters—somewhere around there.

An aesthetic—aesthetics are done on the wavelength which (again, at a figured guess, calculated guess)—about point twenty-six zeros two [.00000000000000000000000002] centimeters. Awfully directional— terrifically directional. So directional that it doesn't combine easily like in the analytical band, so you don't get much reasoning about aesthetics. You don't get much reasoning, as such, about emotion. They're above and below the band of reason.

But the band of reason is very directional and it's quite selfdetermined and it's capable of interlock with other bands. This would just be your Tone Scale, that's all.

Now, any position on this Tone Scale will discharge against any other position on the Tone Scale to some degree, but when the positions are about .5 bands apart, one-half a band apart, you get a very excellent discharge.

A 1.0 becomes very frightened at the threats of a 1.5. Your 1.5 reacts terribly to a 0.5 grief charge. You get somebody crying around somebody who is afraid, and you've really got a mess. You get real action; I mean there's big interchange in those bands.

So, you get what we're dealing with here? And the reason you're dealing with this is so that you can understand that the interaction of bands, the interaction of discharges, interaction of potentials, mani fest themselves here on Earth as human behavior.

You get your artist. Your artist is up there at a potential of, let us say (again, this is not the accurate figure), point twenty-six zeros two [.00000000000000000000000002] centimeters; that's his predomi nate wave; he has terrific direction. He can combine these waves in various directions with great expertness and so forth. And if you'll notice, an artist is as good as he can maintain time and space places ment; the essence of art is time and space placement, and control of time and space.

You don't like stories that start out "She was in New York," and then in the next paragraph—"As she looked around her, all London . . ." You say, "What's the matter with this guy?" Well, this story is reasonable— it's not aesthetic. That is to say it's way down the band of reason—low, low band.

Now, that can create perhaps a great emotional output on the reader—all of a sudden he's sprung from New York to London in one sentence. But it outrages him. It outrages him, because it's not artistic, really. It's not reasonable; it's not a lot of things.

Most art is a longing and a big effort to try to put things in their proper times and spaces, to make everything come out all right. And most of your stories use as their interplay, the inability of human beings to put themselves in times and spaces. And it's the accidental, apparent, being in the wrong time at the wrong place that makes plots. You never have the hero where he belongs, which is probably down at the public library reading up on how to be a hero. And you don't ever have the villain where he belongs, which is someplace else—jail. You have the villain out of jail and you have the hero charging down someplace on a white horse, running into the villain. And then the girl always is in the wrong place, too. They always take the girl, they put her over in the wrong place. She ought to be in a seminary or something, learning how to be a lady, but here she is out on this wild expedition into the middle of Borneo. She's out of time and space, you see.

And the reason people object to science fiction stories, so forth, is because this isn't common with their idea of time and space, that's all. It isn't that science fiction stories are less or more

unreasonable, it's just the fact that they're not used to this time and space. But you take somebody who has his track in a terrible state of restimulation, this seems very ordinary, and Earth time and space seems very, very strange to say the least—so they'll read science fiction stories.

So your artist up at the time band is interested in interplays of things out of time and space and the effort of people to put things into time and space.

If you read Shakespeare along the line of each character, activity in trying to handle time and space—each character trying to handle time and space—all of a sudden the entire bare fabric of plot will just leap right straight out at you. Because where you have an interesting character and an interesting situation, it's where two people are opposing the placement in time and space of some energy or matter.

Now, this also tells you that matter is probably just sort of decayed theta. It tells you that matter probably is not in the beautifully orderly state that some things would have you believe it's in. That is to say that there are so many neutron rings which follow the ionic theories and it's all very nice, and they all run down the various corridors of time, and that's why we have atom bombs.

We have atom bombs because somebody made more right guesses than they made wrong guesses—not that they've been right.

The splitting of the atom was a great deal of concern to us in 1932, terribly concerned with this subject. We had a lot of fun, wondering and working around and so on. There are many ways of doing it—many more ways of splitting atoms than are now being used. But none of them, fortunately, were really good and workable en masse in 1932.

Truth of the matter is, if you can get a series of particles traveling at a higher velocity than another series of particles, and they're both going the same direction—particles "B" have a lot of mass and a velocity of two units, and particles "A" have very little mass and a velocity of five units—you're going to get atoms split, believe me.

If you could just take the second series of particles you see and shoot them through the other series you would be chopping through the units of stuff. Because what you're dealing with is a motion within a motion within a motion within a motion within a motion within a motion.

And when you finally get all the way down to the end, you lift the cover of the box real quickly and there isn't anything in it. Big joke on all of us.

Now, here is, let us say, a unit of motion, and it's flowing along a line here on the Tone Scale. It's going along, and that is its direction of flow. [marking on blackboard] There's a motion of flow this direction.

Actually they're kicking particles, rather than flowing steadily,.but there is a flow along this line of direction. And that unit is flowing along this line.

Now, let's take this unit apart. And we find out, if we take this unit apart, it's a series of motions which is flowing in various directions within itself. In other words, it's motions flowing within motions within motions, and here it's flowing this way.

Now, we take an atom. Atom—you know, popularly, people believe that an atom looks like the solar system. They think there's the sun, you see, and then flying around it are these planets. And the planets are electrons and the sun's a proton or something like that. That's cute, but it isn't true.

Even to make an atom bomb, even that crude, completely imbecile use of nuclear physics, you have to know this—a very childish sort of a practice, but you have to know this: that

probably, more than anything else, an atom resembles an onion, where the electrons are the onion skin. Now, you can't describe it this way, either—I mean, it's different than all this; they always say that very hastily. Anytime you try to nail them down—"What is this shape?"—of course, nobody knows.

Your proton would be a motion which is in here—very heavy, confined motion—and your skin as they come out, concentric spheres, so on, would be your electrons. That's interesting, isn't it? That's an atom.

Now, your boys up at MIT when they're tossing their slipsticks around and having a good time . . . That's the Massachusetts Institute of Technology, which there and in Cal Tech, and some of the chaps here in London are the boys mostly responsible for confusion in this line, and they put it to a very good end—they blew up Hiroshima, didn't they? They used it well.

And by the way, do you know that that never crossed anybody's minds in 1932? Fabulous. Nobody ever thought of this happening. An atom bomb? If anybody coming in had said, "An atom bomb," we would have said, "Say, you know it could be used for that, but you know, you could take one small gram of this stuff, and you could put it in an automobile and then you could drive it for thirty years if the automobile would stay together." That was the only use you could think of for atomic power; people weren't thinking in terms of destruction. It took politicians to think of that.

A politician says, "Well, I'll tell you, boys, we'll slip you fellows three billion bucks if you will sell yourselves down the river and so forth." So, to be very, very crude to you, it will probably offend your modesty—they hung a red lightly outside the door and says, "You're in, Flynn. We'll take the three billion bucks."

And you should see those boys now. A lot of them are friends of mine, and they're saying, "Why did it ever have to happen?" They're as good as slaves. They walk in and out of the stockades and they—so on. Life and death to them is whether or not they keep government employment. They fired eighty-seven or something like that up in the United States on the suspicion that they'd talked to the wrong barkeepers or something. They have songs—there's a whole series of songs that they've dreamed up that they sing. One of them is "Forty millicuries by half past nine." And they're not happy about this, not even vaguely happy because they took something that might have gone on in this way. So I'm a little bit teasing about it all, because they had a butterfly net, and anybody that had ever gone vaguely in this direction . . . They almost had me twice, and each time I said, "Well, I'd be happy to accept. I have to meet a girl named Mabel down at the corner and I'll be right back. Now, don't go away." (audience laughter)

The last time this happened, by the way (big joke of 1950)—the Office of Naval Research was into all of this hand over fist, they were very happy—and the Office of Naval Research came to inform me that they were going to bring me back on active duty. And that wasn't very sweet of them in view of the fact that I was already on active duty—Book One had just hit the stands and I was on active duty on about eighty fronts and no support troops!

And all of a sudden the Office of Naval Research turns up and said, "Well, well, well. We wondered what had become of you"—and oh, sweetness and light, and butter wouldn't have melted you know, it was wonderful, so friendly.

And I said, "Well," I said, "really, I'm not terribly interested in going to work in the project now. I'm really not interested in going to work in the project."

And they said, smiling, "Well, we can always bring you back on active duty, you know."

So I said, "Oh, don't do that, don't do that." I said, "I'll think it over."

And they said, "All right, you'd better."

So I looked very, very scared and very, very timid and very, very inoffensive and when they got out of the door, I went out the back door and I jumped in the car and I went down to the Navy Department and I met "old Bill"—you know, you always know Bill. (audience laughter)

And I said, "Bill, you know, the Naval Retiring Board has finally checked over my case, and I'm really not going to be retired after all, and they'll be starting to pull active duty and all that sort of thing and so forth. But," I said, "at the same time the Naval Retiring Board also says that I'm terribly disabled."

And he says, "You're not going to be any good to anybody, and I don't think there is any war going to come off very seriously in Korea."

"And that's why I want my resignation, so—that's a good boy. That's a good boy," and I took it over to the Potomac Naval River Command and I took it over to the Washington Naval District and I got the proper admiral to sign it and so on, when they—sort of catching him as he went out the door.

And a few days later, why, the Office of Naval Research came up. They said, "Well, hope you've made up your mind because—this business about active duty."

And I said, "Well, how do you do, Admiral, come in." "Say, I've something I wanted to show you here."

There was correspondence for about six months after that trying to prove that an officer couldn't resign that fast. But it had gone down the proper channels, and there's nothing can undo something that's gone down the proper channels. (audience laughter)

Well, all that's very discursive. It all comes down to the fact that you have motions within motions within motions, and if you're actually going to deal—if you're going to deal with a large government or with a preclear you've got motions within motions and what you want to solve and bring about is an optimum motion.

(Recording ends abruptly)