LOGICS 7 - 9 AND 10 - 23

A lecture given on
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All right, let us continue on this second night here of lectures, this night class, with the Axioms. I call the Axioms just generally the Qs, the Logic's and the Axioms.

Now, you will have mimeographed material which will give you much of this, and you will have copies of Advanced Procedure and Axioms before too much more time goes by.

Now, we have a corollary of the last one I took up, which was gradient scales. Gradient scales are necessary to the evaluations of problems and their data. Gradient scales are more than necessary to the evaluation of problems and their data: Gradient scales are necessary to do anything. Right now gradient scales are the basic soul of processing itself.

And right with that we have Any datum has only relative truth.

Absolutes are unobtainable. Any datum has only relative truth.

The truth is relative. We had much material here about Aristotelian logic, about . . . oh, lots of things. But you know, there's three-valued logic—yes, no, maybe—of the engineer. Those yes's are only relative yes's, those noes are only relative noes.

Now, you can ask—very well ask—what are they relative to? I can give you this best as an example of the young navigator. You're, after all, trying to find your way through a body of knowledge and it's not unlike navigation. What is the relative truth of the position of a ship?

Now, here is a ship. And your young assistant-to-the-assistant navigator goes out and he takes this sextant and he doesn't look it over very carefully, but he puts it up to his eye and he measures the altitude of the Sun, and he gets maybe the altitude of the Moon and Venus. And he comes in and he writes all these down and the time all down. And now having written them down, he starts to figure out the position of the ship.

And he uses the most precise tables. He reduces everything down to the tenth decimal place. He's terribly careful in carrying such numbers as .25314—well, he's very careful about that four. He never makes it a three and he never makes it a five. That many decimal places out, he's very careful of this number. And he's very careful of his lead pencil, to make sure that it's awfully sharp as he measures out the position of the ship. And he has this tiny point. And boy, he's right there!

Well, that's not true; he's not right there. There were several reasons why he wasn't there. His observation was liable to far more error than he has given the position credit for. The sextant and his ability to use it made him liable immediately for about a mile error. Then the error in the chronometer, the error in reading and other errors of a practical nature brought him down to a point where he would only have been justified in drawing a pretty liberal circle. And he never would have been justified in figuring everything out as closely arithmetically, everything out to this fine, tiny little decimal place— because the observation doesn't justify it. There is no reason for such accuracy, because that accuracy is being based upon an inaccuracy.

Now, all this amounts to in the world of thinking is just this: You want to tell somebody that you gave Johnny a red bicycle. And they say, "How red?"

"Oh," you say, "a blazing red." They're very satisfied. That's fine. Now, if you wanted to be (quote) "truthful" about this and exact about this . . . As exact, for instance, as they would

like you to be in the English language. Wonderful what they want you to do. They say there is such a word as accurate. A thing is never more accurate nor less accurate, it is just accurate.

Oh, there just is no such precision in the material universe; there just Isn't that much precision! A marksman who gets back and shoots a target and plants his bullet in the bull's-eye—the bullet is one quarter of an inch in diameter and the bull's-eye is three-eighths of an inch in diameter, and any time he gets all of that bullet into that bull's-eye he's accurate. But another fellow comes up and every time he fires into that bull's-eye, he just keeps laying them into the same hole, right in the middle of the black of that bull's-eye. Boy, he's more accurate!

And yet, the person who taught you English said there was no such thing You see, they have the abstract definition and then try to fit it to the realities of the problem. And you cannot fit an abstract to a gross reality without having a relative error. There must be some error.

You can take a theoretical identification of one piece of string and another, but you have to take it out to a terrific theoretical point, and then you will be unable to find that theoretical point in the real universe. And so it's not a practical truth.

You want a practical truth, one that you can work with and that will serve within the limits of your problem. And that's when it says all truth is relative. It said you could have a theoretical truth which was exact— theoretical—and you could simply do that this way: "I have a truth here that is exact. It is completely exact. It is exact to an error less than one over infinity. It is exactly exact and that is how exact it is," and nobody would be able to challenge you.

You'd say, "All right. So you've got a truth there that's that exact. That's fine. That's fine. Now apply it."

"Oh, we're not talking about application. I just happen to have an exact truth, that's all." There's no argument with that, because he's talking in an abstract or a theoretical.

Now we look at the real universe. We look at the real universe of the preclear We look at the no-less-real (often) universe of delusion. We look at these real universes and we want to know how accurate a truth must be. And it must be as accurate as the problem to which it's addressed.

If you're going to run a track for a wheelbarrow from your back door down to your garage, it only has to be accurate within an inch or so, so that you can keep the wheelbarrow on the track. Say your boards are five inches wide. Well, it's all right to lay them down there a little inch this way and an
inch that way. You'll still get that wheelbarrow through.

It'd be silly, but there are many people who would get out there and they would get a transit, they might even get a theodolite, and they would measure with great care, and they would bevel these edges and they would get these edges in perfect condition and perfect alignment and find the exact distance along one edge of those boards to the garage. And they'd spend five days doing this so they could run five minutes' worth of wheelbarrow. And of course, the first time the wheelbarrow goes over all this he knocks it all out to a one-inch error anyhow.

When we talk about truth, then, we are talking about something which is just relative to a problem or relative to another truth or relative to another fact within the limits of workability. How workable is it? Well, it has to be as true as it's workable.

And that works the other way around. You say, "How true do you want a datum?" You want it true enough to be workable. Now, you can say, "I want this real true, good and true, very true...."

You see, “true” is exact; you’re not supposed to be able to do that in the English language. When you say “true,” you mean an absolute. Absolutes are unobtainable.

All right, we’ll say a real truth. Well, that would be a truth which would fit into the reference of your problem, somewhat on the order of “This truth is workable to the degree that every time I work it, it works the same way. I use this truth to solve this problem, and every time I use this truth it works the same way. The result is within the reasonable limit of its application to this problem.” In this way you don’t go going adrift and astray and expecting everything to turn up in terms of blacks and whites and highs and ‘Dow high is high?” Well, it’s perfectly true when I tell you the clouds up there are high today.

You say, ‘“How high?”

“Oh, very high.” Satisfied. I must be talking about high cirrus or something like that; they’re high clouds. Or I say the clouds are low today. That’s true, the clouds are low today. Well, how low is low? How long is a piece of string? Well, it’s long enough. A piece of string is long enough or not long enough. And that’s a relative truth.

Now, I’m going to draw you, just out of pure cussedness, the basic graph on which this is built. And that basic graph is the gradient scale of rightness and wrongness.

And it looks like this. [See the Gradient Scale of the Relative Value of Logic at the end of this lecture.] Here’s the center of the graph and here are degrees of wrongness. So we have “wrong” over here.

Now, that theoretically goes out this-a-way to infinity; that comes out here to infinity. That’s an infinity of wrongness. But know that this would always apply to and influence all dynamics, wouldn’t it? If anything is wrong on one dynamic, it’s got an influence on other dynamics. So we’re going to come way out here to wrongness. And how far could we get? If we got to an infinity of wrongness or an absolute of wrongness, the whole something-or-other is going to be gone. The real universe would be gone, certainly, because you’ve reduced something to . . . You’ve said, “It is so wrong that nothing to which it is related can possibly be right.” Well, that’s impossible.

If all of the streetcar conductors of Manchester were crooked, you could just make a statement. You could say the streetcar conductors of Manchester
are crooked. And somebody could say, within reason, “Well, there are probably two or three of them that aren’t.”

You say, “Well, that’s all right.” You accept that. You don’t even expect anybody to make such a remark, because you know what you mean and they know what you mean.

Because if they were all crooked and if they were all dishonest and if their [dis]honesty was absolute in every case, I can guarantee you that would be the end of the physical universe. That’s how wrong “wrong” would be. Now, that would be succumb. That is succumb. That’s wrong, an infinity of wrongness. And that’s succumb, over this way.

Now, we start this way from center and we get out here, and this is “right.” And this is an infinity of rightness and this is survive.

Now, how right is a datum? A datum is as right as it enhances survival on the dynamics. Let’s use that as a definition: A datum is as right as it enhances survival on the dynamics.

How wrong is a datum? A datum is as wrong as it inhibits survival on the dynamics.

What is an optimum solution? An optimum solution would be that solution which brought about the greatest amount of survival for all the dynamics. That would be the optimum solution.

That tells you immediately, for instance, that war is not a good solution. And sure enough, in the practical world it's not a good solution. It tells you that an argument isn't a good solution. It also tells you that you shouldn't really enter into something that was weighted entirely two, three, four, five, six and seven, let's say, and completely left out one. I mean, you made this computation and it enhanced every dynamic and applied to every dynamic, but it didn't apply to one. You'll find that the darn solution's not workable. It's going to go wrong. You've got to make it apply to one. Somebody will say "But that's selfishness." Hm! You can sure fail if there's no self involved. That comes as a startling datum to some people. They suddenly say, "You mean I have a right to survive too?"

Well now, what would be a nonoptimum solution or a reversal of an optimum solution? What would be the . . . If you had—for instance—if you had a problem and fifty people turned in solutions, there would be two ends of the spectrum. There would be the worst solution and there'd be the best solution. And the best solution would most enhance the greatest number of dynamics. And by the way, this works out just right down the line. It wouldn't seem to. It'd seem on a short-term notice, or something of the sort, on a short-term proposition, that you could omit one of the dynamics and say, "Well, we'll smash that one entirely and that lets the others survive." You don't get a good solution; you get good randomity when you do that.

You start fighting somebody or other, or fighting something—and that's part of the dynamics—and if you fight them hard enough, and so forth, you'll notice the very thing you're trying to defend will start caving in on you. So you want to be careful; you want to choose something that's weak, something that doesn't amount to very much on any of the dynamics to fight—if you're really thinking in the broad term of the eight dynamics.

So, this optimum solution is: How many degrees right is it? Well, it will be as many degrees right as it will serve the dynamics. How many degrees wrong is it? It will be as many degrees wrong as it will inhibit survival on the dynamics. This graph is a very useful graph and is actually logic.

Now, if you appeal, if you put time in here, well find . . . The ship is going down. The sailor finds that heal be able, by diving below and shutting one of the seacocks, to keep the ship afloat long enough to let all of his companions get off of the ship, and yet that'll cost him his own life: That's a perfectly valid solution because it says that there were a number of others and those were his teammates, his shipmates and so on, and somebody's got to shut that seacock. And so he says, "It's I that will do that," and he goes ahead and does so. And this is particularly good, because all he actually loses in the action is a body. Death is not very final; unfortunate, but true.

So we have relative data then. Now, a datum is as big as it'll influence the dynamics—it's as big as. That's how big a datum is; that's how important a datum is. It'll influence, broadly, the dynamics.

Now, if you look at data, then, you will find out that you have to be able to evaluate data. That is to say, what is the relative truth of this data? Is this data just vaguely true? We have a thousand factors in this problem and this datum only applies to six of the factors. You'd say, "No . . . no." Or you have a thousand factors and you have a datum that applies to two hundred of them. You'd say, "Hey. Hmm." You have a thousand factors and you have a datum which seems to apply, one way or the other, good or bad, to all of them but does strange and unpredictable things on each one of the factors. Hmm. Press that one to your breast, by the way. That's a wild variable, and by its examination you will discover a great deal about the problem. If you've got something that's varying wildly throughout all the factors of a problem, look at it. Look at it closely. Because within it may well be a factor higher than any other factor you'll attain.

But now let's say you have a thousand factors in the problem and you find a datum that will apply to and benefit eight hundred. This is the principle of a democracy; this is the principle

of majority rule, and so on. All of these things come in. That datum is important then. Therefore, we pass laws which will influence the greatest majority of the people. Therefore, we say that a law has the truth, that it benefits the people, and a lot of other things. That's evaluation of data. There's more of this.

Truth is relative to environments, experience and truth. Awfully easy to see that one. But it's relative to environment. For instance, a dinner jacket is important in London and not even vaguely important in Saipan. An elephant rifle is not even vaguely important in London but is sometimes useful in some parts of the world.

You take some person who is unable to evaluate truth, by the way, and examine his baggage. Just look over what he has in his pockets and look over what he has in his bureau. If you were to invade his privacy to that degree, the applicability of the materiel to his environment would tell you, in a large measure, what his ability to evaluate was. If his ability to evaluate was very poor and he just had tons of junk, nothing seemed to apply to anything else and it's all kind of being held "in case I needed it"—such as, he's got a bowie knife used in scalping early settlers or something, and it's just sort of he keeps it around in case he needed it. Or he's got a policeman's whistle, and he's got a this and he's got a that and so forth. You start asking him to evaluate. He's going to have a rough time. He'll also be having trouble with time.

All right. A datum can be evaluated only by a datum of comparable magnitude.

Oh, boy, let's know that one, shall we? Let's know that one. Whatever else you don't know, let's . . . Gradient scales are more important than that,
much more important, but a datum can be evaluated only by a datum of comparable magnitude. Gee, let's know that one. Can be evaluated only by a datum of comparable magnitude.

Now, let's take a grain of sand and a mountain. And we'll say, "All right now, there's a grain of sand and there's a mountain."

And the fellow says, "Well, all right, I know about a grain of sand, but I've never seen a mountain. What do we do about the mountain? I mean . . ."

"Well," this guy says, "it's lots of grains of sand." Ah, yes. It's all off.

He says, "You know those hills out there? Well," he says, "if those hills were eight times as big, they'd be a mountain."

And the fellow says, "Yeah?" Now we're getting into comparable magnitude.

Now, we wonder why it is that Herr Devil occupies so much of the scene, and why the devils as they are compared to the gods are so prominent. They'll become as prominent—get this—they'll become as prominent as the god they are supposed to oppose.

You could go around and say, "Now, the god . . . Believe in God. God is all. God is the only one. Of course, he's opposed by the devil, but God . . . ," so on. "The devil can also steal the souls of men. Now, God really does take care of men. God does this and God does that." You're going to get, fully, 50 percent of the people you're teaching this to—they'll look down here and they'll say, "The devil can take your soul too? God is this big"

The automatic mental reaction, the mechanism behind this, says immediately, "The devil is as important as God." And you will have 50 percent of the populace actually following the devil, no matter how hard you tried to teach them.

Now, A datum is as important as it has been evaluated is the next corollary on this. How important is a datum? It's as important as it has been evaluated. What is an evaluated datum? It's a datum that's been compared to the other factors of problems in which we're interested.

All right. Well have a preclear and the preclear is in terrible shape— shaking, miserable, sure that somebody is going to shoot him the next time he turns the corner. He's in horrible condition. He's just something that if you were of a sympathetic nature you might even feel sympathy for him. He's in terrible shape: a Homo Sapiens, and normal. And he's just in this horrible condition.

And you start processing him and you find out that every night when he goes home a cat yowls at him. You want to process that? It's not a datum of comparable magnitude. You have to look and find a datum powerful enough to cause this condition on the part of the preclear And you're thinking very, very badly and you're assessing very, very badly if you were being contented with something that wouldn't cause it.

He's had the usual familial difficulties: His father and mother's really no more or less than other fathers and mothers, and yet here he is in this terrible condition. You say, "Well, it must have been his father and mother." They're an average father and mother, but his case isn't average. You have to be able to diagnose on the clean, clear-cut basis: You'd better find something big enough to have caused the condition.

Now, another way of saying this is: The cause is always equal to or greater than the effect. The cause is of the same order of magnitude as the effect, and the effect is of a same order of magnitude as a cause, with this
single difference: That you can have a multitude of causes which are very tiny growing into a mountain of effects—but at which time you would add up the causes and you'd find out they were the same size—or you could have a multitude of effects taking place from some little insignificant cause. But in any event, when you are looking at a preclear who has something wrong with him, don't be satisfied with the fact that it was because somebody stole his milk bottle when he was very young There's something else in this preclear's environment, if he's in terribly bad shape, that you don't know about. And you just better fish around. Do an assessment and you'll all of a sudden start finding something that matches the preclear in order of magnitude as cause. And that, by the way, is actually the heart and soul of diagnosis.

Now, as far as being able to research and think about something is concerned, a datum is as valuable as it has been evaluated. You'll find an awful lot of people will come running around and saying this happened and that happened and it was known here and this was known there, and so forth. And if you look at this and you keep looking at this, and your attention keeps spreading out from the data, you're spreading out from an evaluated datum. A datum is no good—just bluntly, just no good—unless there's some evaluation, unless somebody says what it relates to.

Let's take the datum "trucks." And now, you write an essay on petrol consumption, and you look around and you use an example of trackage and the number of miles that are hauled per gallon of petrol and the number of tons of freight carried and so forth and so on. And somebody comes up to you and he says, "Well, your whole subject's been covered. I mean, it's already covered." He knew about it a long time ago.

You say, "It has?"

They say, "Yes sir, yes sir. Here's an essay and there's the word right there: trucks."

You say, "Now wait a minute. That word trucks in that article you're referring to also has the word passenger cars, jeeps, tanks, battleships, space wagons, vehicles, tricycles, and doesn't even say a word about petrol or consumption or anything else, and it just says trucks."

The guy says triumphantly, “Well, it says trucks! The important datum.” Just ignore him after that. He’s not worth reasoning with. Or process him or get somebody you don’t like amongst your friends to process him, because the guy can’t evaluate data.

A datum is like a whole ocean full of drops of water. And you gain slugging into this ocean full of drops of water. And every datum looks like every other datum, and you finally swim all over this ocean and you find . . . What do you find, finally? You find a drop of water which contains certain component parts which are different than the other drops of water, but which is the same as all the drops of water, and you evaluate this drop of water. And by evaluating this one drop of water, you find out a great deal about water. So you haul this drop out very carefully and you put it up there as a single drop of water. And then you find four or five other drops that are valuable to you. And this is the substance of that ocean. That’s evaluation.

Somebody comes along and says, “Well, look, there’s a whole ocean full of water. What do you want with those drops for?”

And you say, “Well, these drops explain the whole drops in that water. You don’t need all those drops now, you just need to know these drops. And that tells you what water is. There’s heavy water and there’s light water and
there’s mineral water, and this is all in common to it, and these are examples of each one.”

And the fellow says, “Oh, that’s not sensible.”

You want to be careful of taking in data which you don’t evaluate yourself. Education is often along the line of stuffing snakes. Down here in the zoo they have a snake they feed every six months. They have a stuffing machine and they pry his jaws open and they put the end of this stuffing machine in his mouth and they turn the crank. And this loads him up for six months.

Then he goes to sleep—sleeps for a long time and so forth.

Well, that could be likened to modern education. They never evaluate any part of it; they just open the student’s mouth and grind away. And if he has enough data in him at the time a course finishes, why, he’s supposed to be educated. Hell only be as educated as he’s evaluated the data.

Here you have this dashing army officer and he has just been transferred over to the field artillery. And he had a whole month’s training in field artillery. And they were saying “caissons, trucks, limbers, ration cards, hay, petrol, mils, fire posts.” He knows all these words; been very familiar with them; heard them all, he has. And he gets out there and he starts the truck battery into action by the simple process of finding out if there’s any hay. And he looks all around and he finds out they don’t have any hay so they couldn’t go into action.

Somebody points out to him, he’ll say, “Hey, the stuff fired out of the guns is in the boxes there.”

“What boxes? What I’m looking for are caissons.”

“Well, those are caissons. (Contain the shells.)”

“Oh,” he says, “so they are. Oh. Well, all right. Hook up the caissons.” Now he’s all set. He’s got all the data in the world, but he hasn’t applied it to anything.

And the most horrible thing that could happen to you is to imbibe all this data and not compare it to anything, and not sort it out and find out which is the necessary element. That’d be horrible. Because all of a sudden you’d have this preclear and it’d be two o’clock in the morning, and you’re trying to get this preclear processed and get the job over with, but the preclear keeps screaming. And between the police ringing the doorbell and the parents of the

preclear on the phone, you haven't got any time to evaluate this data. The time to do it is now!

You say, "Is it as important to have a preclear take his shoes off before lying down on the couch as it is, always and invariably, to say to the preclear 'Come up to present time,' or 'Are you aware of your surroundings?' or orient him in time and space? These two data, are they of equal magnitude?" No, they're not of equal magnitude.

It's important to have your preclear in present time. It's important to have your preclear at the end of the engram before starting him back through the beginning of the engram.

Now, continuing this matter of evaluation, that's actually the essence of education—the essence of it. You actually have, here, only five data of incomparable magnitude. I mean, they're so high they're the Qs. They're way up at the top of the pyramid. And they don't compare with the other data which you're getting at all. So if you were to spend hours of examination of the Qs and doing theoretical applications of the Qs, just as that, and minutes on all
the rest of this material—per each—you would then be evaluating just about right.

There's a navigation textbook printed called Dutton's. It's the most wonderful textbook you ever read. It has everything in it that there is— just everything in it there is. Anything you want to know is in there, and it says it all in the same sentence structure. There's no evaluation in Dutton. Actually, it's about the grimmest thing a student ever tackled. Oh, it'd just be horrible. Because you read in there "Charts are put out by the Hydrographic Office. They are twenty-one and a half inches by twenty-four and a half inches. You must always know the index error of your sextant. Charts are folded, generally, and stowed in some merchant-ship drawers, but in most naval vessels they are laid out flat." And your guy reads that and . . . "You always know the index error of your sextant." Oh, my God, don't compare that in magnitude with how you fold charts or how big charts are. That's completely incidental. But boy, if you don't know the index error of your sextant, you're never going to get a position. I mean, just that. I mean, you're never going to know where you are, and that's the essence of navigation.

So give it that same value on these Qs. Know these Qs. Placing in time, space; creating time, space, energy, matter and so on. Boy, just work that one to death, just grind that in. And then take this other material and evaluate it by the Qs. You see how that works? And yet this other data has interest to you. And it, in turn, does some fragmentary evaluation of the Q.

Now, Logic 10 is: The value of a datum is established by the amount of alignment it imparts to other data.

Now, when you say alignment . . . This is a word you'll find through these Axioms quite a good deal, and alignment merely means "relationship." If you got all of the factors of a vector . . . Let's say we have a vector of force here. If all of your energy units in it are going in one direction, there will be a considerable force imparted here. You see how that is?—if all of your energy units are going in one direction.

But supposing it works like this. There isn't going to be any impact imparted there. No impact. Just going to be scattered. You put an impact in here and that stuff just chases around, sort of chases its tail. But here, nice and straight, an impact is delivered.

In other words, you can make energy hit its target or make an object do what you want it to do if your force is directed on it. If it's not directed on it and if it's not directed properly on it, nothing's going to happen or it's going to happen wrong

So you could say a datum of how to apply force to a billiard ball would guarantee—if the datum were important—it would guarantee that the billiard ball would hit other balls and go into the proper sequences. In other words, what we've got here is the usability in the

application of effort. The usability of the application of effort would determine the value of this datum. It'd also determine its ability to align other data.

And you take somebody out there you're going to teach how to play golf And he says, "You put the ball down here, you put your heel opposite the tee and you stand back and you grip the club with an overlapping grip, and your thumb goes in here and your thumb goes there. Now you hold it back very carefully like this over your shoulder and you swing, and then you follow through. And you look up then and see the ball at the other end of the fairway." Now, he says, "That's what you do and that is how you do it," and so on. As a matter of fact, that's all valuable data.

But let's go over it again and see how much not-valuable data there would be in there. Now, he says, "You always bend over very carefully and dust your pants off in case you get sand on them," and so forth. "And you get this tee. Now, it's much better to get wooden tees, but wooden tees are very often expensive. But I can sell one of these wooden tees to you up at the clubhouse if you want them. But you can make sand all right, and maybe you'd better make sand." (Now, that's quite important.) "Now you put the ball on this tee, and you step back here and you take hold of the club and you hit the ball. And that's the way you play golf."

No, you wouldn't be able to play golf, that's all. That would really be a complete, different shift of evaluation to a nonessential. And how often have you found subjects like that? They keep shifting from a nonessential—I mean, over to nonessentials.

For instance, you'll find out in laboratory work it is of the greatest, utmost importance to know how to get a test tube clean. They never teach you that. No, you sort of go into the laboratory and you find the test tube is dirty. And you try to get a precipitation, and this precipitation isn't the precipitation you thought it should be. And you scratch your head and say, "What is wrong with my chemistry?" Well, there's nothing wrong with your chemistry, but there's a heck of a lot wrong with your ability to wash the test tube. And nobody ever came in the textbook of chemistry and said, "Use clean test tubes always. If you take cornmeal and a long-handled brush and rub up and down carefully under hot water for some time, you'll get the worst stains off of the inside of a glass test tube. And this is one way to do it.

"Now, there are other ways to do it and that is simply to take an acid like aqua regia and simply rinse the thing out. That kills everything. There are various ways. And this is how you get a clean test tube." Very important. Shift.

Now, a student, when he comes out the end of a course and he knows what he's doing—if he knows what he's doing, he knows what was important in that course. But he knows what's important in the course by evaluating the data that hits him.

Now, I have a way of trying to impress you with the value of data: I try to hit the data from about eight different sides and about twelve different times if it's vital. I keep coming back to it and kicking it and coming back to it and turning it upside down and showing the other side, and then show it in practice and then show it in use. And then when you're so darn sick of this datum—you say, "Why on earth does he keep talking about tennis balls?"— we come back and talk some more about tennis balls if they're important in the process.

All right. The value of a datum or field of data can be established by its degree of assistance in survival or its inhibition to survival.

Poison is corrosive to the stomach, is inhibiting to survival. If you didn't have that datum, you might take some poison. And you would learn the datum, and always it's too late to learn the datum in the field of action. That's always a little too late. It's better to know about poison before taking poison.

The value of a datum or a field of data is modified by the viewpoint of an observer.

To ducks, shotguns are no good.

Logic 13: Problems are resolved by compartmenting them into areas of similar magnitude and data, comparing them to data already known or partially known, and resolving each area. Data which cannot be known immediately may be resolved by addressing what is known and using its solution to resolve the remainder.

And the only reason that's there is that is the reason and the way I did Dianetics and Scientology. And that's how they got here, by the use of Logic 13. I just knew that there was something to be known about the mind and then just took the whole area of the mind and kept chopping it up in chunks—chopping up the humanities into chunks and carting one of the chunks off stage and dumping it every time I found out that it had not been generally applicable.

Now, let's see. People, let's see, of Asia . . . All through China people are hungry. Now, there's a lot of Chinese philosophy, and there's Confucianism and this sort of thing Can't be anything important in it. There might be something of importance in it, but why should we bother to examine China? Dump it overboard. Something wrong with all the information there is in China.

Isn't that a forthright and horrible statement?

You say the secret does not lie in China. Why? People are hungry in China, China is dirty, people don't live long and they aren't very bright. Okay, that goes into the Yellow Sea.

Japan: Japan must be running in good shape. It's brought itself up in the world and it's in good shape, and they have all these rice paddies and everybody is working for it and they're in good shape, totally, and they're very bright. And let's see, they copy everything Hm, that's an interesting datum: they mimic, they mimic, mimic, mimic, mimic, mimic, mimic. Well put this down: Japan must have something in it—something in it—but I don't see anything immediately that's a large body of data there. Well just move it sideways.

Now let's take the field of religion. Religion been of any great benefit? There are probably a lot of things . . . Well, well move religion aside.

Let's see, what have we got left here? We got Aleut Indians. Well, I don't know, Aleut Indians didn't even know how to preserve food before the Russians landed there. Gee, they must be awful stupid. Let's just throw that whole culture out.

And go on down the line in this fashion, until all of a sudden we find some field that has gotten a terrific spurt of advance. Well, what do you know, what do you know!

It was the field of electricity . . . that seems to be advancing faster than anything has advanced in any age since manes been here on earth. Boy, is it going with velocity! James Clerk Maxwell in 1894 did himself a fine job of figuring out a lot of stuff—by 1894. Freud's libido theory was extant in 1894, and let's see, today we've got the atom bomb. James Clerk Maxwell, 1894; Freud, 198 . . . Hm. You know, it kind of seems to me like electricity has done a terrific jump forward and the libido theory is still with us, unchanged. And we still have sanitariums and there's been no advance in that line. But here's this one field of advancement.

But it's incredible to think that anybody would be just wholly juice; there must be other answers someplace. So we'll go over and well find some more compartments and well look for some more knowledge. We'll look for some more spheres of knowledge. We'll look in the field of biology. Well look in the field of this. We'll find out how well-oriented these people are or how badly oriented they are, or whether they're getting along well or whether they're not. Rough, isn't it?

Just the crudest kind of analysis of data, just arbitrarily taking a sword and just—whack!—that piece of data is cut off now from the rest of it and we won't think about it anymore. Whack! Another big body of data, we've cut that off and moved it aside. Whack! We've taken another part of the humanities and we've moved them aside. What do we keep coming back to? We find out there's one stability today: the science of physics. And by analysis of chemistry we find out that chemistry isn't very stable, because nuclear physics moved in on chemistry and, boy. the chemist is having an awful time today. He has another entirely different brand of nuclear physics.

Here's relative truth: The atom of the chemist is good for the chemist. The atom of the physicist is good for the physicist. It's true for the physicist, it's true for the chemist. But the atom of the chemist and the atom of the physicist aren't even vaguely similar! Yet each says this is the atom. They've got entirely different atoms. That's very amusing. You call this to their attention. You say, "Say, by the way . . . by the way, I know you . . . Here you are working in this exact science. Now what did you say about the atom?"

"Oh, so-and-so and so-and-so and so-and-so."

And you say, "Well, isn't that funny? That doesn't compare to the physicist."

"Oh, the physicist has to be wrong! He's wrong, that's all. It just doesn't work in chemistry; it just doesn't hold out."

Physicist says the same way: "The chemical atom doesn't work out in a cyclotron." This tells you something else: It tells you neither one of them has got anything but a vaguely workable atom. The atom probably isn't like that at all.

Now if we look at what our concept of the atom is, they'd both get awfully shocked. Because we're dealing with an atom probably in the line-up that it doesn't exist. Hmm, that's heresy! Well, I can't find any evidence that the atom exists. I wish I could. I tried! I've tried to be a good boy.

This tells you something else. This is useful in processing—why I'm stressing it a little bit. You want to do a fast diagnosis, just cut your preclear up into sections, so to speak. Well, one of the best ways to do that is cut him up in dynamics. You say, "Brrrrr! Eight dynamics. All right, how does he feel about this first dynamic? How does he feel on sex, children, groups, man, animals?" so forth. Just take a check down the line. "Oh, he doesn't want anything to do with that second dynamic. And he thinks he's pretty despicable as a person. Hmm, there's first and second out." And you say, "What about groups? Oh, he's an ardent supporter of the 'I Will Arisers.' " You say, "Hmm. How's he feel about man? Men are lice. How does he feel about animals? He hates most animals but he loves cats." This is interesting. We're getting more and more interesting, because what we're doing is cutting up whole sections of this fellow's whole track and we're finding out that we'll find some solution (if we're just looking at this lifetime) immediately. Somebody, probably a sexual partner (you see, just add this up; just make a ragged guess out of it) used to run him down and tell him he was despicable. Who was it?

Now, if we could just clip that person out of his life—boom!—gee, would he feel good. Because here he is, second dynamic is bad, and yet he's not very old and he's in pretty good shape, and he thinks he's despicable. And we go
up the line and we find out the rest of these dynamics don't seem to be terribly out of line. We find out just those two seem to be kind of bad. Well, let's just take a gunshot at it and say, "Who did you know . . ." This is a man, let's say, you're processing. "What woman did you ever know that used to run you down?"

"Oh, that was my first wife."

Now, he probably wouldn't have thought of mentioning his first wife to you, oh, for fifty hours anyhow, till he got to know you better or something— a hidden datum to you and to him.

You ask him now, "All right, let's get a visio on her."

"Oh, I don't get anything."

"Well, let's get a visio on some of the places you lived."

"Oh, those years are just sort of blank to me."

"Let's get a visio on anything connected with her."

"I don't know, I think we were married in 1932. No, it was 1940. No, that was her mother, I . . ."

You'll find that you have walked right straight into the maze of unknowingness in this case. He can't place it in time, he can't place it in space, he hasn't got any eyesight on the subject, he can't hear a voice, he really can't tell you many of her characteristics. So what do we do to make a fast case out of this? We don't have to particularly go through the agonies of Theta Clearing this boy if we're just doing a fast patch-up. What do we do?

Well, we have him mock up a woman. And we start putting her in time—yesterday, tomorrow—and in spaces. And then make up spaces and put her in spaces. And then mock up some more women and then mock up some more women and some more women. And what do you know! All of a sudden, all of a sudden—is it his wife that appears? No. It was a girl that lived next door to him when he was sixteen. And did she louse him up like fire drill (as they used to say in the navy). And he's forgotten all about it. And her father threatened to have him run out of town. And oh, boy! And what do you know, after all this mock-up of women, women, women, all of a sudden there you are, he is looking at a picture of this girl. He's got a visio on this girl. Not just a visio of this first wife, but he's got a visio of this earlier girl.

Now, you do things with that until he can create many of her, he can place her in many places, and until he can actually blow her up. And you create some more of her and blow her up some more. And then you place her some more places, and you take the actual facsimiles with regard to her and you place those around in times and spaces. You don't run them. And all of a sudden he says, "What are we doing this for? I'm bored stiff."

And you say, "Well, how do you feel?"

"Well, I feel fine. I feel . . ." He'll say, "Say, that's funny. That's the first time in five years I haven't had this headache."

Just as silly as that.

Now, when I talk about diagnosis, you're dealing with something that's a vessel of knowledge. And you want to get out the most hidden knowledge that you can get out. One of the fastest ways you can get it out is just take and split it up and take each one of these big areas and find out if there's anything faintly wrong with any one of those areas. And then just spot the one you find the most wrong with, throw the rest of them overboard—you don't care about those—and just process this one area that you found in bad shape. And all of a sudden, what do you get? You get the datum of his life hitherto hidden from view suddenly flashing into view.

All of a sudden, by the way, because of past lives and things like that, you're liable to find some girl way down the time track. And he starts to get this strange feeling about this thing "You know, I've seen her someplace?"

He should have, he was married to her for fifty years.

Okay. Now, Logic 14—Factors introduced into a problem or solution which do not derive from natural law but only from authoritarian command aberrate that problem or solution—goes with Logic 15: The introduction of an arbitrary into a problem or solution invites further introduction of arbitraries into problems and solutions.

That's the introduction of an arbitrary. And you'll find any science has gone off of its wheels when someone introduced into that science an arbitrary. You'll find any government departed from rationality and from good government the day they passed an arbitrary law. It had no basis in natural cause or in custom—which is about the same as natural law—it simply got passed one day. And then you find that to enforce it they had to pass something else. And then it made something else go off of its wheels and you had to pass something else to patch that up.

But then because that made five other factors go wrong, you had to create bureaus in order to keep those five others in place. And then, because that made so many arbitrary factors that went so wrong, then you had to appoint a board to oversee this whole field and regulate it. But that board, because it was on an arbitrary factor, knocked everything wrong. And the next thing you know, why, you have a fascist dictatorship. But of course when that passes away you get a communism. And you have to put in . . . What do you get? You get descending tone scale from any introduction point of an arbitrary. Get that.

You want to trace where an individual started descending the tone scale, find out where the arbitrary was introduced upon him which did not agree with his own needs or the dynamics or an optimum solution or anything else. Someone introduced, by force or trickery upon him, an arbitrary factor which had no bearing in natural law. And he's been going off of the road ever since. And he's clear over there in the jungle. And he's all messed up and bogged down in the sand and threatened with wild beasts on every hand. And he can't figure out how he got there. He was a good, clean young boy—he'll say this to himself quietly. He was a good, clean young boy and he meant well and he studied hard and he knew the road and he knew how to drive, and here he is over here in this sand pile. And he keeps saying, "What happened?"

Well, what happened was that an arbitrary became introduced into his existence. And when that arbitrary was introduced into his existence, nothing else could fit with it. And so he had to make new arbitraries, which made new arbitraries. The next thing you know, he had totally false gods, false values, there was nothing real. And the funny part of it is, he didn't think anything in the whole universe was real either. After he got through, he was certain there was no reality left.

Now, down tone scale is from the point of first introduction of an arbitrary. A person's inability to feel the reality of things stems immediately from an arbitrary point, an arbitrary introduction of some sort, which had no basis in natural law, cause, fact or anything. You start searching this law out, you start reading him on an E-Meter and you'll trace this back, back, back, back, back. And all of a sudden—it'll be the darnedest thing—
something strange happened one day. And if you want the point in one lifetime which makes the electric lights of a fellow turn on, you just look for that first arbitrary. You'll find it pretty early, but it's totally unreasonable. And that's what's wrong with it.

He's always gone along with it but it's totally unreasonable, and he's always fought it, and it's suspended in view, and he has to do this and that. And that's the way it is.

And Logic 16 is: An abstract postulate must be compared to the universe to which it applies and brought into the category of things which can be sensed, measured or experienced in that universe before such postulate can be considered workable.

That sounds very erudite, doesn't it? That merely says if you're going to have an x and y in a mathematical equation, you better show wherein the x's and y's is. It says that those x's and y's have to be brought into the category of things which can be sensed, measured and experienced. It tells you that a mathematical formula is of no use whatsoever until real values are put into it. It really is of no use unless someplace, somewhere along the line, somebody puts a universe in there. It's an abstract nothingness.

And the fellow will say, "I can figure this and figure this. I can figure x and x's are fine and infinities. And I can figure G's and zeros," and so on. And "I'll figure all these things, and I'll figure 'em . . ." and boy, he has a lot of fun.

And you say, "Hey! Hey, hey, where are you?"

The fellow says, "I can't even hear your voice." He's gone.

By the way, when you process some people, they have done practically that. They have actually done practically that. Now, they'll have a universe of their own. And they'll find this universe of their own is no good. This universe is no good. Why? Well, it's just the fact that they couldn't apply it in any fashion to anything they were doing, and it doesn't have any relationship. And besides, it's just idle daydreaming and it never got them anyplace and it doesn't have any purpose. And they feel kind of sad about the whole thing because they couldn't think up anything original anyway. And you get this thing.

So where do you pick up where they thought daydreaming was idle? Daydreaming, once upon a time, was the life and death of their very beingness. Later on it became daydreaming How did it become daydreaming? That's an interesting thing to know.

Completely aside from this fact, the reason why this is here is just hopeful that someday somebody won't come up with this perfectly wonderful thing, transcendental "truth": All knowledge is beyond the realm of human experience. Let's just skip that one. It's not.

Logic 17: Those fields which most depend upon authoritative opinion for their data least contain known natural law.

Want an example? Art. It really depends upon authoritative opinion— really does. Art does. Somebody comes in and he says, "Now you see these new cubist-modernistic impressionism's? Now," he says, "they're the thing." And you look at these things and they just don't make sense, except they give you kind of bad eyesight.

You say, "Well, I guess they're the thing." How do you know they're the thing? Well, there isn't any way you know, because there's no law behind art. There could be.

Oh, by the way, that is a good one for you from this standpoint—this on
a diagnosis becomes very interesting: The preclear who says, "Bang, bang! It is so, it is so, it is so. This is, that is, and so . . ." Boy, you got yourself a case. You got yourself a case who is so far gone on knowingness he is fighting his last-ditch action. He doesn't know. The only thing that's left of him is to be highly authoritative. And if he feels he can be authoritative enough, why, gosh, he somehow or other will be able to make it. But he doesn't know. And you'll find out that he knows he doesn't know. He's fighting the front edge of a very, very tight balloon that is liable to be punctured at any instant.

Now, Logic 18: A postulate is as valuable as it is workable.

That's very self-evident, but you wouldn't think so with people. Sometimes it's the postulate "Well, I made up my mind to believe myself, and after this I'm going to believe myself And although this keeps giving me awful headaches, I've still made up my mind to that effect." You see, that's not a valuable postulate at all, because it doesn't work. Idiotically simple, that one is.

Logic 19: The workability of a postulate is established by the degree to which it explains existing phenomena already known, by the degree that it predicts new phenomena which, when looked for, will be found to exist, and by the degree that it does not require that phenomena which do not exist in fact to be called into existence for its explanation.

You want to study that one out someplace, I'll give you a simpler way to study it. Just go look up the works of a fellow by the name of Hegel.

The wild abandon with which certain writers of the past have been able to just leap out into thin air and say, "Well, there it is!" And everybody sort of waits for them to fall. They don't fall. They seem to stay there in thin air, saying "There it is." And so after a while everybody starts to believe them. They must be there; they're defying all known laws.

A person could come in and say, "The moon is made of green cheese." And he says, "The moon is made of green cheese," and then we go up and we look and see if the moon is made of green cheese. And it's not made of green cheese. Well, the theory which led him to believe that the moon is] made of green cheese is then probably not very workable.

But a fellow sits down and he says, "Hmm. The moon must be covered by pumice." We go up and we take a look at the moon and, sure enough, it's covered by pumice. Now, the theory from which he's working must be a good theory because it predicted phenomena which, when looked for, was found to exist. You get this as a test, then, of a theory. In the matter of how to think, you're always thinking from postulates. You assume something is true and then you try to find out if it is true.

Now, 20: A science may be considered to be a large body of aligned data which has similarity in application and which has been deduced or induced from basic postulates.

That's just so science will have a definition.

Twenty-one: Mathematics are methods of postulating or resolving real or abstract data in any universe and integrating, by symbolization of data, postulates and resolutions.

That gives mathematicians headaches; they don't like that one.

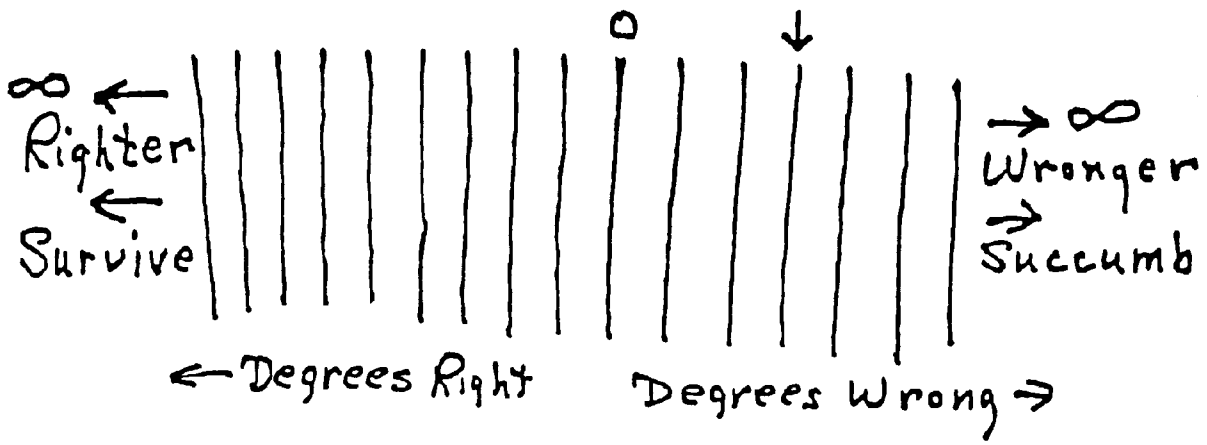
Logic 22: The human mind is an observer, postulator, creator and storage place of knowledge.

So you're studying a secondary manifestation from knowledge, but you're studying it because it is a vessel and creator of knowledge—and destroyer also.

Logic 23: The human mind is a servomechanism to any mathematics evolved or employed by the human mind.

And you will find that your problems of a society go off just as well as the people of that society can think. And that any solution you introduce into any problem with the preclear goes off just as well and no better than he can assimilate it or be a servomechanism to that theory. And you may know very well that the reason why that preclear is ill is because of so-and-so and so-and-so, and that is your theory. And your preclear just is plain incapable of grasping this theory. That might as well be the wrong answer. Why? His mind is a servo-mechanism to your theory. And don't you ever forget that in processing.

Gradient Scale of The Relative Value of Data



Infinity Valued Logic

Absolute Right or Wrong Unobtainable

Dianetics