THE LOOP

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The loop is a piece of information which gives the relationship between a postulate, what that postulate permits to be possible, and what that postulate permits to be impossible.

The first thing you should know about the loop is that it is not peculiar to this universe; it is a general principle that will be applicable to any universe. But it is certainly applicable to this universe.

Now, what it amounts to is this: that if you have a postulate you can deduce from the postulate what is possible in the universe in terms of that postulate, and knowing what is possible in terms of that postulate in the universe you can deduce what is impossible in the universe in terms of that postulate. And note the next bit: knowing what is impossible in terms of that postulate in the universe you can deduce the postulate.

So it is a loop, it is like having A, B and C and if you know A you can deduce B, and if you know B you can deduce C and if you know C you can deduce A; you got the loop. It is like a snake going round and being connected up, the tail end of the snake is connected up to the mouth of the snake. The whole thing is connected up in a circle and that is why we call it a loop. Now it is very easy to prove logically that when we have a situation like that where B is a valid deduction from A and C is a valid deduction from B and A is a valid deduction from C, that A and B and C are all identical to each other. In other words A equals B equals C equals A, the whole lot are identical one to the other. You can find the proof in any logical textbook; it's an easy proof.

Now I will give you a very simple example of this. Let's consider a particular loop: we discover that all crows are birds. Now that is the relationship, that's the postulate; 'all crows are birds'. From this we can quite validly deduce that it's impossible for the class of creatures that are crows and non-birds to exist. So that's our first deduction, we've now deduced just what that postulate 'all crows are birds' makes impossible in our universe. And knowing that this class of creatures that are both crows and non-birds doesn't exist in the universe, that the postulate has made it impossible, we can now deduce what is possible in the universe in terms of this postulate. Well, that turns out to be: we can either have birds in the universe or non-crows in the universe, or we can have both. That tells us what's possible in terms of our postulate.

Now in that particular example we haven't really learned an awful lot, but let's get very fundamental, let's take a very, very basic postulate in this particular universe that we all inhabit. We know that in this universe a thing cannot both exist and not exist simultaneously. We know that, we call that the law of the impossible in the universe. And we know that this is a valid deduction from the basic law upon which this universe is constructed, this idea that a thing cannot both exist and not exist simultaneously.

So here we have an element in a loop. You say 'Ah, we recognise this as an element of a loop'; you say 'There's two more elements in this loop, let's find the rest of the elements in the loop'. Okay, now we've got the impossible, it should be possible to deduce what is possible. What is possible in this universe is that a thing either exists or it doesn't exist. That is possible, you see, that exhausts the possibilities.

So now we have the impossible, a thing cannot both exist and not exist simultaneously, that is the law of the impossible. Now we have the law of the possible that a thing either exists or it doesn't exist. All right, that's two out of the three members of the loop; well, what is the third member of the loop, the postulate? Well, the postulate here is that let X be the thing that exists, if the thing exists we call it X. Well, X equals X^1. If X equals X, that is the third part of the loop.

Now these identifications, as I've already said, each of the three elements in the loop is identical to the other two elements. All parts of the loop are identical to the remainder of the loop. This identification is not a false identification, it is a true identification, so the postulate that X equals X, which obviously is true in this universe, all Xs are Xs, there is no doubt about that. All cats are cats and all kings are kings and all coal heavers are coal heavers; you know all Xs are Xs, it's true. But what isn't immediately obvious is that to say that X cannot both exist and not exist simultaneously is just another way of saying that X equals X. Now that isn't obvious, is it? But it's true, because of the loop. Another way of saying X equals X is to say that X cannot both exist and not exist simultaneously, and another way to say that X equals X or to say that X cannot both exist and not exist simultaneously is to say that X either exists or it doesn't exist.

So you see, now we are into something useful, aren't we? Now we are really discovering something. It is not obvious that those three expressions actually mean the same thing, are simply different ways of saying the same thing, but it is so, I can assure you because of the identification in the loop, and the fact that the identification is a true identification.

In a later supplementary lecture when we take up the subject of the anatomy of insanity, you will find this loop turning up again. So you see, you'll discover that it does have some tremendous practical uses, but I am giving it to you at this stage to get your mind wrapped around this idea of this connection

between a postulate and the subject of the possible and the subject of the impossible, and to see that there is very real connection between these three things, which is true in all universes, to prepare your mind for this idea.

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[1]Boole in *An Investigation of the Laws of Thought* (1854) wrote this as $X = X^2$, from which follows $X (1-X) = 0$ and its dual, $X + (1-X) = 1$

transcribed and edited by David Cooke