



BRIGHAM YOUNG UNIVERSITY • PROVO, UTAH

FARMS Preliminary Reports

The Foundation for Ancient Research and Mormon Studies (FARMS) was founded in 1979 as a clearinghouse to distribute scholarly articles focused on Latter-day Saint scripture. Within a few years, FARMS began collecting and distributing its own “Preliminary Reports.” These were said to consist of “tentative papers reflecting substantial research [that was] not yet ready for final publication.” FARMS made them available “to be critiqued and improved and to stimulate further research.”

Having since absorbed FARMS into the Willes Center for Book of Mormon Studies, the Maxwell Institute offers the FARMS Preliminary Reports here in that same spirit. Although their quality is uneven, they represent the energy and zeal of those who sought to enrich our understanding of LDS scripture.

If you possess copies of Preliminary Reports that are not included on our website, please contact us at maxwell_institute@byu.edu to help us provide the most complete collection possible.



Hugh W. Nibley

Intre-Ancient Records

F
A
R
M
S

Summary:

This is a very rough transcript of Nibley's contributions to a panel discussion about ancient writing, scientific methodology, and testing of the Book of Mormon.

Transcript
Research

FARMS
Brigham Young University
P.O. Box 7113
University Station
Provo, UT 84602
1-800-327-6715
(801) 373-5111
www.farmsresearch.com

\$4.00

N-INTR



7 14861 06090 4

For a complete listing of FARMS publications,
call 1-800-FARMS-15 for a FARMS catalog.

© 1984 by Hugh W. Nibley

INTRE-ANCIENT RECORDS

by Hugh Nibley: 11-11-65

Well, some of the other brethren I've brought with me are not for support, but to demonstrate here; because you're not going to get a weaker vessel than I am, I wouldn't dare talk about these things unless there were somebody to act as a check on them. I've recently had occasion to look through--sort of catch up on the journals, you know, (the parts I can understand), and it's very impressive how many articles are appearing in journals of all types (scientific journals) on the subject of inductive reasoning today. First of all, we should mention the subject (before we leave it!); fact and fiction and fancy in the interpretation of ancient records. A record is something that suggests something. Recordar means to bring something back to your heart; a record is something that happens inside of you. A record exists in someone's heart or mind; it doesn't convey its own message--of course it must be interpreted. And, the record is an interpretation of some tangible object. It doesn't have to be a written record; it can be this paper, it can be this as a record--anything that you find is a record. This comb could be a record, any piece of clothing, any tangible object can be a record when it's interpreted. But you notice it's the interpretation that makes it the record. So any tangible object will do, if someone is going to interpret it. So we define a record as the interpretation of a tangible object; notice it's not the object itself. We don't necessarily say... specify an object from the past, because all tangible objects come from the past (nothing's so recent that it hasn't had something behind it). And it's in that light that you interpret it's significance.

So, what is required is an object and a person. The object itself is the fact, and the person supplies the fancy. So, the fact is simply the object--everything else is fancy, the interpretation. If you get a book; what would be the fact about the Book of Mormon, for example? Well, the paper, the covering, the binding, the print--you see these black marks; if it's written in Chinese I can see the black marks--they're an object of direct observation. But what do they mean? I can't tell you--see, that's interpretation. The significance of this--the whole thing is interpretation. And that is all fancies. The fact is simply the book itself. And you say, 'well, that can't be very significant'. Well, some people say it's of no significance at all. In the case of the Book of Mormon, it is rather significant. The mere object itself has a peculiar interest, which you won't go into however.

Let's get back to our (having barely started on it), our...this inductive method here, and you'll see what we've been talking about. What they're telling us, to judge by the dozen or so that I've read, with a layman's apologies, of course, is that the inductive method is not the real method of science afterall. Here's an article; it was much publicized, it was written by the director of the National Institute for Medical Research in Great Britain, it was re-printed in the Journal of Human Relations and in the Saturday Review; he says "what induction implies in its cruder form, roughly speaking, is this: scientific discovery, or the formulation of scientific theory, starts in the unvarnished and unembroidered evidence of the senses. It starts with simple observation; simple, ~~and~~ unbiased, unprejudiced, naive, or innocent observation. And out of this sensory evidence, embodied in the form of simple propositions or declarations of fact, generalizations will grow-up and take shape, almost as if some process of crystalization or condensation were taking place. Out of a disorderly array of facts and orderly theory, an orderly ^{general} statement

will somehow ^{emerge}immerge." Well, he says, "that's nonsense". And so many of these articles are saying this now. He says here, "in the first place, the starting point of induction is a philosophic fiction; there is no such thing as unprejudiced observation. Every act of observation we make is biased. Well, this brings up a lot of objections that are being made to this approach. They say you can't use this anymore, and there was an interesting study; one of the people who are talking most about this, Carl Popper(?), has written an interesting study--we have here (over there), but we're going to quote from it here. He mentions that Einstein, in his Herbert Spencer lecture, told his audience not to believe those scientists who say their methods are inductive. That they find the facts first and then draw their conclusions. It does not work that way. "The idea", (now we're quoting Popper, he's the eminent historian of science, at the University of London), he says "the idea that we cannot will, purge our minds from prejudices, that is, from pre-conceived ideas or theories, is naive and mistaken. It's only after the scientific discovery has been made that we know which of our ideas were prejudiced. And there's no criterion by which we could recognize prejudice in anticipation of this advance. Moreover, there's something ^εparnicious about this idea, that we can view things unbiased, without any prejudice, simply see the object itself, for after having attempted" (and we're quoting him, again) "for after having made an attempt or two you think you are now free from prejudice, which means, of course, that you will stick only more tenaciously to your unconscious prejudices and doctrine. A mind purged of all theories would not be a pure mind, it would be an empty mind. There's no such thing as pure observation; all observation" (and we're quoting him again) "and especially all experimental observation, is interpretation of facts in the light of some theories." All observation--there's no such thing as pure, uninhibited observation. All observation is interpretation of facts in the light of

some theories. And an interpretation is an image; it's something in your own mind. It's not something that exists outside as a fact. As I say, the rock you hold in your hand, or the fossil, or the plant, or the photograph of the spectrum you can call a fact--it will give you a direct impression. But your interpretation of it is not a fact--it never will be; it is 100% imagination, not just part. The fact that it's based on fact doesn't mean that it is one.

This is a basic weakness here that Bacon noticed; you remember it was Bacon who said that you see things. If you just look at the thing itself, and with an unprejudiced mind....but he recognized that any kind of prejudice, any kind of theory we approach a thing with, will color our interpretation of it and will confirm itself. For example, if a person has a whole certain religious beliefs, as I do--well, everything I find in the Book of Mormon will be colored. I will unconsciously suppress that militate against it, and I will unconsciously seek out--that is, I will consciously seek out and exalt the things which seem to support it. 'Sorry, I can't help that. I was just reading tonight (upstairs in Paul's bed--he's gone away), I was reading this book, The Year of the Gorilla, by George Challer(?); and he has a very interesting section in there where he says that most scientists despise the idea that naturalists should try to interpret animal behavior in terms of his own emotions and feelings and reactions. Afterall, this is an animal; this is a different type of thing. He says, what other kind of reactions have you got? This is the only thing you'll ever know--you can't get out of yourself! And because you can't get out of yourself, you will always approach a ~~problem~~ proposition with certain previous positions. But Bacon recognized that. Or, if a person believes in class struggle, as the Russians do, well, everything they read will support it. Or, if they believe in psychoanalysis and things like that; whatever he observes or experiences will be inter-

preted in terms of this belief, and tend to enforce this belief. Well, to get around this, Bacon had only what Popper calls the impracticable proposal to purge our minds from all theories, and the advice to it here to pure observation. Well, what this amounted to was the cultivation of an attitude. It is a pose, a posture, the fiction that there are people who are above all prejudice and bias. That this is the...this became the pose and the attitude of the scientists. The aloof, the detached--like the detached observer of animal behavior. I say, how can he detach himself from himself? Ah, he learns to do that--he's a scientist; he's above petty, human, personal concerns.

Now, J.B. Cowen(?), the head of the National Science Foundation a few years ago, says "this is a vicious fiction; we should have no patience with it". I quote him here, he says "this is a sort of scientific idolatry; the idea that we have a race of supermen here". "Supposing that the scientists are entirely free from the passions that direct men's actions, and we should have little patience with it." "Philosophers of science speak as if there were a body of knowledge, called science, which consists, in the main, of accepted theories. But this seems to me utterly mistaken" (here, we're still just following the theory of one man; we'll be off him in a minute) "this seems to me utterly mistaken, and a residue of the dreams of authoritarian science." "There never was, for example, a more ~~th~~ established theory", he says, "or a better tested theory or a more thoroughly tested theory for hundreds of years than Newton's," and this was science; this was it; this was the real explanation of things.

The theory of gravity; ^{Poincare} Poncaree(?) believed it would remain the invariable basis of physics to the end of man's search for truth. Then along comes Einstein, whose theory of gravity reduced Newton's theory to a hypothesis competing with other hypotheses; it was no longer the truth. "It hereby destroyed its authority", says Popper, "and with it, it destroyed some -

thing much more important; the authoritarianism of science. Einstein himself did not hold that his general theory was true, but that it was a competing theory that explained more than Newton did.

And then again, finally we're asked to use our eyes. Facts speak for themselves. Look for yourselves...this is what Bacon said, this is the 'Gospel' of science. Now, taking the position he did, would you think that Bacon supported the Copernican theory, as against the Ptolemaic theory? Oh no--that wasn't scientific! This is the way he put it; he was an enemy of the Copernican ~~theory~~ hypothesis. "Don't theorize", he said, "open your eyes, and observe without prejudice, and you cannot doubt that the sun moves and the earth stands at rest." Use your eyes--there it is; you can see the sun move; what more could you ask?! And you don't feel any motion of the earth. Now this was the position, taken by Bacon, being very scientific. Don't theorize...remember Newton's doctrine. But just use your eyes, and what you see is it. Well, you use your eyes, yes, but what? To support an article of faith. So here's a number of now-rejected concepts. Going through these articles I find these concepts are listed. As now being rejected by scientists--not being a scientist, you see, I have no business talking at all. (We'll justify this later on) But, you see, all these things I've said for years and years in my little field, and so forth (and I can prove it from print that I've said these things years ago--this is the point of view I've always taken, with regard to other types of knowledge), but first, the idea that [science represents a high court, from whose judgement there is no appeal. The idea, (Freud expresses in his The Future of Illusion, you know) that this court passes down clear and unequivocal judgements, that all other judgements are outmoded traditions. That the judges are free from prejudice and bias, and above petty personal interests, if they let the facts speak for themselves. That they suspend all judgement until all the facts have been gathered

(well, they'll wait 'til doomsday!). That they proceed cautiously and carefully, step by step, making no mistakes, no guesses, never accepting a proposition until it is proven. That to question such a judge is an affront to his dignity and to his high office. That the judges never guess but always know. That they make no ~~ann~~ pronouncements until they have proven and verified everything. That they begin their investigations by accumulating facts with completely open minds, neither selecting or eliminating as they go. That their proceedings and conclusions are in no way colored by any previous experience...(this is repetition; these are from other articles). That they never trust anything to luck, and rarely make mistakes. That their accumulated decisions of the past compose a solid and reliable ~~ef-tes~~ body of tested and proven knowledge called science. That by following the instructions and example of the judges, our ~~society~~ civilization can emancipate itself from the darkness of ignorance. That to accept the decision of ~~is~~ the judges is ^edefinitive, is the mark of an intellectual person. That the knowledge of the judges is so deep and specialized that it cannot be put into ordinary language, or understood by the layman, but science is necessarily the exclusive domain of highly-specialized experts and so forth. Well, according to these men, everyone of these propositions is completely false. }

But, these articles of faith are still with us. There's a very interesting study here; it was last year's...Thomas Henry Huxley(?) lecture, given at Oxford (the Huxley lecture, a big thing) by Krimingsvalt, a great anthropologist who deals with pre-historic man. All through this he tips his hands; a very interesting thing. This is a very interesting thing, this is a good example. I'll give you a couple of examples here of what we mean by an 'article of faith'. He says, "Most finds were made, I am proud that we can say this, by men who wanted to find". Notice, he must admit that they didn't go into ~~the~~ to the field as unprejudiced observers,

but they found what they wanted to find. And since you can't deny it, we might as well be proud of it and admit it, you see. He says, "most finds were made" (but I've heard plenty of denial of this) "most finds were made by men, I am proud that I can say this, by men who wanted to find." And then, he makes...he drops this important one; "we must recognize the important, intrinsic relationship between expectation and discovery". There's an intrinsic relationship between what you discover and what you expect to discover! Of course. If you're not expecting something you look right by it, and if you do expect it--even if it's not there--you can manage to see it sometimes. But there is, as he says, an intrinsic relationship between expectation and discovery. And he says here, in another quotation, "the science of early man is one-quarter anthropology, one-quarter palientology, another archaeology, and the most important--and the last quarter--is composed of fantasy, intuition, and good luck." This is it, you see. It combines these, but without the fantasy... You notice the great scientists always admit that element in it; they won't go all the way, like Popper, and say well, this is what you rest on in the end, but they'll always admit that because they're able to experience it. They find it rather exhilarating. And sometimes they like to disturb the lesser lights by exploiting it. But it is fantasy, intuition, and also good luck. Now here's a typical statement of this man; he say, "we are certain that tertiary man must have existed, because everybody has to have a great-grandfather. We don't have any evidence for him, though we are certain he existed". I thought you found the facts first and then you draw conclusions, you see. He's not being inductive at all. He says how are we to recognize him in the tiny fragments? All we have is one little handful of teeth, and some of them are pecarry(?) teeth and others are sloth teeth--according to various ^uathorities--they fight

among themselves to whose teeth these are! But here is your tertiary man. But the point is, he says, with these few little tiny fragments, we have to recognize the critter and we can't recognize him from that. But we know he exists. Why? Because we have to have grandparents, don't we? That's his answer, see. He's not being inductive at all. "We are certain", is the word he uses, "that tertiary man must have existed". Everybody has to have a great-grandfather, but how are we to recognize him in the tiny fragments? It wasn't the fragments which suggested his existence; the fragments are, in fact, completely inadequate. And then he says, also in this same lecture, 'why was the Piltdown monster accepted? It was a clumsy forgery!' The answer is very simple: it had been tailored according to scientific theory. They had the theory, and here came the evidence, so they fit it in! And that's why they accepted it for almost a hundred years. Though it was not even a very clever forgery, even. Why was it accepted? He says the answer's simple--it was tailored to fit the theory.

Now here's another article I find very interesting. It's a very important one; it's one by Shindevolff(?) on, what he calls, Neocatastrophism, in which he blasts Darwin's favorite theory sky-high. The theory that all gaps would eventually be filled up. (That's been given up now by most palientologists, they tell me). But, this article is the most effective I've ever seen on this. But, he says, he wants it understood at the outset, and this is a quote, "that all of us today stand without compromise, on the evolutionary position". From here I can go on and knock it cold, but we stand without compromise...there's no discussion. We don't even talk about this--it's an article of faith. There's no room even for discussion without compromise. These typical hints are dropped all the time. Now here, he says, *if* this man says, "it was very wise, when in 1945, G. G. Simpson created a new super-family, the Homomoida(?),

which embraced both man and the anthropoys". Now you could talk safely about Homom^{id}ids without committing yourself; the point was that the theory was in danger of breaking down. The evidence went the wrong way. So, what you do is simply revise your terminology to fit it, and you're safe again. And everytime your theory is about to break down again it can't lose, you see, because whenever it's about to break down, you just invent a new family or a new classification (and this is something that's coming in for a great deal--some of you biologists may know that--for a great deal of discussion today; the validity of some of our taxonomy, and the principles by which it's...). There's an article by Hull, a very recent one. Not the old Hull, that wrote the big book used in my palientology class, Organic Evolution, that was a classic for years, no this is a son of his, or something like that. He says he's giving it up in despair, because you can't classify anything anymore. Well, we won't bother about that.

Now, here's another thing that Pirnicvald(?) says, and this is typical. He says, "actualizism, uniformitarianism, is obviously true, except for the very beginnings of life history". Well, the whole value of a universal law like that....see, you got the point. It's obviously true; it's a universal principle; it applies everywhere--uniformitarianism. It's the key to the geologic and prehistoric plans of things, and it's obvious...except, it doesn't work, it's an earlier time. But why obviously? See, I don't think it's obvious, when a person says to me (and this has been said to me on more than one field trip); you can see this is obviously laid down in some shallow sea. I'm dumb, I can't see it. It was obvious; to me it ~~was~~ is equally obvious that it was laid down quickly in a deep sea, as far as that goes! And we ask naive questions about these, and fail to get answers.

Here's an example, he notices here. He says, "Darwin himself thought that man originally possessed great canine teeth" (looked savage, and so

forth and so on); well, he didn't, it turns out. But why did he think so? Why ~~did~~ was he completely wrong? Why was he so sure of himself? Well, you naturally assume that a primitive would, and so forth. And then, speaking of...you see, unless you have a theory to which you can refute, which you can test by trying to break down (you can test it by trying to fail it, as Popper says); when you test a machine, when you test a theory you try to make it fail, you try to find its weaknesses. You try to devise a test which will break it down. And for any test, before it can be empirically valid, you have to be able to conceive of a test which would disprove it. Now, can you conceive of a test, for example, that would disprove some of our favorite beliefs? The answer is no--you can't. They're not scientifically testable. He gives a good example here of Darwinism. He says it's far from clear what we should consider a possible refutation of the theory of natural selection. The survival of the fittest becomes ^atautological(?) and irrefutable. Of course I can prove that only the fittest survive, because there they are--they survived, didn't they? No, you're just arguing around in a circle for that. Then he says, and we're still quoting, "what we should do here...we ought to try to construct alternative mechanisms, and this is what we don't do. Rather than to foster the belief that the Darwinian mechanism is the only possible one" (just as we did with the Newtonian--Newton was the only possible explanation; then we found out there were others and it changed things. We were able to make much progress. As long as you have one theory completely dominating the field to the exclusion of all others--which will not even be discussed--see, you're not going to make progress even in your own science). Well, I think those passages from Pirnicvald(?) and Schindevolff(?) would illustrate that point.

Now, the new method that's suggested by some of these people, is that

of guessing and testing. What? You guess? Yes you guess--that's the way you solve problems. Popper says, "the change from authoritarian theory of scientific knowledge to the anti-authoritarian and critical theory of scientific knowledge is a recent one". "The method of science is essentially the method of critical discussion of competing conjectures or hypotheses". Now we're getting to see why our panel is here. We do not start from observation, but always from problems, from a theory which has been raised and this appointed some expectation. It's broken down. How do we go about coping with this? Well, we attempt to guess a solution. And we attempt to criticize our usually feeble guesses and solutions, They don't have to be good--it's just a point of beginning, a point of attack. Even the best solutions soon give rise to new difficulties and to new problems, and thus we proceed. We may proceed ~~to~~ from bad solutions to better ones, provided we have the ability to produce new guesses; and again, new guesses. (See, we're just guessing). The best if ~~the~~ not the only method of learning something about a problem (this is a quotation), "is to solve first by guessing, and then try to pin-point the mistakes we have made". So he gives these three points: First, all scientific knowledge is hypothetical or conjectural; the growth of knowledge consists of learning from our mistakes (this is a humiliating process which few are willing to go through, it's so...we don't like it). The method of science consists in learning, first by daring to make mistakes. The great Joseph ^{SCALLIGER} Scallager(?), the greatest philologist who ever lived, said 'anyone who wants to learn a language has to make a fool ~~of~~ of himself 10,000 times'. Very few scholars are willing to do it. They won't run the risk, and they simply don't learn. They're not willing to pay the price--'have to humiliate themselves. Who is an authority? I don't know authorities...Well, after all, the dirty faced ^{man} in the street can teach me things about, say, spoken Greek. I don't know...he's an

authority, as far as I'm concerned. I have to swallow my pride if I'm going to learn how to say it. Don't mind the little urchin...but I know people who would never stoop to anything like that. You're a scholar; you don't talk to people like that...and this sort of thing; it's unbelievable, isn't it! But, it consists by daring to make mistakes; "make a fool of yourself 10,000 times," he says. That is, by boldly proposing new theories. Be bold--put your foot into it! Make a fool of yourself, in other words. This is the way you're going to get someplace. And second, by searching...you see, I'm...this is...I'm defending myself here; you can't say I'm a hypocrite on this point--when it comes to making a fool of oneself! And second, by searching systematically for the mistakes we have made. Well there I'm not so enthusiastic; I'm a bit more cautious there, and reserved. I stand on my dignity there; after I've made a fool of myself, then I say 'let's not discuss that'. He says, there's only one way to ^{understand} ~~solve~~ a serious problem, and this is to try to solve it, and to fail. Ah, we should all be brilliant at this! We become acquainted with the problem only when we've tried many times in vain to solve it. Understanding a theory means understanding it is an attempt to solve a certain problem. Newton's theory is an attempt to explain Kepler's and Galileo's laws. The fact that there are always an infinity of logical and possible solutions to every problem means that we have to use, in science, imagination. Bold ideas--you don't proceed cautiously, carefully, shrewdly; you work fast and be willing to make a fool of yourself. Tempered by severe criticism and ~~server~~ severe tests. Well, how do we do this? This is how: this is the new method of testing. You test everything, and it's very important to test here. After all, if you're going to be allowed free liberty to propose anything you want to, there's got to be a control somewhere. And there are, of course. Controls. Every scientific theory should be tested by two questions, we are told. First, can you describe

any possible observation, which, if they are actually made, would refute your theory? If not, it's not an empirical theory. That theory is outside empirical science. To test a theory or a piece of machinery, it means to try to fail it. It cannot be failed or refuted...if it cannot be failed or refuted it is not testable. But a non-testable theory is not necessarily meaningless. He gives the example of the neutrino, which was not testable for 30 years, and then finally means were devised to test it; it was still valuable. A theory is supported by observation only if the tests are severe. Ah hah! You've allowed me the liberty of making a fool of myself, but now you're going to call me to account. The tests are severe. The results of serious attempts to refute it, or of trying to fail it where failure should be expected. Testing a theory means to try to find its weak spots, trying to refute it. Notice, authoritarianism tried to prove and verify; the critical approach tries to refute or to falsify its conjectures. You make the conjecture and then try to refute them. You don't make the conjecture and then try to verify it. "Science begins with observation", said Bacon. Science, we may tentatively say, begins with theories, prejudices, with superstitions, with mysteries-- they don't have to be true or anything else. Just something to start out with. And testability has degrees. A theory which asserts more, and thus takes greater risks, and I can't imagine a document or anything that takes the risks the Book of Mormon does, just all over the place--'whopping risks; testability, so it should be the most exquisitely tested among documents, shouldn't it. A theory which asserts more, and thus takes greater risks, is better testable than if they were able to search... All these rules, incidentally apply... Friedrich Blass(?), 80 years ago, in a great work on the testing of ancient documents for authenticity, propounded all these principles; the only real test is a lengthy historical document, and the longer it is and the more it is searched, the more

easily it can be tested, and so on. These principles have been known for hundreds of years, actually.

And so, he says (now this is our final quotation from Popper), he says "I believe that in these three words, problems, theories, criticisms, the whole problem of rational science may be summed up." The problems... you stumble on a problem, something that isn't fitting...then comes the criticism, then comes the examination of it. But how do we preserve objectivity in this? If I'm going to take sides... This can be done, alright. The objectivity of science is not the objectivity or detachment of the individual, but it's the friendly hostile cooperation of the scientist, that is, their readiness for mutual criticism that makes for objectivity.

I said that was my last quotation, but there's another one in here if I can find it... Yes, this is one from Popper, he says "there is a methodological justification for individual scientists to be dogmatic and biased". You're justified in being dogmatic. Why? Because it is of great importance that the theories criticized should be tenaciously defended. For only this way can we learn their real power. Somebody puts up a half-hearted defense...this theory has to be tested. So I want somebody to make a good solid attack on the Book of Mormon. That's why I like that book of John...what's-his-name... That's the best one, because he made a good (I haven't looked at it for years and years; 'can't even remember the name of it now. Which one is it? It's the green book...it's the Prophet of Palmyra; not Tucker's , but the earlier one. And not the Howe one--it's between Tucker and Howe. Oh, I know it...I'll think of it in a second for you); but he makes a good...he was an apostate, and he really makes a good case, a slashing attack on the Book of Mormon. It's a good healthy one, and it's something you can really get your teeth in. You can refute every one of its points, I think, without any trouble; maybe

if he was still alive he could refute mine! But that's the way you've got to do it. That's the way you're going to keep your objectivity, is taking sides and defending them with bias and with passion. Ah, for only in this way can we learn the real... See, I will speak out for it but I don't expect you to be silent. I certainly must hear the rest of it. "There is no such thing" Medavar(?) says, "as an unprejudiced observation". "Every act of observation we make is biased. All scientific work starts with some expectation". And here's a quotation from Darwin himself; "how odd it is that anyone should not see that all observation must be for or against some view". So much for his being impersonal and unbiased. Darwin thought it was very odd, that people shouldn't see that. Of course it's for or against some view, and yet you find books like those of Wallace and Brody¹² and so forth, which will tell you in their long introduction that their author has no bias whatsoever against Mormonism; he's completely free of bias, one way or the other. Well, of course, you couldn't write a book on anything without having some feelings one way or the other about it; you either accept the claims of Joseph Smith or you reject them. If you're going to write a book about him you must do one or the other. But to say Oh, no, as Irving Wallace does in a 50-page introduction, as Fawn Brody¹² does--"I am completely detached", she says, and she's hailed by the reviewers. This is scientific detachment; she has no feeling at all. Well, as Darwin says, it is utterly impossible. I may quote him again, "how odd it is that anyone should not see that all observation must be for or against some view" . Not for or against something, but for or against some point of view somebody takes. So don't be ashamed of being for¹² against something, but make sure we hear from both sides.

This means we get the open-ended discussion we've been talking about--that never ends. Scholarship is an open-ended discussion that never reaches finality. Of course, it goes on--there's always new stuff being brought

out. For this reason, the important thing is not to be right or wrong on a particular point, but to be able to enter into the discussion. The method of critical discussion does not establish anything; it's verdict is always an invariably 'not proven'. See, it's always left open. We can give some examples of this, (it's a quotation, incidentally); "What do you do, then, by your discussion?" "Well, they can't establish anything finally--essentially they help us to eliminate the weaker theories". This is what ~~do~~ you do as you go. "Science may be ~~reaga-~~ regarded as a system of problems rather than a system of beliefs; the tentative acceptance of a theory means hardly more than it is considered worthy of further criticism." You don't accept it or state your life on it--it is still open to criticism. We haven't gotten rid of it yet. The weaker theories fall by the way in the process of discussion, and this is the way we proceed forward. We never reach an end; they just always (are) coming in. A classic example is the case of heavy water; it shows that we can never know which part of science will have to be revised next. It was the solidest part of chemistry.

Here's an interesting article by a Dutch scientist, Lutens(?), in the last issue of Discovery; he says "thirty years ago astronomers generally believed that the solar systems must be very rare; now all this has changed abruptly, and many astronomers will prove conclusively, that planetary systems are quite common." The plurality of inhabited worlds has become an accomplished fact when I went to college, and that wouldn't only be a heresy--they'd laugh their heads off, you see! But abruptly it changed; we never want to regard anything as finally settled here, as we're pointing out here. One should not forget(this is Loyten(?) still writing); "one should not forget, that many of the same enthusiasts who calculate to the nearest million, how many planets with intelligent life the universe must contain" (he underlines 'must'). We're the strongest

advocates of the collision theory, and the near uniqueness of terrestrial life in the middle thirties. The same ~~side~~ ^{side} now hold a very opposite point of view, and quite suddenly too. "Even when you prove", he says, "that life on other worlds is possible, that doesn't prove that life is there." And this is a thing we often forget; when you prove a thing could happen--the river could've broken in here, this could've been deposited....it could've happened that way doesn't prove it did happen that way. It's a different thing, because there are an infinite number of possibilities that are conceivable. This is the point, the thing we must never forget. But, to quote Loyden(?) again, "even when you prove that life on other ~~plan~~-worlds is possible, that doesn't prove that life is there". Because a thing could've happened doesn't mean it did happen. I firmly believe that the only proper scientific conclusion is 'we do not know'. You can say 'it could've', and that's fine. And, incidentally, this Huxley speech of Kernigsberg(?), we've been quoting, ends with this sentence: "The problem of the origin of man is still like one of these modern paintings which stimulate every spectator to give his own explanation". There you are, it's wide-open. At this he has just finished contradicting Professor Leaky, and actually making fun of it. He thinks it's funny. Heavens, we all went down on our knees up at the U. of U. to Leaky; every year he comes about, having discovered the final origin of man. This is what makes Leaky so, shall we say, so pathetic and amusing and so forth. Well, he's a heroic character, and a very able scientist, and this, that, and the other, but he's always so final about it. He now knows where man finally originated, and next year he'll come out again--he's gone into a new level and he's discovered the whole thing over again. Well this was his last discovery last year, and he says, 'never, never', he could never (this is Janthropist, this typical late ostrol opithicus of Leaky), could never stand at the beginning of what, in the long run, would be homosapiens. He's not an

ancestor of ours at all. And then his position is, we are convinced that if we keep further digging, research in one bed will reveal the presence of another, more refined type of man; that's the one you must consider. It hasn't been found yet, you see, but if you dig, we believe you will find it. But the thing is open, you see, it's wide open. Here, he doesn't accept Leeky, and he finally concludes by saying, "it is still like one of the modern paintings...". Well, how long will it remain so? How long will it remain like a modern painting? When you consider that all we have is one little handful of teeth, as I say here. How long do you think the data will continue to come in? Well, it won't ~~but~~ shut up in the next two or three years, I can feel fairly confident. And so, you are perfectly free to make your own interpretation.

Now, repetitive induction is out. You say you take enough tests (we all know this); you test a thing in the laboratory--it happens. You test it--it happens again and again and again and again and that proves it. No it doesn't. This thing has been shown again and again too, like your heavy water business... Because, to quote one scientist, "No amount of observation of white swans establishes that all swans are white". In fact, even that most swans (are white), because you haven't seen all swans. You can go on testing for white swans forever, and the limits of induction where you get rid of the weaker theories, and therefore what remains must be the truth--that's out because quote, "the number of competing theories is always infinite". "There are grounds for new theories always arising." So, look how open-ended everything is. Why do we discuss things?

Now, where do we find certitude in this case? Well, he says, if everything is open and yet you go on discussing forever and ever, and the final data isn't in, you draw no conclusions. What are you sure of? And this is a funny thing (and this is confirmed by all the really great scientists, or so it would seem); namely, it comes in inspiration. And that's the

word Metawar(?) uses, he says here; "hypotheses arise by guess work. This is to put it in it's crudest form--I should rather say, they arise by inspiration. One does not deduce hypotheses; hypotheses are what one deduces things from, and you begin with inspiration". This is the only thing you're really sure of, and the rest you're just fitting into place. 'Taking it as it comes along. Then he says, "scientists should not be ashamed to admit, as many of them apparently are ashamed to admit, that hypotheses appear in their minds along uncharted by-ways of thought; they are imaginative and inspirational in character". Remember Einstein said, "Imagination is more important than intellect". Wilwell(?), an inspired geologist of an earlier period, says that we shouldn't be ashamed of that; "a facility in devising hypotheses⁵, so far from being a fault in the intellectual character of the discoverer, is a faculty indispensable to his task." But, is there any rule by which you can't devise hypotheses, and he says, no--there's no rule; these things just come out of the blue. Yes, here he says, "An art of discovery is not possible; we can give no rules for the pursuit of truth, which should be universally and pre-emptorily applicable." No rules, you can't teach anybody this. It comes, as they tell us, by inspiration, intuition, whatever you want to call it. Well, this is a surprising thing; in that case what are we going to do? Can you teach this sort of thing? Where do we stand?

Now, next we are supposed to talk about the paralyzing effects of this. All this applies in other fields of scholarship as well, you see. As you know, this thing is perfectly at home there. And it also applies to the Gospel. All this applies...these four things. We believe in the inspiration, the revelation, and it's final. Are we authoritarian in our beliefs? In anything? Brigham Young...this was his favorite doctrine. I have stacks and stacks of his sayings on the subject--they really mount up. I'd like to read them to you all night; but there...we take nothing

on authority. We do believe in inspiration. The inspiration is not transferable. That...then...well, we'll talk about this later. Let me read you these passages from Brigham Young, some of them. "How often it has been taught, that if you depend entirely ~~on~~ upon the voice, judgement, and sagacity of those appointed to lead you, and neglect to enjoy the spirit for yourselves, how easily you may be led in error, and finally be cast off to the left hand". Another, in '67, he says, "Some submit to it, and I say that it's right because their President (the President of the Church) says so, but how many of the saints have received the manifestation of the spirit to themselves, that it is the will of God? If you say you believe it because I say it is true, and ~~never~~ never seek to know it for yourselves, my testimony will do you no good." Notice that, even though he's speaking as the prophet and seer. You get your own revelation--you get your own proof. "Every man and woman in this kingdom ~~ought~~ ought to be satisfied with what we do, but they never should be satisfied without asking the Father, ~~the~~ in the name of Jesus Christ, whether what we do is right". You get your own testimonies after that. 'Never because Brigham says it. "I do not wish any Latter-day Saint in this world, nor in heaven, to be satisfied with anything I do, unless the spirit of the Lord Jesus Christ, the spirit of revelation makes them satisfied". "Your confidence in me may be almost unbounded, and in the authorities of the Church of Jesus Christ, but if you ask God, ~~the~~ in the name of Jesus, and receive knowledge for yourself through the Holy Spirit, would that not strengthen your faith? It would. Those who possess the spirit of ^{e\}revelation know the voice of the Good Shepherd when they hear it, and a stranger they will not follow". "There they're directed to go not to Brother Brigham, Brother Heber, or Brother Daniel Wells, to any apostle or Elder in Israel, but to the Father in Heaven, in the name of Jesus Christ, and ask for the information they need." "If we do not live in the lively exercise of faith in ~~the~~ the

Lord Jesus Christ, possessing His spirit always, how can we know when He speaks to us through His servants, whom He has placed to lead us?" Not because of their authority, not because of their position-- this is the point. We don't take it on authority; the whole thing is built on this inspiration, this revelation. And everybody has to get it for himself. This is what we mean, as he says so often, when we say the Church is lead by revelation. "There's not a single saint deprived of the privilege of asking the Father in the name Jesus Christ, our Savior, if it is true that the spirit of the Almighty [^]wispsers through ~~the~~ [^]servant Brigham, to urge upon the Latter-day Saints to observe the Word of Wisdom." "All have this priviledge, from the Apostle to the lay members. Ask for yourselves." But don't ask me, see. He says ask your Heavenly Father. Flesh and blood have not revealed this...that was Jesus Christ himself. Even He not giving it on authority.

"Now let me ask you, if you trust to my faith, to my word and teaching, counsel, and advice, and do not seek after the Lord to have His spirit to guide and direct you, can I not deceive you? Can I not lead you into error? Look at this, and see [^]what mischief it would lead, and what [^]mount of evil could be done to a people if they didn't live so that the Spirit of the Lord might dwell in them, that they might know these things for themselves. Let me ask the Latter-day Saints, who are here in this house today." (This is during a conference). "How do you know that your humble ^{servant} is really, honestly, guiding and counseling you aright, and directing the affairs of the kingdom aright? Let you be ever so true and faithful to your friends and never forsake them; never turn traitor to the Gospel which you have ^espoused, but live on in neglect of your duty. How do you know but that I am teaching you false doctrine? How do you know that I am not counselling you wrong? How do you know but that I will lead you to destruction? And this is what I wish to urge upon you; live so that

you can discern between truth and error, between light and darkness, between the things of God and the things not of God, for by the revelation of the Lord, and this alone, can you and I understand the things of God." Now this was his message; as I say, he goes on and on with the same..."That he may be able to witness to every man of the truth, and not depend upon the words of any individual upon earth." "I ask the brethren to read the scriptures, all of you; seek earnestly for the spirit of the Almighty to understand them. Let each man so live that he may know these things for himself, and be always ready to give a reason of the hope within him to all that ask him." And so on. "They hear their fathers pray--the children; they hear the apostles and prophets preach, but they can't know that Mormonism is true for themselves! Until they have the privilege of being placed in the circumstance to exercise faith for themselves, and to pray to God for themselves for a testimony and knowledge."

Well, we don't need to labor the point; but you see, the position we take is essentially anti-authoritarian here. Now there's some points that should be mentioned here...the paralyzing effect. This is an interesting article by Deshert(this is also in a recent issue of Discovery). He says, "The scientific revolution, by denying the revelance, if not the possibility, of non-empirical, non-instrumental knowledge, made man the intellectual summit of the universe. The pride of physical place was replace by auto-deification in the order of knowing." Man is the one who knows all things. You won't have any knowledge...the last words of that writing of Freud's that we mentioned before; "there is no knowledge that doesn't come by science; it is an illusion to suppose that we'll find any true knowledge anywhere else." This makes man God, you see; he's the 'auto-deification in the order of knowing'. He knows more than anyone else in the universe. This is where it put him, you see. Now, with this pride of knowing comes a lot of things. Let's realize that we, along

with this, go...the trappings and so forth of these things. And the extension of authority where it should not be. A recent statement of the AAAS on this (they put a committee to work on this, and they're quite worried about it); the committee says, "these judgements are, or ought to be, wholly vulnerable to political debate" (they're talking about a lot of problems--about fall-out, and so forth). But, he says, "their appearance in the guise of scientific decisions shields them from scrutiny." This is science, so we can't discuss it--instead of the other way around. "The public has become willing to accept, with the respect accorded scientific conclusions, the scientists' view on numerous topics that have nothing to do with this specific area of competence, or with science as a whole." And so we must stop the idea that to ask a PhD a question is to insult him. Remember what what's-his-name told us who talked at the commencement here...Brother Kennedy...that a degree in science or anything else is good for 5 to 10 years, and then it expires! 7 years...they made a long study at Berkeley and decided that in 7 years a degree expires; it's no good anymore, unless you've kept up in your field and been doing shings. But {a professor is not one who knows, but one who professes to know, and is constantly in the position of inviting challenge. Now this is the historical position of the office; and is constantly inviting challenge and criticism. This is the nature--he professes publicly for a fee, he wins his position by defending a thesis publicly where everyone is invited to come and challenge, but at anytime he has to be available to defend that. In theory, he must be willing and able to defend it openly against all ~~commer~~ comers at anytime. The degree is originally a chivalric device--a gauntlet of defiance to all rivals. And not a safe rampart or dug-out for a scholar to hid^e_A behind in safe immunity from any challenge; just the opposite, you see.}

Well, there's one thing we should mention here, that we run into a

good about here (I notice my colleagues notice this too); that is the exploiting of religions and things like that. Now I've meant...this is in line with what we've said about the nature of final evidence. [I've met lots of young men,] lots of them have come to me [who've confidently believed that they have been chosen to discover the evidence which would finally prove the Book of Mormon. There will never be such evidence.] Of course you won't get your final proof, there will never be final.... Well, this we should discuss here anyway. [Not long ago, a minister in Scotland wrote a letter challenging President Mackay to prove the Book of Mormon to him; to produce such evidence that he would be forced to believe the Book of Mormon, whether he wanted to or not. Well, of course you can see that there is no such evidence. Nobody's been forced to believe the Bible on those terms, after all these years.] One way or the other; you're not forced to believe it. So, don't think you'll get the final evidence here. We run into this sort of thing; a student says, 'look, I prayed for a 'B', so if you don't give me a 'B', you'll be denying the power of prayer', the power of revelation. See, that puts me on the spot, doesn't it! See they're making it a substitute for hard work, is the point. But it goes further than that...I have met people, quite recently, who ~~have~~ tell me that they have prayed about details of Book of Mormon geography, or the translation of this or that document, or some mysterious object that would prove the Book of Mormon; therefore, to deny their conclusion is to make a mockery of revelation. You see, 'I prayed for it'. But this is the point; the answer to this is that we are not in a position to criticize their testimony, one way or the other. Since their testimony is not our testimony. See, we can't devise a test for it. The witness I receive for myself cannot be transmitted to others, much less forced on them. Flesh and blood does not reveal it to other flesh and blood; all must go to a single common source. [Since testimony, a

revelation, is non-transferable, it cannot be used as evidence. The genealogy society has a block on this sheet that says 'sources of this information' (a section in the family group sheet). They will not accept in there dreams, visions, hunches, inspirations--legitimate sources. Well, that isn't because they make a mockery of revelation! They accept it; these people are the readiest in the world to acknowledge the validity of such assistance. They are only interested in the evidence which your revelation made possible. So you had a revelation on the matter? They tell us--'splendid; and to just what sources of information did this revelation lead?' 'That's what we want to know.'] But if you said, well, I had a dream that my uncle was born in Halifax, well that's a dream to put you on the trail; you go to the archives and start looking with fresh zeal and assurance, but you can't use the dream as evidence. You can't use a testimony as evidence. You can't use anything like that, (eventhough) people tend to do that. So we can't use our revelation itself as evidence, since it's your personal, non-transferrable experience. Other people will say, 'my theory, my lecture, my book has brought many people into the Church'. 'How can you dare criticize it then?' It must be good. Put it another way...is it possible that good could come from disception? No, because disception is deliberate fraud. But, if you say, is it possible that good could come from faulty scholarship? Well, if any good could come at all it's got to come from faulty scholarship--there's no other kind!! Of course, if you're making progress...a book that brings one into the Church may be a good book, but it doesn't follow that its propositions are all true. That would be the equivalent of saying that the Ptolemaic theory must be true because all must admit that it did a lot of good in helping scientific investigation on its way. Yet, it was responsible for progress precisely at the point, at the moment, when it could be shown that it wasn't true--that it was necessary as a nursing

mother...Gentiles, and so forth. But to accept it as true would be folly, just because it did good. Well, we have these arguments that are used today. This new approach, however, does dissolve old quarrels and things like that. There's no such thing as a ^{charlatan}~~scharlatan~~(?) or an imposter, because anybody can be invited to present a thesis and no thesis is absolutely true or final, so what do you do here? Well of course the only faker is the one who refuses to discuss! That's all--that's when a man is suspicious. He may be very bright and he may have a much sounder theory than ~~everyone-else~~ someone else (well, such a person won't refuse anyway). But, there're some interesting quotations here we won't worry about. Let's get on to the people that are important here, now. If they want to talk briefly...

We made a list of questions here we might want to talk about, or if any of you have any questions ~~about~~... We want to introduce our panel now. Here's Ross Christensen, you all know him, of the Archaeology Dept., Anthropology. Here's Merlin Meyer, an anthropologist...indian man, from Cambridge. And here's Neil...Kend Neilsen who is a mathematician who turned to ^{the} history of science; he's now working at Harvard--finishing up (we're always finishing up!), in history of science. So he's the man we want to put us in our place, you see. We've been getting way out of bounds here. What right have we got talking about these things anyway? That's the first question that should be asked, of course. Oh, I've got an answer to that--don't worry! But, no--this has been brought home to me quite recently by a number of things, quite forcibly; it seems that we don't bring these things out the way we should. There are various areas here... you see, these brethren, we all have a common interest. We all believe in the Book of Mormon, and yet we all have totally different approaches--everyone of us. 'Different backgrounds, we represent different bodies of knowledge, and so this raises certain questions. These questions refer to

the Book of Mormon; they may interest you, or they may not. Well, if nobody in the audience has any questions, can I ask something? OK, then, we'll....proceed then.

(Bro. Christensen speaking): I should like it understood in the first place, that I am in essential agreement with what Bro. Nibley has said... perhaps you spoke too soon, Bro. Nibley. I was a student here, under Bro. Nibley, in 1946 or '47 (I can't remember clearly), and I remember studying Egyptian hieroglyphics under him... What I mean to say is that I am in essential agreement with Bro. Nibley in his interpretation of the relative value of the sciences against revealed religion, as set forth in this dispensation of the Gospel. But, of course, in accordance with what he has presented to us, there is such a thing as defective scholarship (well I don't wish to use that word with reference to you, Brother Nibley, but there are some points that I jotted down...). Now, here's just one point; let me give these perhaps in reverse order. He made the observation that we cannot use testimony as evidence; this depends, if you're in a testimony meeting, or in other words, a congregation of people who are disposed to believe and who are searching for truth and for that which satisfies their spiritual hunger, then testimony may be used as evidence. In fact, why gather to a testimony meeting if we do not regard testimony as being valid evidence. Of course, if he is speaking about men trained in Baconian science, then I would agree with him on this point. (Bro. Nibley: Excuse me, but [in a testimony meeting it is the spirit who testifies to the individuals there, not me; I may get up and say that I know it's true, and if a person does not receive the spirit there, that will leave him cold.] You say, well all you have to do is say he knows it's true, but if a person was spoken to individually by the spirit, not from me, you see--my words may carry or may not, as the spirit carries words to the person--but, the things of God knoweth no man save by the spirit of God.

So, as Ross says, in the testimony meeting it works, but not in a Baconian group--it doesn't work that way. But if there's someone in the group to whom the spirit speaks--that's what I'm saying--it is not transmitted horizontally, from man to man; flesh and blood doth not reveal this to other flesh and blood, you see. Here was Jesus Christ himself, in the presence of Peter, 'I didn't reveal it to you', though He was in the position to do so; the testimony had to come from the Father in Heaven. So we agree there).

Ross : That isn't the question here. The question is whether a testimony is scientific evidence; I think we'd have no problem admitting it's evidence, but not scientific evidence. Now here's another point: the observation was made that there will never be anyone who will come forth with final Book of Mormon evidence. That there have been a number of young people come to Dr. Nibley ~~with~~ who thought that they were designated, and named by the Holy Spirit to bring forth such evidence. It might interest you to know that as a youngster, I had such ideas myself, and I think, however, that the attitude to assume here is the attitude of humility. I would like very much to be involved in such a thing, but I must wait until the Lord calls upon me to get into something like that. And also, I think it unsafe for us to say that ^{there} ~~their~~ will never be anyone who will bring such evidence forth; I don't believe that you or I know what the Lord has in mind here, in the generations to come. In the millenium. The Lord may have a great scheme here, and it may require someone to come forth with just such evidence. To say that there will never be anyone come forth with ~~any~~ such evidence is possibly a little unsafe. (Bro. Nibley: Oh, thanks. Someone will dig it up--who knows? The Lord (...) His own work; He says He will. When Joseph Smith prayed, you remember, on his way to the printer--I should have remembered this---the spirit told him that the Gentiles would bring forth proof for the Book of Mormon. But whether that proof impresses you or not...it's simply the way you react to it. This

Egyptian thing illustrates very well what I was talking about. I wasn't being central(?) when I said I didn't know anything about it. I thought I did, but then six years ago I had an opportunity at Berkeley, when I was there as a visiting fireman, in one department...here was a young man, a very competent Egyptologist, who was there; it turned out that I was his only pupil for Egyptian and for Coptic after the third week. And if you don't think that was punishment--if I thought I knew something before... oh, brother, what a work-out--I was his whole job, you see; he was trying to indoctrinate me. It was fiendish to have a man 20 years younger than yourself cuttingly sarcastic; 'just tear you to ribbons ~~very~~ every time you made a mistake. I'd go in there in fear and trembling...the guy had studied three hours...it was a six hour course, and the Coptic was rather easy. But the hieroglyphics ~~were--~~ he was fiendish. But, as I say, there are levels, levels of comprehension here; I wasn't completely ignorant the other time, but I'm still a dunce...I tend to go back to him. Next year, as a matter of fact, I'll go back for some work...and I'm already trembling in my boots!).

Now here's a point; I'm not sure that the impression given by Dr. Nibley is exactly what he meant to give. He referred to the entire evidence for, I'm not quite sure what, resting on a handful of bones. He may have been speaking ^{of the} of the original find of Pithicanthropus Erectus(?), as it's so-called....oh, long before him. Well, maybe I just haven't gotten that far yet! (Bro. Nibley: There's a whole graveyard of that. Oh no, there's a graveyard of Pithicanthropus(?); there's almost a hundred of those. There's quite a lot of that. Their relationship to man, that's a different classification. No, he's talking about something earlier which he wouldn't accept at all, I mean Leaky... I didn't make that clear at the first.) I'm not at all sure that I would come to the same conclusions that men such as our friend Leaky, the British anthro-

pologist to which Dr. Nibley refers; I'm not at all sure that I would come to the same conclusions that they do, or that are standardly taught in departments of anthropology. But at the same time, I think that we should be cognizant of the evidence; and there has been discovered many hundreds of skeletons, which in physical type differ widely from our own, and apparently of very early date. Now, what the meaning of this is is another matter. Here we come to this matter of interpretation, that Dr. Nibley stressed, and very properly so. We interpret the evidence; the evidence never speaks for itself. Someone told me once, 'now you dig, and you let somebody else interpret; you're an archaeologist, you dig. You let the rest of them interpret. Well, I would not feel safe in letting someone else interpret the material that I dig--I wouldn't have confidence in it myself, and I don't believe other people would. Now, I want to yield here--there are others; but I want to say this, that at the beginning of wisdom in the fear of the Lord. And I'll quote another one to go along with it, from Jacob (the brother of Nephi): "Behold, it is good to be learned, if they will hearken unto the counsels of the Lord." And now, may I quote from my brother, who taught me: he said "I am a scientist, but I am not a scientist 24 hours a day." I think that we should inculcate the doctrine of humility, and we should seek after this. The old Christian virtues, after all, are the best, and are fundamental. What we learn as scientists constitutes a valuable tool, one with which we can perhaps do great good in this dispensation of the fulness of times, but they are a tool only, as far as I'm concerned. They are not to be taken as the final end of things. They are relative, and they lead to good ends, we hope. In some cases, at least. In other words, my parting note here is something in the nature of a testimony. I believe, I can't help it if my learned professors on other campuses would be shocked (I don't care whether they would or not), but I believe, I do believe...and with

me the scholarship is merely a means of fulfilling what Heavenly Father sent me here to this earth to do.

(Brother Nibley speaking): There's just one thing; Ross, you say you wouldn't trust another person to interpret your findings. That means I have to accept your interpretation, whatever it is? You won't let me interpret your findings because I didn't find them? You can't transfer your discoveries, or anyone else. (Brother Christensen): You make me back up here; of course, we have to allow others to interpret, but I mean to say that a field archaeologist is under a certain obligation, it seems to me, to make his own interpretation^S. What I referred to, Bro. Nibley, is something which you may not be altogether familiar with. But I claim the privilege also, of helping to interpret that.

: Maybe it's unfair to get this discussion away from evolution and back to the Book of Mormon, but I'd like to try, anyway. I ~~am~~ happen to be a disciple of Karl Popper's; I like his approach to science because this goes along with my prejudices. You propose the Book of Mormon as a document, and while you played fast and loose at the word 'fancy' (my fancies are fancier than your fancies) still when we get right down to it, if every interpretation is a fancy we have to talk about our fancies, so let's talk about them. How do you fight back!? This technique of brilliant sorting's so fast you can't keep up with it nor never find out what he's talking about--I've never learned how to cope with it. I learned years ago, that if you want to ask Dr. Nibley a question you hope that he'll get around to it himself; there's no possible way of finding anything out! The first year I came to BYU I followed him around from class to class, and on several different subjects it was one continuous lecture--it was fascinating. But, Popper defends the idea of a theory must be falsifiable. While we recognize ~~the idea~~ that all we can deal with is increasing probability, yet I can get a certain amount of

probability to where I can't help but jumping to a conclusion. Some of us are better conclusion jumpers than others; now I'm ready to jump to a conclusion on the Book of Mormon a lot faster than an anti-Mormon is. I'm not willing to jump to a conclusion in favor of a scientific theory that bothers me, nearly so fast. But, I think all of us reach a place, and it's an individual matter, where a whole body of probability (we can talk about it as probability) when we get right down to it, we can't really argue about it. I could let go of this pen, and we could argue--well, yes, it might go up; but I am so convinced by all of the probability that's overwhelmed me in all of my past experience and everything else, that if that pen went up I would be bothered. Seriously. I used to rig a demonstration in my science class to make it go just this way--to bother them...but I had to rig it. They knew it was rigged. Now, is the Book of Mormon falsifiable? I would like to get down to...so we recognize that there... it's probability, but...a certain amount of it--how much can you build up? What are some of the things? If the Book of Mormon is falsifiable, how could you falsify it? Depending on which way you'd like to go at it--I'd like ~~of~~ to explore this a little bit.

(Bro. Nibley speaking): I thought I'd caught it up...I thought I'd caught the Book of Mormon in its mistakes. I mean, I thought I'd blasted it wide open. The appearance of Greek names in the Book of Mormon, which disturbed me, is shocking anacronisms out of the picture entirely, until I knew more about the situation. Anacronisms are usually the common thing; the animals that are mentioned in the Book of Mormon--how about the cow, and all those? Well now, the new studies on ancient ecology show us how fast and radically the picture can change. We don't really know; there's nothing final there. See, this ~~is~~ is a beautiful case of being wide open; finding animals... When I was...last winter when I was in Syria I traveled with Muss Muchar(?), the hunter for the king. He's a big man, there,

but he's also a great hunter...and they're beginning to see ostriches in the Syrian desert. Well, no ostriches have been seen there since ancient times! There were no ostriches there, all through the Middle Ages; they shouldn't be there. Or lions coming down to drink in the Nile, almost in the suburbs of Cairo; they haven't been heard of since the new kingdom of Egypt up there. These things happen, I mean animals appearing in places like that. You can't use those arguments of silence very effectively, but if you find a really solid contradiction inside the Book of Mormon, besides these anacronisms...people have thought that they've had it, had some pretty good contradictions, and it's amazing how they iron out. As you know, we tried to think of some...did you think of any really good tests by which you could disprove It? Set up a test...does ~~anything~~ think of a test by which you could disprove the Book of Mormon. See, many... Hyde, is the name, Brother John Hyde--that was the book I was talking about... Now, he thought he had good proofs against the Book of Mormon, and a hundred years ago they were good. But a lot of things have been found out since--he should have left it open. So that takes care of your Book Of Mormon; that brushes that ~~assid~~ aside, we see that that is a fraud. The whole thing is now been disproven, because we see it's impossible. They couldn't have come over here at this time. Well, these various things, brought into the picture and so forth. But where is the Book of Mormon weakest today? I've had people up at the U. of U. tell me, well, it's a refutation of a...you don't have any evolutionary history, any development in the history of the society. Or is that the question, or is it the kind of development you get in other societies? Do you anywhere, and so forth. And so it goes. No, I can't think of any right now, though I say...I used to think of the Greek names; that was a pretty good one. Elephants--I once thought it was the elephants; he'd really given himself away there--until a friend of mine wrote a long article in (this was one of Popper's pupils

at Berkeley)...he wrote a long article showing the presence of the elephant in America, probably down to a late time. And again, the horse; my friend Woodrow Borah(?) and Cook are both convinced that the horse was here long before the Spaniards, and was a common animal running wild. Others think otherwise, but of course he's made quite a study of it--he's quite an authority on prehistoric America. And so it goes...in other words, it's all wide open. You have nothing that you can really pin down right now...either to support it or to refute it. 'The one way or the other. You go on and refute it--gather all the arguments you can, and I'll get as busy as I can supporting it. Without being ashamed, you get all the arguments you can your way. And of course sometimes--very often--those who were the friends of the Book of Mormon get these things that backfire. If we do not allow free discussion, free examination of what we've found, then we can sometimes get into trouble, or admit that we've been wrong. Now, through the years the stuff I've collected has just been for discussion and nothing else; I'm surprised that that book called Leni In The Desert held up as well and as long as it did! It's intention was just to get things going. The first year, I wrote that World of the Jaredites, I gave the assignment to the history class, to each student, for a term paper to tear this to pieces; find every flaw you can in it. Well, this is what you're supposed to do. It's supposed to be discussed, you see, and that's very valuable, it's very useful to have these things pointed out, because if I'm wrong I certainly want to know it! There's no point to cling stubbornly to the view I've taken...hey, you go on talking--you're a lot more interesting than I am.

(Another speaker speaking) : You're still too open ended for my prejudices. Well, we have admitted the...we're talking about the Book of Mormon, about probability, but...may I use the word fact? The fact remains that you cannot at the same time, without throwing over the whole

idea of consistency as a necessary part of truth. We can't accept the Book of Mormon without necessarily accepting certain corollaries. For example, if I am convinced, for other reasons, that the techniques of the higher critics are valid, and therefore there were two Isaiahs that wrote Isaiah...then the fact ~~and~~ that the Book of Mormon quotes from Isaiah, indiscriminately, both from the scholarly Deuteral(?) Isaiah that was invented by the higher critics to explain what they think are valid objections (I don't). Well, either you say the Book of Mormon is not true on this respect, or else you have to throw this particular conclusion to the higher criticism. Or, let's take it the other way around. You find the name Paanchi, it's in the Book of Mormon (this is one of yours--I'm indebted to you for this one); you find the name Paanchi in the Book of Mormon. How probable is it that Joseph Smith would've just happened to luck onto that name? How possible is it that Joseph Smith would've known that this is an authentic, but unknown, Egyptian name in 1830? Well, this one appeals to my prejudices, I like this. Paanchi I can have lots of fun with, and I can smote the Gentiles hip and thigh with Paanchi. Now, you prove to me that Joseph Smith knew about Paanchi, if this is out of the realm of probability. This we can do. Now, if my prejudices are in favor of higher criticisms, I can show the Book of Mormon is false because it quotes Isaiah. If my prejudices are in favor of the Book of Mormon, as they are, I can say now look--Joseph Smith didn't know of Paanchi; it came from somewhere, that's just too improbable for words. We can do this with it.

(Bro. Nibley speaking): It's still wide open. In other words, the higher critic, the whole probable of the nature and structure prophetic writings, especially Isaiah's, is now being re-vamped completely. That is represents not just one man but a school, and anything that goes by his name is his. And this changes the whole aspect of the thing. But

even with Paanchi--the name could've come in through another source.

But don't ask me how...remember this idea that hypotheses are infinite in number. The number of hypotheses is endless. I can think of all sorts

of ways that he could've got onto that name, Paanchi. Though the name was unknown before 1880, it was extremely popular in Lehi's time. It was a very popular name before the people had it. So, what do you do with that? And the names all around it--that whole cluster of names are very good. Those are the names that impressed Albright so much, that got him reading the Book of Mormon. He knew that...he came to the conclusion this couldn't very well be fake, in that case, because how would a young Mormon dream of a name with a double 'a' in it, of all things, and ending with a 'kh', that rough "kah" sound. (Question posed by other speaker): Now wait a minute. Were the vowels used in ancient Egyptian? Double 'a's? (Nibley): This is one they know--this is a common one. We have the Coptic form of vowels and so forth. There's not much doubt of it, though some people say....Budge would have read it as 'Pahanchi', rather than (...). So there you are. It's wide open. Everything's wide open. You're hard!

(Prof. Neilson ----- panelist speaking): Let's take the other alternative; the thesis of the Book of Mormon is false. I think this is a falsifiable thesis, to my way of thinking. Subjective, of course. For example, if someone should discover^{where} they're in a cave or some other appropriate place, a scroll written by the prophet Zenos that happened to give, in essentially the same detail as the innumerable quotations we have in the Book of Mormon, this to me would be the nature of the overwhelming evidence for what I already believe. I think it would be fairly overwhelming evidence for a great many other people. I think that the theory that the Book of Mormon is false is a falsifiable theory in Popper's terminology by probability. (Surely the high-powered logic of this table can stand a double

negative tonight).

(Dr. Meyers speaking): Yes, I think I'm in the wrong company tonight. I'm a social anthropologist, and social anthropologists came into existence on the basis of being discouraged of trying to reconstruct the past. And they gave up the whole task as an impossibility a long time ago, and thought they ought to take a look at things that go on into here and now, and they thought they might get further. Now, this idea ~~that~~ of multiplying conjecture upon conjecture, concerning the past, held no fascination for them, and they thought they were getting nowhere, and that there was no limit to this. And they thought that they might be able to pin their conjectures down just a little more closely if they concerned themselves with what goes on before their eyes in the here and now. I'm not so sure that we can pin it down even then, but at least this is what has happened. Now, the social anthropologist, as we come back to the Book of Mormon, certainly relinquishes his interest in the Book of Mormon as an historical document, and would seek tests for the book in the material that he learns from observing peoples interacting with each other, and you have an example of this kind of criticism of the Book of Mormon, or criticism based on this type of data. In the work of Thomas F. O'Day^{Dea}, his thing on the Mormons (some of you, or most of you, I suppose, know this), O'Day^{Dea} (I don't know his position intricately--I've just had a brush at the book and have not studied it diligently), but he seems to feel that the Book of Mormon is an out-growth, is a product of the ferment that was going on in American society during the 1800's. Now there's a lot of material that would substantiate O'Day; we find that this phenomenon of nativistic cults--Cargo cults, ^{ess}Masianic cults...it seems that when societies begin to break down, or when they're loose-jointed, when they're not very firmly integrated, they make an effort to do this. It is a remarkable thing; this integration usually centers around some religious phenomenon. I can give you an

example of this. Among the Iroquois, about 1790, they had been thoroughly riddled by European culture in the form of Bibles--as they say, black books and black bottles (they mean rum and the Bible)--and this had brought considerable stress on their society; their men were spending most of the time getting drunk, neglecting their domestic duties. Now, in this whelter, this chaos of disintegration, there arose among the Iroquois a prophet. They refer to him as "Handsome Lake"; he ^{ur}ported to have had a visit of three messengers--some people would like to say that this is the three Nephites, of course--and they took him off to a third messenger, and there he received a great code, a set of principles by which his people might preserve themselves, by which they might re-integrate themselves and carry on. Well, he came back--he was in a trance all this time, he was in this trance for two or three days, as a matter of fact--and when he came back he summoned the people and preached this code. Now the Iroquois are still a recognizable entity today; they re-integrated themselves on the basis of what "Handsome Lake" told them. He received this from a messenger who had holes in his hands and his feet, with a scar on his side, and the message, of course, is a very nice synthesis of Iroquois culture and the culture of the New World during this period. Now, this is a phenomenon that has been identified all over the world. And you have something very similar to it going on in our society right now. The last statistics I had on this were by Alistair Cooke, back in 1963; Alistair Cooke reported to the people in Britain that there were 1600 people per day moving into California to take up permanent residence. These people were coming from the East. Now, California and the Pacific Northwest...it is a remarkable thing that our missionaries seem to have greater success in precisely this region of the country than anywhere else. The social anthropologist would feel that these people have torn up their roots in the East, and they must become integrated into meaningful social life, meaningful social relationships

wherever they settle, and they select a religious basis, a religious principle upon which to integrate themselves. Now, O'^{Dea}Day makes out a... well, it's not a very good case, I feel...but he would explore the Book of Mormon within this framework. He would challenge it; he would say we don't need to bother about the past--we can't know about that anyway. What we can know about is what's going on before our eyes. We can make hypotheses about this; we can test them on live bodies of data. And he would say that the Book of Mormon fits in with a class of evidence, the like of which we have from all corners of the world. Now, it's that kind of criticism that the social anthropologist would make; he could also make out certain cases for the authenticity or the genuineness of the Book of Mormon record. I have only dealt with this one critical sign. I'll stop there.

(Bro. Nibley speaking): Speaking of the climate of ideas; Bro. Nielsen, I think you have some pretty hot stuff on that, don't you? You were telling me yesterday that the Book of Mormon...well, that certain scientific theories simply could not have taken root in the 19th century, and others could not survive in the 20th century. There is a climate of ideas which is very important in the interpretation of things and in the attitudes people take toward them.

(Another panelist speaking): Remember O'Day points out this...what does he call it...the antipathy(?) towards Catholics. He found this quite... this is one of the climates of opinion, the climates of thought of the day, and he finds this incorporated quite neatly in the Book of Mormon, in this great and abominable church idea, and a few other things.

(Bro. Nibley speaking): Now in a series of some years ago I collected a great number of instances showing the primary, first reactions of Joseph Smith's neighbors, or all the people of the area to him, and you know what they were. Utter outrage--far from being a product of the world

that produced them. Nothing could have set the world up-side down as Joseph Smith did. I mean, they started mobbing him right from the beginning. You know that history (some of you know it a lot better than I do). But, was this the congenial world in which, O'Day says, the people wouldn't have even thought it strange--the Book of Mormon would have been taken in it's stride, just as a matter of course. Everybody was writing Books of Mormon! Alright, you try classifying it; what type of Book have we got here? How did they actually react to it? How did they react to Joseph Smith's claim; and if ever there was a man out of his time and place, that was it! That was not his climate at all! So there...that is a very strong point, I think, that social anthropologists would have to take into consideration. - Namely, the volcanic reactions to Joseph Smith's very first words. I mean, he really set things going, and that was not a well-adapted situation.

(Meyers speaking): What you see is that O'Day is advancing at least a testable hypothesis here.

(Bro. Nibley again): Now, speaking of O'Day's book, and his willingness to test; Bro. Neilsen mentioned another test, which he would think would put a Book of Mormon attacker on the spot--namely O'Day. Well, when he first came here, I met him in Brother Widsoe's office, and we had a long talk. And I had just been writing some things about these names in the Book of Mormon, which I thought were rather impressive, and I gave him a list and we talked about them, and he was duly impressed. 'Not one word in his book--all he says is the Book of Mormon is simply a re-hash of Biblical names. He doesn't mention the fact...he knew perfectly well it was nothing of the sort. He couldn't touch that.

(Bro. Neilsen): He does mention that Hugh Nibley is part of a new breed ⁱⁿ the Mormon Church... ^{of} neo-scholasticism.

(Bro. Nibley): That's pseudo-scholasticism! Ah, you can have it.

(Another panelist speaking): Brother Meyers comments on "Handsome Lake", among the Iroquois, bring to mind a passage in the Book of Mormon that I've often thought about. I don't have my Book of Mormon with me, but maybe someone does and could check the reference; but if I recall correctly, it's Alma chapter 29, verse 12--or it could be chapter 12 verse 29...it goes like this: "The Lord giveth unto all nations, of their own kindred and blood, that amount of light and truth that He seeth fit in His infinite wisdom that they should have". Now, this is not an exact quotation, but that's the sense of it, and when he speaks of "Handsome Lake", and the great good that he did for his own people--he saved them from annihilation, you see. Now, what might seem a mixture of Iroquois superstition with Christian truth, may, upon re-examination, may be merely an adaptation of the truth of Jesus Christ to the Iroquois mind. I think we should be open-minded about this, and I think that this is an instance to bear-out that particular point in the Book of Mormon.

(Question--by the panel chairman): Dr. Nibley, if everything is wide open, why form hypotheses? Why? Is this somehow intrinsically the same as making mud pies, then? Surely there must be some value for this, either pragmatic if not an ultimate value. What value is there?

(Dr. Nibley): Well, it's the extension of our experience. What we're doing is projecting our experience beyond our present course. If we were just vegetating we wouldn't hypothesize; the only way you can shake loose, you see. You don't have to hypothesize--I know people who have overcome the temptation! Well, we can vegetate...cows and mushrooms and cockroaches do not hypothesize, I'm quite sure of it! But we do it--it's characteristic of our nature.

(Question): Well, what practical value does this bring to our lives, as we hypothesize compared to those who do not?

(Bro. Nibley): This is exactly what Aristotle was asked, you know,

when the student asked him, 'well, why should I worry about the Pythagorean theorem?' He said to his monitor, 'give that boy an opal so he won't think he's wasting his time'. Well, it's the same thing, as Aristotle says. It's a flight from ignorance...at the beginning of the physics, you know, he says it's like having a cinder in your eye or a stone in your shoe--you're uncomfortable; you feel sophocated by ignorance. You want to push it back. And, unless you're hypothesizing, unless you're wrestling with it, it leans in on you and chokes you. That's the way we're made, see. This is no intellectual phenomenon--it's as born into us as the desire to eat and drink. 'Before we're in danger of, hunger and thirst. We eat and drink because we have the urge--not because we figure out scientifically that if I don't eat at such and such an hour I'll die. Ør No, you eat because you enjoy it, and because you have the urge. And it's the same thing about learning. Unless you feel you should learn about things long before you're in danger of being exterminated if you don't, you are in real danger; you must do these things spontaneously, impulsively because you can't help yourself. But that's not why you eat--you eat because you are hungry and because you enjoy it. Even children eat!

(Moderator): Well, there are those who eat to live.

(Bro. Nibley): I don't know who! Well, there're some people that figure the calories very closely yes, I know that. 'Not to live, but to reduce the corporation! No, I think that's valid--we don't have to give any excuses. It's what Aristotle, remember, calls a 'good, first intent' It's a thing you don't even have to argue about. Is breathing good... well, yes, because if I don't breathe I'll die. The gay and melancholy flux(?) come of themselves, and I don't figure out why I should be breathing!

(Moderator): Aren't you backing a little too far off, though. If you don't hypothesize about the Book of Mormon, of what value is ^{reading} reading

the Book of Mormon and trying to understand it? Is that of no value?
Just a sheer intellectual excersize that we can't help doing?

(Bro. Nibley): No, I don't think that intellect has anything to do with it. Of course, the Book of Mormon has such a tremendous impact-- this conviction, you see. I say this conviction comes by inspiration; that's where the joy of the thing comes. That Book of Mormon is tremendous.

(Moderator): The conviction is one thing, but an understanding of the book, and its content and message, that's another thing, and that is where you form the hypothesis as you observe the facts.

(Bro. Nibley): That's true. Now, reading through today--for how many years...10 or 12 years now I've been teaching this elementary Book of Mormon and I just love it, because it every class I discover something I never noticed there before in my life. And you've found that to be the same thing, I suppose. It's a marvelous experience. It never gets tiring, it never wears out, and I'm always hypothesizing. That's a brand new theory today; I'm going to think it over now. 'A brand new theory--there's probably nothing to it--but, if...

(Moderator): It'd take your students 10 years to find that out!

(Bro. Nibley): Oh, don't worry; the class next year will get an entirely different course, so there's nothing to worry about! But if Newton says hypothesis is (.....), I say, with St. Augustine, hypothesis is (.....); I can't avoid making them, you see. I can't not make them, yes (.....), as we would say in that case. I can't help making hypothesis. Well, we're that way. We do. See, we project our present experience by imagination and so forth way beyond the immediate experience that's here. I mean, everything that you do, you're projecting yourself out. You're going into future, you're living into it; see, this is only the strange interlude, this little instant here in the

patience, but we're living in the future and the past, primarily. Now, we can get mystical, if you want, and say this is the strange interlude, the instant that's not particularly significant--except as we extend it to other dimensions, other worlds. It's nice to wander around that way.

(Moderator): Since I can't draw you out, let me try the hypothesis and see you refute it then. In science, we have a great interest in it for one thing because it's of enormous practical value. Though these theories are wide-open in many respects, they do enable ~~to~~ us to accomplish things in the world in a way that nothing else we know of does. Is it not possible that we must form theories, for instance in relation to the Book of Mormon, as a possible basis for the action patterns of our own lives. In this sense, the Book of Mormon becomes a thoroughly testable hypothesis.

(Bro. Nibley): That's a good point. Naturally...who would disagree? Incidentally, as to the great gifts and assistance that science gives us, that is all achieved--these gadgets are all achieved, remember--through the purest procedure of trial and error and blunder in the laboratory. Nothing but trial and error; they're not scientifically calculated ahead of time. Of course, that limits the number of trials and errors they make, but the one success that is published against the 200 that fail, and so forth, or the person that has the grant--\$50,000 grant--and you ask him, as I have asked many of my friends, 'what are you doing?'. I don't know; I'm just trying this out and trying this out and hoping that I'll find something. I don't know. If he knew, of course, he wouldn't bother. He'd get it done today! This thing may go on for weeks or years... he gets the grant extended, and so forth, and this goes on and on. And really he's just trying the most primitive sort of bungling and fumbling around with trial and error, hoping that he'll stumble across something (but has the acumen to know what it is in the background, the understand-

ing, that's very important--to understand it when you've found it). Fleming was no ignoramus when he recognized what he discovered there. But, these things aren't actually given to us by science. They're given to us by patient men who go through this business of stumbling around until they hit on something. And it is the Lord who gives them the spark--as a pattern of behavior is concerned--these things guiding us, these projections of the mind we make. The imagery...I mean, when you read something like Alma, or when you read Third Nephi; don't think that cannot influence your life. I mean, you walk around in a daze after that--that really has direct influence. I think it's something much more organic and immediate. See, I'm not a rational creature at all. I'm strictly emotional, as you may have discovered. I think there's a place for being emotional, just the same.

(Question--by a panelist): This point you make here...reading Third Nephi and Alma; this certainly would have nothing to do with whether the Book of Mormon was true or not, would it? Certainly the Navajo myths must penetrate their souls very deeply also, as they do those of the Azandi(?) in Africa...anywhere. And they manifest themselves in the behavior of the people. They have an impact, an influence.

(Bro. Nibley): We must realize how often these myths have opened the way for missionaries too. In the islands of the sea and elsewhere, I think many missionaries know instances of that. I know that down...when I went with Bro. Bushman first to the Hopis...the other churches always try to appeal to the young people, to get them away from the traditions and background of the tribe and so forth. They can work with them more easily that way, if they break them up. Not so with us. As old Brother Tom Peyushavit(?), it was old Kreshera(?), Mark Kreshera(?) down there; all the old men, all the old chiefs--men that really knew the traditions--that first accepted the Gospel. They were the ones that were waiting for it. The first night he heard it, old Tom who was 94 years old, said 'it

feels good in here'; didn't know a word of English, but 'it feels good in here--I know it's true'. This stuff isn't to be laughed at and brushed aside, ^{as} ~~that's~~ nothing at all. It prepares the way too. We have to recognize that. But, Kent, you said something to me the other day that the Book of Mormon was not a scientific document. But what do you mean it's not a scientific document?

(Bro. Neilsen): I don't think I said it in quite those terms. You started it--you tell me what you thought I said! And go on from there.

(Bro. Nibley): No, you were talking about the climate of...necessary to produce the Book of Mormon. No we were talking about evolution and certain ideas connected with it, and ~~th~~e climate of the 19th century in which it could flourish; and you said in the 18th century wouldn't have flourished, and certain ideas would have flourished, depending upon the climate. And then, what about the Book of Mormon in a scientific age? It's the sort of document that would thrive in a climate of scientific skepticism. Well, obviously it isn't. It's strictly treated as such.

(Another panelist speaking): Certainly there are aspects of the Book of Mormon which do not lend themselves to testing in the conventional apparatus of science. How do you quantify the Urim and Thummim, for example, or how do you calibrate and weigh Moroni, the man who brought the thing? And how do you measure the chest in which it was found? This is the grand old procedure of quantification. How does this come into the Book of Mormon? You don't have a very good chance to do that, and to that ~~it-seems~~ extent it seems to lie outside pail(?) of science.

(Bro. Neilsen): Now that you've told me what I said, let me defend myself a little. I do believe that there are climates of opinion; I believe the Book of Mormon...I don't think I said it's not a scientific document, because this is foreign to what I've been thinking. But, in the sense that we've been talking about; if you propose the theory that

the Book of Mormon is true, it admits of all types of confirmatory evidence. You can't prove it in the sense that you can thrust it upon someone, like you say. 'Make me so I can't help but believe it. But there are any number of tests that are available of the Book of Mormon. This is the sort of thing that I think does appeal to our generation; once you assume, as a working hypothesis, the Book of Mormon is true, then you can examine it, as you have done, year after year. And many others have done this. There are these things that can be done; you can examine...is it plausible that people wrote on metal plates? Is it possible there was a Messianic concept in ancient Judaism 600 years before Christ? Is it plausible, and so on and so on. This you can do.

(Unidentified speaker): That doesn't get you anywhere, though. Anything's plausible. But it is--you've already said that! Anything's plausible.

(Bro. Nielsen): Once given...science isn't quite that loose! Well, you make it that loose and microphones don't work.

(Moderator): Well, you don't have to say that it's true initially; you can put it in the subjunctive and say, 'if the Book of Mormon were true, then there ought to be some ethnological and archaeological evidences on this continent of a people living here.' Now, if there weren't any, if there were indigenous people here, if there were no archaeological remains at all, this would be a clear refutation to many people. Now, actually it wouldn't be, but it certainly is, shall we say, a bit of evidence in the other direction--the fact that at least there are ample remains.

(Bro. Nielsen): Don't we all jump up in the air when we hear something that does fit that theory? And don't we collect these, and store them away, and say 'look, I knew it all along!'. I do...and I've got enough of them that I don't dare disbelieve even when I want to!

(Unidentified speaker): The thing is that you can take all those

you find that seem to support the book, from the Americas, and you can find parallels all around the world! From Australia to Africa to India; it doesn't matter where. This is exactly what you can do. It may cause you to jump up and down; it may make you feel good. But then read on a little further and you'll find the Africans doing the same thing. Or the people, the Devetoids(?) in India--something like this. They had patronial(?) systems, and this brought older brothers into conflict with younger brothers and ~~it~~ into conflict with their fathers, just like Laman and Lemuel and the rest of them.

(Bro. Nibley): In other words, it's a psychologically sound position that's taken him....'could've happened anywhere. That's not an argument one way or the other. There you are. But it builds up; he says these things will build up on certain sides to a conviction, a personal conviction is what they build up. At what point are you finally convinced? Well it's not the same level with everybody; some people are easily convinced, others are not, and so forth, and what is this conviction? In the end it's the conviction the individual has when he's convinced. It's not through the evidence.

(Moderator): This is scientific evidence. Scientific evidence creates interest, and shows ~~it~~ him this is a significant problem. But it will never confirm absolutely.

(Bro. Nibley): It proves to himself that he's being more or less honest about it, though. It's nice to know, isn't it. But that's...very much the point. Well.

(Moderator to audience): Are there questions that any of you would like to ask Dr. Nibley at this point? Yes...

(Question unintelligible) (Dr. Nibley): Now this got around... Well, they were getting out this series, you know, and they wanted me to write an article in which I was supposed to say what the others said, but

my idea was that if you had a series, the purpose was to give a number of different points of view. So, I decided I'd stir them up a bit and give a different point of view. And I quoted some interesting things...I was almost entirely a patchwork of quotations from other people; I wouldn't dare stick my neck out. You see, I have no authority--there's no such thing as an authority. And so they didn't like, and that's that. (I can give you a copy of it later on--don't bother about that).

(Question): You've so thoroughly refuted the value of science; well, maybe I misunderstood, but at least anything to really pin down, and so what's the purpose of all of this?

(Dr. Nibley): You notice I've been very careful to quote all along here, not only Popper but Netherwar(?) and Kernigsvall(?), and these people, who are all scientists; it's their point of view, and I say it nearly confirms what I've always been saying, and that gives me great comfort. But...no, you ask Mr. Popper what's the point of all this...Brother Nielsen is the person to ask that question to. He says he's a disciple of Popper; let him defend him! There, see...you ask him!

(Bro. Nielsen): I'll fall back on the technological output--this thing does work, and it's a result of you might call the method sloppy, but there it is. Now, you can argue all you want to on the intellectual level, but I think it's pretty obvious to most of us that we have a fairly high technology in the world today. If we've made any progress over the world history, and that's your area, we do have a higher technology than we've ever had before. It has something to do, afterall, with this scientific method. Popper isn't trying to argue that science is useless; he's just trying to define what science has been doing! It's been doing it, whether Popper says so or not. It's been producing what it's been producing. I think what you and I are both agreeing on is that science is not the authority that moves in and takes the place that revelation left

in the 12th century.

(Moderator): It's not to say that science can't do anything; it's just to say that science really doesn't know when it knows.

(Bro.): I'd like to ask your permission to make a comment on that. It seems to me that what has happened in our 18th, 19th, 20th centuries is that the saying, "thus sayeth the Lord", has been transplanted by the saying, "science says", and I think what has been argued here tonight is not that science is worthless, but that science cannot, and never will take the place of God. We still worship the God of our fathers.

(Dr. Nibley): That's a very good point, which Popper makes in his opening paragraph. 'Very strongly...that very point, which is quite relevant.

(Question): Well it's such an open-ended theory; what's the average layman of the Church....size up the information he gets. In other words, at point do we say that we accept it or it's still open-ended enough that it could be different?

(Dr. Nibley): That's interesting, because I had this question down here... At what point is one competent to discuss the problem? The answer is, according to these men, at any point. The sooner you come to grips with your ignorance the better--just so you start moving there. And then this followed...can one discuss a document about which one knows nothing whatever? Well a good example of that would be the Dead Sea Scrolls when they were first discovered. Nobody knew anything at all about them, and ~~no~~ the most learned men were making the most widely-variant, the most fantastic speculations about them. Some of them have survived, and some of them haven't, but they're still speculating. But you can't...you're supposed to put your foot in them. I mean, when (...) says, 'well, it's simply a forgery, a practical joke the Arabs put. They buried that there.' Or when Shefter says, 'no, it's a 14th century Kurdish(?) forgery,' when

another person says, 'it isn't even in Hebrew--it's a fake,' you see. And this sort of thing...they had a perfect right to say it. The (....), let's look into that; let's see if that's so. That's fine. So you can begin your discussion at any point, no matter how ignorant you are, but you intend to follow it up, if you can. And the third point...students should be encouraged to go in over their heads. Students come to me and want to write discourses on say the plates in the Pearl of Great Price. Well, no one's over his head as long as he's discovering his ignorance! As long as we recognize that, where we stand...our feet are on the ground. But ~~est/less/we~~ less we're constantly confronted by an opposition, we're liable to forget that. We're apt to lose contact with reality, as Dirckheim reminds people, in an interesting quotation I have here: "unless you meet this opposition, you're liable to start thinking as an authority." You think you really know something about it. But students should start anytime discussing these things; there's no harm in it at all, if we do it with the intention of discovering what we do not know. The progressive discovery of our ignorance; it's a humiliating experience, and as I say, few people have the stomach for it. We like to get a terminal degree, and say 'I'll never have to take another test again.' Don't fool yourself. You've just begun. But no, I've actually had them...the only course I ever took here at the BYU the professor was very proud of the fact that he was told when he got his examination, the chairman of the committee told him, after he'd finished his finals, 'now you will never have to take another test as long as you live', and he firmly believed it. How silly! The fun just begins then! But sure...there's no such thing as a layman here; there's no such thing as a layman. Now, this man says there're various levels of discussion. All people aren't equally competent--that's one of the things we have here. But it means your general familiarity with the material--what do you know about the subject, and so forth. And when the

person brings a thing up you're perfectly within your rights to test the testor and challenge the challenger. 'Find out how well equipped he is, how much he knows about the subject.

(Question): Oft times you bring up the question of evolution of fossil man; I mean, the thing I wanted to (...) is that oftentimes you tend to bleed our ears, instinctively because our religious heritage does not want to believe in evolution of men, and yet most of us don't know a thing about it. 'Not a thing, we have never really (...), and you continue to let us (...), let you bleed our ears.

(Dr. Nibley): Well that's bad! If you've read nothing about it, let's go home. Yes, I mean afterall, there are plenty of books available here, and there are plenty of people. Remember, if I am biased and prejudiced, and I am--terribly--I mean, I know very little about it and yet I take a stand, just like that. But what an obvious target! I mean they could make mincemeat or a monkey of me anytime they wanted to! They are perfectly welcome. And remember, I¹ even outnumbered a thousand to one, so I'm not playing unfair; I'm not taking unfair advantage of anybody. I'm outnumbered at least ten to one right here on the campus; I'd say 20, or even 100 to 1! Of course; you can hear the other side. You won't have to go far to hear it. We must hear both sides--that's the point. Let's hear them both. Now I think it was wonderful when Keith Rigby came into our religious group a few years ago, and gave us a series of talks running over several months. It was very nice to discuss these things quite frankly among ourselves; he had his point of view, his arguments, and we had ours. And the thing is still wide open as far as I'm concerned. He didn't convince me--I'm sorry we didn't convince him. But...so there we stand. You can hear both sides, don't worry. I'm not going to lead anyone astray; not around here. Not in this class! There's no danger. But there should be a voice on the other side; I'm sorry that it has to

come from someone who is no scientist, not the slightest part--knows nothing about it at all. It's too bad.

(Question): Ah, classical rhetoric (....) tried to develop a certain degree of objectivity and impartiality in the human. You know, you take a few, (....) 5 minutes....(...). There's changes too. Now, one of the things they're trying to do with (.....) is (.....). In this sort of objectivity, unquote; this ^{lying} ~~line~~ to yourself about being unbiased, characteristic, would you say, of all the people in history which have characterized (.....) who will comment, as a person unaware of his biases, or...

(Dr. Nibley): He was ferociously biased; he was magnificently biased. No but that's a....Tom made a very good point here. The ancient rhetoricians, you see; part of their training was, from the 3rd century B.C. on, from the Rhodian school on, the only type of higher education was rhetorical. It was an important thing to be able to take either side of a question with complete indifference. The individual was indifferent--he was impartial, and it created a false (....) science all the way through, because it was the individual himself who said he could take either side. It made no difference to him whatsoever. Well the honest thing is to take sides. Now, Mohammed did take sides, and he took sides with ^{a vengeance} ~~avengence~~. He was by no means rhetorical. No, he was....I like that man; he was all the way one side or the other. He might make a complete fool of himself, but he went on... The classic example; when they came to him one day--they visited him--and they said, is Abu (what's his father-in-law's name?), is he in hell? No, not Abu Baker(?)--he was the successor. No, this was the other one, the old man. The old man who had nursed him when he was a child and so forth. But he died before hearing about Islam, you see. It sounds like Abu to us--something very near to Abu...very near to that. They said, 'is he in hell?' , because he hadn't heard of Islam. And here, all of his

family was around waiting to decide, to hear what he would say. And Mohammed, without hesitation, said 'yes, he is in hell.' And they all deserted him, they all became his enemies then and there. And he knew they would; he was going to take sides. Now we would say, he is being detained there until he can hear the Gospel...as far as that goes! But, you see, he was not rhetoric, and he was not willing to hedge. In fact, he lost his whole following, and it took him 3 or 4 years to get anybody back again. His real persecution began then when he said that....

(Moderator): Our time has come to an end. We're very appreciative of all of you and your participation, and I hope that this is the beginning and not the end now. The purpose of this discussion is to stimulate all of us to do some investigation for ourselves; to investigate, evaluate, hypothesize...perhaps discover even a little of our own ignorance. We'll ask Brother Wilford Griggs if he'll give us a benediction.

