

# **A History of Philosophy**

## **46 David Hume**

### **By Dr. Arthur Holmes of Wheaton College**

This afternoon, we turn to the third of the great English empiricists, Locke, Berkeley, and now Hume. I said English empiricists. I should have said British empiricists.

He's a Scotsman. And Hume, all coming, as he does, really only 50 years after John Locke. 1690 was John Locke's essay on human understanding.

And 1748 was Hume's inquiry concerning human understanding. And so in less than 50 years, a remarkable change takes place. From John Locke's optimism, almost rationalistic optimism, about the possibilities of empirical knowledge, to David Hume's skepticism about it.

In fact, prior to 1748, nine years earlier, when he was only in his 20s, as you see, born in 1711, the treatises came out in 1739. It was actually finished, I think, in 1736. At that early age, he completed the treatises concerning human nature, which is much longer than the inquiry.

There's an everyman edition, you know, those little compact blue volumes, two volumes of it. I was going to bring mine along, but discovered that one volume I'd loaned to somebody had never come back. So I was going to bring along the one-volume edition, which is the standard scholarly edition, and discovered I'd loaned that to somebody and it never came back.

So if you know of anybody who has Hume, with my name in the front, chase that person and get it back. I loaned them to people last year when there was a Hume seminar going on. But in any case, the earlier book, the treatises, is longer.

Hume comments that it fell stillborn from the press. And so apparently he wrote the inquiry in much shorter form, jazzing it up a little bit, in order to get the literary fame, which he confesses he was so anxious for. So the treatises are longer, fuller, and in talking about Hume, I'll be drawing on the treatises as well as the inquiry.

The number of topics that he omits from the inquiry, as we'll see, the emphasis there in our knowledge of external things, is really on our knowledge of cause-and-effect connections. A little bit on our knowledge of God, but in the treatises, he's dealing with knowledge of cause-effect connections, knowledge of space, knowledge of time, knowledge of matter, knowledge of minds, and a much fuller discussion of the metaphysical topics, which we noticed are of importance in both Locke and Berkeley. Now in both of these works, the treatises and the inquiry, his focus obviously is on epistemology.

This is the main concern of the Enlightenment period. Catch it in the titles of the works. John Locke, *An Essay Concerning Human Understanding*.

George Berkeley, *Principles of Natural Knowledge*. David Hume, *An Inquiry Concerning Human Understanding*. Take it back, an essay on human understanding.

And Leibniz in responding to... No, let's see, Locke is an essay. That's right. Hume is the inquiry.

And in responding to Locke, you may recall that Leibniz had written *New Essays on Human Understanding*. So in this period, this is the focus of attention. What are the possibilities for human knowledge? What sort of reach can human knowledge have in this age of reason, which, of course, is the age of scientific reason? What is the scope of scientific knowledge, in other words? And it's about this that Hume becomes quite skeptical.

Now, in the treatise, he takes it that the key to settling philosophical disputes is the study of human nature. The study of human nature. That's why the book is entitled *Treatise on Human Nature*, he'll say.

And he subtitles it to indicate that he's dealing with human nature by what he calls the experimental method. The word experimental then had nothing to do with hypotheses and confirmation. It referred simply to the appeal to experience.

So what he's trying to do is to provide an empirical account of human nature in relation to two issues, he says. Human belief and human action. Human belief and human action.

And in the light of that subtitling, it's significant that he doesn't say human knowledge. Because his main emphasis is on giving a descriptive psychology of human belief, and related to that of human nature as it affects ethics. Put that another way.

If we want to explain human belief according to Hume, we have to turn from rationalist explanations. We believe what can be proven. We believe proportionately to the objective empirical evidence.

Remember John Locke's evidentialist criterion. You have to turn away from that to an account of human psychology. Human nature leads us to believe.

There's a psychological account of belief. And similarly with regard to not just moral belief but moral action. We're led to moral action, again, not by the force of reasoning about ethical principles but simply by the psychology of human feelings.

Moral feelings that lead us to act. So in both cases, he's offering more of a descriptive psychology than he is a rational, logical proof or evidential justification. His complaint is that the obscurity of ideas misleads people like Descartes, Locke, Spinoza, and even Berkeley.

Now it sounds sort of odd to say the obscurity of ideas when Descartes and Locke were stressing clear and distinct ideas. His point is simply that ideas are not clear and distinct. And in that sense, he reminds me of a friend of mine some while ago who used to say when somebody said of an idea, well, it's perfectly clear to me, his response would be, well, I'm sorry, I don't find it so.

Because after all, a criterion of clarity and distinctness is immediately relative to how a person conceives the idea. It's person-dependent. And Hume does not find the ideas that Descartes and Locke hold to be clear and distinct to be so.

You will notice, as we get into his theory of ideas, that Hume, in place of talking of clarity and distinctness, talks of force and vivacity. Force and vivacity. Notice that those are affective criteria, not cognitive criteria.

It's not so much a matter of thinking with clarity but feeling with forcefulness. That becomes important. Now, that is the sort of thing he makes clear, then in the introduction to the treatise.

But in section one of the inquiry, he does something very parallel to it. And if you've been reading that section one, you may have noticed, I hope you noticed, that what he was doing was talking of types that he calls abstruse and, on the other hand, practical philosophy. And what he argues for, in the long run, is a mix of the two.

The ideal is some sort of mix of the two. Abstruse philosophy is the sort of thing in which Descartes and John Locke engaged. Its value in talking theoretically about ideas and knowledge and so forth, its value is in logical precision.

It's motivated by intellectual curiosity. But it provides no basis for morality, for knowledge of the external world, or for natural theology. That is to say, the rational, rationalist kinds of approach are impotent in grounding morality, grounding scientific knowledge of the external world, and grounding one's belief in God in rational proofs.

Abstruse philosophy, with that kind of logical demand, is of value only in mathematics. Only in mathematics. So, right at the outset, then, in that introductory section, what he is doing is proclaiming, announcing, his rejection of the Enlightenment spirit, the Enlightenment conception of knowledge, the rule of reason.

And in talking about practical philosophy, in contrast with this, he's talking about what guides action. Why we believe what we do. And so, he says, in talking of a mix of the two, be a philosopher, but be still a man.

Well, a woman, too. In other words, human nature, rather than the artificial demands of reason, is what should really characterize philosophy, an understanding of human nature. So, whether you start with the treaties or start with the inquiry, the way we have it in Kaufman, the beginning is the same.

He launches out by announcing, in effect, what he's going to do. Lay aside the claims of Descartes and Locke for human reason, and develop a psychology of belief. Okay, is that clear enough? Once you get a handle on that, I think you can see what Hume is doing.

Too often, unfortunately, people tend to talk about Hume and, for that matter, teach Hume, as if he only wrote the first four sections of the Inquiry, the Rule of Reason. And forgetting what comes next, Section 5, which has to do with what he calls the skeptical solution to these doubts. He's skeptical about reason.

How does he resolve the doubt? By developing a psychology of belief, which shows that belief isn't always voluntary, as Descartes had said, as Locke had said. You remember their attitudes. If there is insufficient evidence, withhold belief.

The will must not go ahead of the intellect. To which Hume is, in effect, responding. The will may not go ahead of the intellect, but you do.

But you do. Even if you haven't come up with any proof of the existence of an external world. Notice how you behave in the world around, as if it were thoroughly real.

Well, all right. That's my way of introduction. Now, the development that Hume gets into in talking about knowledge and belief, as you might expect against the background of Descartes and Locke, has to be introduced by talking about the theory of ideas.

And I suggest that here it's particularly important that you watch for where he disagrees with John Locke. If you've given Locke a careful reading, you'll have caught the differences. For that matter, differences not only from Locke, but from Berkeley as well.

Take Locke to begin with. Take Locke to begin with. You notice that Locke starts by talking of ideas.

Simple and complex. All right. Hume is quite happy to talk about ideas, both simple and complex.

The difference is that whereas Locke takes it that simple ideas are the original input to the consciousness, clear and distinct simple ideas, on the other hand, Hume inserts as the original input not ideas, but impressions. Impressions are the original stimuli with force and vivacity.

There it is, not clear and distinct, but forceful and vivacious. Force and vivacity. So forceful as to be irresistible.

So lively as to capture us. Forceful and vivacious. Now, his point is simply that an impression that an emotive, affective state, as it arises, arouses the consciousness.

And as it declines, gives place to an idea. So, an idea is the cognitive state that follows an impression, which provides you with a copy of the impression. Okay? A copy of the impression.

Now, take it, for instance, if there's a bright flash of light which dazzles you. What you experience initially is not a clear and distinct idea of a bright flash of light. What you feel initially is the hurt, the blinding force of it.

And if all of a sudden I yell at you, the initial impact is going to be physical, rather than, did I wake you up? It's going to be physical rather than conceptual, quite plainly. But it's most evident in those physical sensations which are associated with some degree of, what, shock, pain, whatever. But his point is what, when we get to Whitehead later on, he calls the primacy of causal efficacy in perception.

Except that Hume isn't prepared to call it causal efficacy. But it's the primacy of the affective, if you like, of the emotive, rather than the cognitive in human experience. Yeah.

The primacy of the affective or emotive. What happens if you're driving along the highway and suddenly something flashes in front of you? You see, it's not a clear and distinct idea. It's a reflex action, and the heart beats pretty fast.

So he is doing his descriptive psychology in this sense. Now the interesting thing is that while the impression leaves you with an idea, that idea, as it comes to mind, comes back to mind in memory, remembering the impression, that idea, remembered, also leaves its own impression. And that impression leaves its idea.

So that's what you have is this commingling of impressions and ideas. The initial sensation, the initial feeling, gives rise to an idea, which is a copy of it. The

impression of which is associated, the impression of which is desire, dislike, something of that sort.

You didn't like that emotive response. Memory again, or if you like, imagining something, also leaves an impression. So you have this whole strain of impressions.

And the word sensation, which is associated with the initial impression now rather than the idea, the sensation is, yeah, what you mean by a sensation in ordinary parlance. When somebody tickles you, and you say, " Hey, that's quite a sensation. So that the emphasis is on the physical, the emotional, rather than on the cognitive.

Well, this is one main difference from John Locke. And Hume uses the word perception to refer to that whole business. Perception.

Perceptions are not clear and distinct ideas. Perceptions are just states of consciousness. States of consciousness that begin with impressions and include ideas.

Now, a second departure from Locke is not so radical a change, but it is, I think, an advance over Locke. He talks about the association of ideas. After all, if we combine simple ideas into complex ideas, as we do, then he's going to become interested in the psychological process by which this goes on.

How do we gain ideas of substances? Ideas of relations? Ideas of modes of being? Contingent, necessary as the case may be. And he sees that there are three principles of association that are being used. I might say that at this juncture in history, the beginning of the 18th century, associationist psychology was going pretty great guns.

So what Hume is doing here is in line with the associationist psychology, where they try to find principles that associations follow. Well, the three principles of association that Hume comes up with are resemblance, contiguity, cause, and effect. So we seem to combine ideas, to relate ideas into more complex ones when repeated impressions and ideas are similar.

We combine them. And it's in that sort of way that I get my idea of a particular substance. How do I know that this is one of these so-called dustless dry markers? Well, the impressions I get of it are both the appearance and the sort of repulsive smell.

I had to get the repulsive in to get the effective term. The repulsive smell, you see, that's repeated. The same thing is repeated.

What I remember from last time, I got it again. And that resemblance develops the idea of a substance with ongoing identity. So it's as if a mental habit is being formed of thinking of this marker.

That way. The idea of substance. Contiguity, likewise.

If things are adjacent to each other, we tend to associate them. Spatially adjacent. Chronologically adjacent.

And so we get ideas of spatial relationships and temporal relationships. Therefore, of a location in space and a location in time. Now notice, these are particular locations.

Just like the marker is a particular substance. Because the complex ideas that I get are not ideas of some abstract universals. They're ideas of particulars.

Not abstract general ideas, but ideas of particulars. And if I do get ideas of markers in general, general ideas, again, it's because of resemblance that it does it. Now, when he comes to the relationship of cause and effect, the principle of cause and effect is a principle of association, that is, where the difficulty occurs.

That's the problem he points out in section four of the inquiry. Because it turns out that, as you try to describe empirically what we call cause-effect types of relationship, all we can observe are constant conjunctions, uniform associations. But we never have any observation of the force that is exerted, of causal power, of what he calls causal connections.

So that the uniformity of nature is an empirical generalization. But that A must cause B, it's a necessary cause of it, that's unknown empirically. So of these three principles of association, while they all work, inferences from the third to any necessary connections is invalid.

Although psychologically we come to believe that. And this is going to be the key for how we come to certain beliefs, like beliefs in material objects, external objects, belief in God, and so forth. Because we come to believe in cause-effect connections for which there is no empirical evidence, and for that matter no a priori knowledge.

So keep that in mind also, then, the association of ideas. Now that leads him in the third place with regards to Locke, which leads him to go one step further than Locke and formulate what has since become known as an empiricist criterion of meaning. An empiricist criterion of meaning.

Now he's not talking of a criterion of truth. Or of justified belief. He's talking simply of language, of what words mean, you see.

And if we're talking about factual meaning, reference to something, reference to something specific, naming something, describing something, then the criterion of meaning for an empiricist is going to be that the language must refer to some original, no, not original ideas of an empirical sort, but original impressions of an empirical sort. So look at page 100, no, take it back, 291 in Kaufman. 291, which is at the tail end of Section 2 of the Inquiry.

The last couple of sentences, in fact, are of Section 2 of the Inquiry. And notice what he says. The last three sentences.

All impressions, that is, all sensations, either outward or inward. Outward sensations, inward sensations. He talks of the outer sense and the inner sense.

All impressions, all sensations. Inward or outward. Strong and vivid.

The limits between them are more exactly determined. Nor is it easy to fall into any error of state with regard to them. When we entertain, therefore, any suspicion that a philosophical term is employed without meaning or idea, as is but too frequent, we need but inquire from what impression is that supposed idea derived.

And if it is impossible to assign any impression, this will serve to confirm our suspicion. By bringing ideas into so clear a light, we may reasonably hope to remove all dispute that may arise concerning their nature and reality. Do your ideas have any basis? Basis in experience or not? So what you try to do is to take a complex idea, analyze it into the simple ideas, and ask from what original impressions do these simple ideas come.

And that's the acid criterion. Now, it's this empiricist criterion of meaning which he uses with such effectiveness. When he talks of the idea of necessary connection, there's no original impression of necessary connection, so the idea has no meaning.

When he's talking of a miracle, he takes it that the idea of a miracle is something unrelated to any original impression, therefore impossible to ascertain. The idea of anything abstract, abstract ideas, real universals, in the same situation again. This goes, it turns out, even for the concept of mind as a substance, as an entity.

Of soul, you remember, as we were talking about it a bit last time. Because he looks at that, well, we have impressions of our own mental states, of our wishing and hoping and feeling, but where's the impression of mind's substance, soul's substance? It doesn't leave any impressions. So there is no empirical point of reference that's involved in talking that way.

Now, you might say, well, why didn't Berkeley see that? Or Locke? If that mattered, Descartes? Well, Descartes had started by saying, no, we don't have any direct, clear, and distinct idea of the mind, but we have a notion. A notion. A notion that it's there.

So that when Descartes goes through his I think, therefore I exist, a thinking thing, the notion he has is of that continuing I that is the agent that's thinking, and I sort of catch me in the act when I say, I think, I exist, I got me. And Locke and Berkeley follow that line of thought, but not so Hume. Not so Hume.

What is the I? If it's not the substance, well, what is it empirically? And this gets to the question of personal identity, and in the Treatise, he has one chapter that deals with the notion of the mind's substance. He has another chapter that deals with the concept of personal identity. And if we have no basis for affirming the existence of the mind's substance, then the question of personal identity has to be addressed.

What do we know of personal identity? And he says all that we know of personal identity is through memory. You know, search yourself. If you're looking for some empirical basis for talking about the I, what is the I? What is your I to you empirically? Now, plainly, it's not the body as such.

Because you are still you, even though you trim your fingernails and toenails, and get your hair cut. Losing that much body mass doesn't affect you. And now we know you can get along with transplants, even heart transplants.

And people are writing philosophical science fiction about whether you would be you if you had a brain transplant. You see? Yeah, there are all sorts of fascinating literary works building around that. But as far as humor's concerned, the body is irrelevant because the body is it, not I. And you sense that if you see yourself in a photo, you see yourself in a video.

That's not the I that I know. I can objectify that. No, the I that I know is the inner I I know through what they call reflection.

You see? The I that was the thinking thing on such an occasion. The feeling thing, another occasion. The speaking thing, on another occasion.

The I that I experienced inwardly. You see? And so personal identity for Hume really consists in this whole stream, strain of ideas and impressions. Sensations and reflections that, in my memory, I trace all the way back along complex streams of ideas and impressions that were mine.

You see? So he says in the final analysis that the self is like a theatre in which ideas appear and pass. One after the other, fleeting as they come and go. That's all there is to identity.

Then he adds another sentence by way of qualification. Don't let this misunderstand you. The I is a stream of ideas, not the stage on which they stand.

Not the building of a theatre, just the appearances. So when it comes to the nature of the self, he's plainly only a phenomenalist, not a realist. Only a phenomenalist.

We can only talk about how the self appears, not what the self is. Well, I think that, which he develops right at the end of Book Two of the Treatise, I think that is perhaps one of the clearest examples of how this empiricist criterion of meaning works. What else do we have to refer to empirically in talking about the self? Well, as you probably are aware, it's this empiricist criterion of meaning which was adopted and updated by 20th-century logical empiricists.

And we'll be running into it again when we get to A. J. Ayer and his book *Language, Truth and Logic*, which we'll be reading on in the spring sometime. Oh, to be in Ayer when April is here. It'll be just about that time when some of us would say, Oh, to be in England now that April's here, it'll be A. J. Ayer instead.

And he, after all, is English. All right, any comments there about Locke and how he goes, I take it back, Hume and how he goes beyond Locke? Okay. All right, now, still with his theory of ideas, how does he compare with Berkeley? How does he compare with Berkeley? Well, I think the first observation is an obvious one, that he agrees with Berkeley's nominalism.

He agrees with Berkeley's nominalism. That's obvious, isn't it? That if we're going to be strict empiricists, tracing everything back to impressions, then there are no empirical impressions of abstract entities or of abstract ideas. Our ideas are all of them about particular qualities that are seen or felt.

And words only become general names by customary usage that uses them indiscriminately between similar particulars. We associate the particulars by virtue of their commonalities and use one word to refer to them all. But we never abstract any concept of a universal essence.

So, he agrees with Berkeley in that regard. And that attitude of Hume's towards abstract ideas comes out in his discussion of space and time, which is in part two of the treatise. It's not in the inquiry.

He maintains that we have no empirical idea, because no ultimate impression, of infinite space or infinite time. And when people like some of the pre-Socratics talk of infinite divisibility of particles of matter, on and on and on, well, if we have no concept of infinity, we can't think with any clear idea of infinite divisibility. And so those notions associated with traditional discussion are out.

All we can think of are finite spatial relations and temporal relations, just that. There is no abstract idea of space, no abstract idea of time, no abstract idea of substance. Only complex ideas of particular substances are a collection of simple ideas.

That's all. No idea of existence, only of particulars that we think, as we say, exist. But you don't have a conception of existence, no impressions of existence.

You get impressions that have qualities of their own. Existence is not a quality of an idea. And that is going to be significant when we get to Immanuel Kant, and he talks of the ontological argument, you see, the idea of a perfect being such that it must necessarily exist.

Well, if existence is not a concept, you cannot predicate it of anything. It's not a proper predicate, as Kant says. And so there's no proof there in an ontological proof.

So, by the time you get through that orientation to Hume's modified theory of ideas, you can see pretty well where he's going. And I think it really begins to seem as if the rest is simply a mopping-up operation. At least the rest of what he's doing about knowledge and belief and metaphysical and theological topics.

Notice that his basic question is not, can you prove such and such, but what in experience are you talking about? The basic question is one of meaningfulness, empirical meaning, rather than truth. Unless you know what empirically is being referred to. How can you check the truth of a statement? Well, question, comment there.

Yeah. It seems to me that the empiricist criterion of meaning leads naturally to nominalism for someone who's an empiricist, because then you can't have the idea that words are actually ideas. Did you get that? Did you hear that question, John? It seems that the empiricist criterion of meaning leads naturally, I think you mean logically, to nominalism.

Yeah, as long as you're maintaining an empiricist view. Yeah, I think you're completely right. My question then actually is, I guess I'm wondering, when did the idea that words are ideas come about? Did that not come about until Wittgenstein challenged this? When did it come about that words are ideas? Or representing something other than.

Yeah, representing something other than. Well, Wittgenstein is also, I think, a nominalist. In the sense of repudiating abstract ideas.

John Locke, of course, is an empiricist who's not a nominalist. And perhaps your question is whether there are other empiricists, no, whether there are other

empiricists in addition to Locke who are not nominalists. Get it? What you may be getting at is this.

Was Locke mistaken about the logical compatibility of empiricism and conceptualism? Does an empiricist always have to be a nominalist? Does it necessarily follow? Well, yeah, I mean, I think it does with the empirical criterion of meaning. I guess I'm wondering, when was this empirical criterion of meaning finally challenged so that it might open up more logical grounds for empiricism? Well, it was challenged in the, or somewhat in the 40s, but challenged in the 50s. And by the 60s it was pretty well passe, 1960s.

But its challenge was not so much from the standpoint of conceptualists. As opposed to those who claimed that the empiricist with the empiricist criterion of meaning is not being empirical enough about the diversity of language. And that, in a way, was Wittgenstein's point.

He would say that language plays other games than simply the game of naming, pointing, denoting, and referring. And what's involved in that is the recognition that language doesn't just consist of isolated words. None of the syntactical structures.

But language is a social function. A cultural activity. A means by which, in the culture, we do all sorts of things.

In the language culture, you see. So the oversimplification there. So I think that criticism is pertinent.

There was another line of criticism which I think is also very pertinent. The way the logical positivists stated the criterion was to the effect that any factual statement, in order to have empirical meaning, must, in principle, at least be empirically verifiable. Now, is that a factual statement? If so, is it empirically verifiable? You know, it becomes obvious that it's not a factual statement that's empirically verifiable.

And so the positivists had to back up and say, no, this is a methodological stipulation on our part. And in saying that, they've really shifted ground and said we are going to act as if empirical reference is the only kind of meaning. No, I think Locke's position is defensible if we recognize that the carriers of abstract ideas are not mental images.

Locke seems to think, with his notion of a clear and distinct idea, that what we carry in our minds is mental images of something. An image of the blueness of your shirt, or whatever. No, when it comes to thinking abstractly, we're not imagining particular qualities.

We're thinking verbally. And it's words which are the vehicles of non-empirical thinking. Thinking in abstraction from.

So, if you want to use the phrase, one of the games that language plays is abstract thinking. Which is most noticeable in the way in which mathematics works. Or a dictionary works.

Though that kind of abstract thinking, where the statements are not factual statements but analytic statements, is not the only one, I think. I think poetry is another kind of abstract thinking. Where the words of the poet conjure up whole general ideas without picturing particulars.

Sometimes, by picturing a particular, but other times just the word itself, gains symbolic significance. Symbolism. Well, that's obviously a crucial question.

And when this business came up in the 20th century, and we'll talk about that when we get to it, two of the crucial issues involved were what does this do to moral language and what does it do to religious language. And those were the two key issues in the 1950s. Okay.

Turn our attention then to the next stage in the development, having to do with knowledge and belief. And here, let's simply remind ourselves that knowledge consists of propositions. Of propositions that affirm something about the relationship between ideas.

A proposition has a subject and a predicate. Involves at least those two terms, two ideas. And so there are two kinds of propositions, says Hume.

Two kinds that have become known ever since are analytic and synthetic. Analytic propositions have to do simply with the logical relation of ideas. Logical relations of ideas.

And so if such propositions are true, they're called logical truths. Logical truths. The synthetic has to do with matters of fact.

And so these are called factual truths, if they're true. Now, logical relations of ideas have to do simply with the ideas, not with what they represent. So if we say, for instance, that a bachelor is an unmarried male.

We're talking about the word bachelor and its meaning, unmarried male. We're talking about the language. And the meaning of these terms is such that they are logically equivalent.

So you're simply analyzing the logical relationship between the two terms. The same is true with any definition. And the most obvious example is in mathematics.

3 plus 5 equals 8 is talking about the logical relationship between the terms 3, 5, and 8. So here we're talking simply about the language that is being used. Or if you like, about the ideas. We're not purporting to talk about anything other than impressions.

We're not purporting to talk about anything external. Whether or not there are any remaining bachelors in this room, the fact is that all bachelors would be unmarried males. On the other hand, of course, if you say, well, bachelors are miserable, that would be a factual statement.

Now, Hume spends very, very little time on relations of ideas. That is most evident in mathematics. And he wants to say nothing further about that than that's where abstruse philosophy, abstruse reasoning has its value.

And it's good mental exercise and foot drill for the rest of us who are not in mathematics. But his concern is with matter-of-fact statements where the contrary of such a statement is logically possible. It's not logically possible to have a bachelor who's married.

It is logically possible to have a bachelor who is not miserable. So the contrary of a matter-of-fact statement is logically possible. They are falsifiable.

So then the big question, and the question where the empirical criterion of meaning comes into play, has most to do with knowledge of matters-of-fact. And it's that which he is going to question. Now, his line of argument for this is what develops in that crucial section four of the inquiry.

That crucial section four. And I see that this clock is slow. Time's run out, so don't hold your breath.

But we'll get to that crucial section next time.