## An Information-Theory Look at Biblical Inerrancy

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The games Christians play are sometimes vitally important. One such is the game of reexamining enduring truths from the viewpoint of new methodologies. For the Christian, the motivation behind this game is not entirely sportive, for he is always seeking ways to express Christian truth that will address modern secular man in an idiom he understands. One might think that Information Theory would, if anything, provide today's secularists and unbelievers with more ammunition in their campaign to demolish once for all the Christian doctrine of Scriptural inerrancy. Surprisingly, the opposite may be true. It may provide a framework within which the idea of biblical inerrancy can be both more intelligible and more plausible to man in the computer age.

This is because a considerable part of Information Theory deals with the subject of inerrancy, although without using that specific word. More specifically, it deals with the problem of achieving the inerrant transmission of information via a noisy channel wherein parts of the message are certain to be garbled or distorted while it is in transit from originator to recipient. It turns out that,

according to a theorem enunciated and proven by the famous Bell Laboratories scientist Claude Shannon, inerrant transmission of the desired information can be achieved under such conditions, if the originator encodes the information in a certain way which is determined by the character and amount of noise known to be present in the channel of transmission.

How may we look at the Holy Scriptures from this viewpoint, understanding that our application of these conceptual tools of Information Theory is at this stage only analogical and not rigorous? (Perhaps, indeed, it may never approach anything resembling rigor, nevertheless, it may be helpful as a catalyst in our thinking.)

The Scriptures, in this view, may be thought of as an ensemble of messages intended by their Originator to convey a certain quantity of information to a certain number of recipients. In the Christian view, the Originator of this ensemble of messages is God, the Creator of the Universe. The intended recipients are members of the human race in various ages and cultures of history. The noisy channel via which the en-

semble of messages is being transmitted is the stream of human history itself, to which, at different periods, the various sequences of signals (i.e., written documents) were committed by the Originator with the intention that they should thereby reach not only recipients of that immediate period and culture, but eventually other recipients of other periods and other cultures. Each document was added to the growing ensemble of documents already committed to the channel of history, until at last the ensemble of messages was complete and sufficient for carrying the information which the Originator wanted to communicate to the recipients of all succeedings eras (i.e., the canon was closed).

Now, no fact stands out more clearly than that human history is indeed a noisy channel of transmission. The multiplicity of textual variation which confronts the biblical student today is ample testimony to this fact. And this situation, indeed, is one to which liberal scholars point as fatal to the doctrine of scriptural inerrancy. Suppose we do assume that each of the biblical documents can be ascribed to a single divinely-inspired original. (I do not see how any valid scientific or a priori arguments can be brought against this assumption. Let us note that there is no reason why this divinely-inspired original should not have incorporated in its text older written or orally-transmitted material which now became useful to God in expressing what He wished to say in this particular document). How can there be inerrancy today when the texts of these documents have suffered so much from the presence of historical "noise"—i.e., the depredations of careless or presumptuous copyists or editors—as they were transmitted from the time of their origin to the present day? Liberal scholars tell us that the whole idea of an inerrant communication from God to man under such circumstances is preposterous!

But such gentlemen are badly mistaken on scientific grounds. For Information Theory tells us that such an idea is not preposterous at all. On the contrary, now that specialized codes worked out on the basis of Shannon's theorem have been devised, we find taking place every day the kind of thing which our friends decry as preposterous. Messages are received nearly every day on earth from space vehicles millions of miles distant. Because of the presence of considerable radio noise in space, these messages are always received with "textual variations." Yet, the information on temperature, radiation levels, magnetic fields, etc. which they are intended to convey, is received error-free every time, thanks to the use of the Shannon codes which permit such error-free transmission of information in spite of the presence of noise. From an ensemble of messages which contain what might appear to be at first sight hopelessly-damaging textual variations (i.e., variations in the sequences of signals received, so that the precise sequence of originally-transmitted signals is unknown and unknowable), comes a dependable residue of error-free information on the basis of which scientists are now making significant additions to our sketchy knowledge of extra-terrestrial phenomena. Such a thing preposterous? Not at all.

Now what man can do, surely God can do even more perfectly. Granted that words are much more complex and difficult-to-treat signal elements than electromagnetic pulses. Granted that the "noise" that causes textual corruption in the historical transmission of documents is quite different from the noise of electromagnetic disturbances in space and the earth's atmosphere. Granted that the information which God desires to communicate to man is scarcely on

the same level as sequences of digits conveying instrument-readings of temperature or magnetic flux. But if man can do it with electromagnetic pulses and digits and spacenoise, surely God, who is infinitely greater than man, can do an analogous thing with words, spiritual truths, and "historical" noise. The difference here is merely one of degree, not of kind. Here then is an analogy drawn from a model based on modern scientific concepts, which shows that the idea of biblical inerrancy is certainly plausible, not a hopeless absurdity as some scholars try to depict it.

It seems entirely reasonable that God, knowing as He does the characteristics of the receiving-apparatus called the human mind, to which His ensemble of messages is directed, would be able to encode the information which He desires to communicate in such a way that, in spite of the depredations of historical noise occurring during the process of transmission (whose quantity and character are also known to God), a human being reading the entire ensemble of messages with an open and unprejudiced mind would apprehend without error the information that God wished to convey. (One must always bear in mind that every person's reception of information, no matter now plainly and inerrantly encoded, is influenced by the prejudices already existing in his mind. This fact alone probably accounts for most of the painful areas of dissension among Christians regarding interpretation of scriptural data.)

Thus, we see that from the viewpoint of Information Theory and Shannon's Theorem, the idea of biblical inerrancy gains appreciably in stature and in its claim to scientific respect.

At the same time, this viewpoint suggests some things to evangelicals about the way in which we formulate the doctrine of biblical inerrancy. For one

thing, we need to realize that words in themselves are not information. Words may be put together to form messages which then convey information. It is the combination of words that is all-important. Often it is the total combination of a very large number of words that is required to convey to us, without error, a desired point of information. Just as with sequences of signals received from a space vehicle at a great distance from the earth: it is the analysis of the complete sequence of signals that makes possible the determination without error of the originally-transmitted information. This is why random variations in individual pulses within the sequence do not destroy the reliability of the message as a whole. The message is not inerrant pulse by pulse, element by element (it would be if one had the original, of course, but one does not!). Rather it is the sequence which has the property of inerrancy in conveying the information which was committed to it by the originator.

This suggests that the term "verbal inerrancy" is not a very meaningful or useful expression in describing the Scriptures as we know them today, but that the term "verbal inspiration" is indispensable! "Verbal inerrancy" is an expression that may be true of the original autographs of the biblical documents; but is it applicable to the situation we are in today, where we find ourselves generally unable to reconstruct verbatim the texts of the original autographs? Moreover, as we have seen, present verbal inerrancy is not a prerequisite for "informational inerrancy." On the other hand, the achievement of the type of "informational inerrancy" that we have described, is only possible through a very careful "verbal encoding" of the original message on the part of the Originator, in such a way as to compensate for the depredations of noise

which will occur during transmission and render the message still "informationally inerrant" when it reaches the recipient(s). God could only have achieved this by inspiring the writers of the scriptural documents as to the very wording of their text, not simply by inspiring them as to the general ideas and then leaving the matter of the actual wording up to them. (This is in harmony with God's making use of the vocabulary, diction and styles of the culture within which the document was composed.) Thus, while verbal inerrancy can be a chimerical term better dispensed with, verbal inspiration becomes an even more meaningful description of the character of the Holy Scriptures. We can truly say, not merely that the Bible contains the Word of God, but rather that the Bible is the Word of God, textual problems notwithstanding!

In sum, then, I wish to suggest that present-day Information Theory, and more especially Shannon's Theorem, may furnish us with an analogical basis for reaffirming the doctrine of scriptural inerrancy, and expressing that doctrine. in a way that is even more relevant and intelligible to modern man in this secular, scientific age. And perhaps we should take note that, if science is simply an honest attempt to arrive at more accurate ways of understanding and expressing the realities and potentialities of our world, then inevitably science must provide, not weapons enabling unbelievers more successfully to undermine the foundations of the Christian revelation, but on the contrary, tools enabling belivers to deepen and enrich their understanding of that revelation. and to bear better testimony to it before the world.

It is strange that a New Testament scholar of Schweitzer's rank has never seen that according to the Gospels discipleship is never silent obedience only. Human curiosity has not asked the question who this Jesus is. It was our Lord Himself who asked his disciples: "Whom do men say that I am?" "Whom say ye that I am?" (Mark 8:27ff) and who put the question to His adversaries: "What think ye of Christ? whose son is he?" (Matthew 22:42). Men are not responsible for the Christology. Christ Himself has created it by claiming to be what he is, by demanding from men a clear statement as to whether they accept His claim.

From Professor Hermann Sasse, "The Confession of Faith according to the New Testament," *Theological Review* (Australia), October, 1967