

Lecture 1: The Nature of Arguments

Lecturer: Right, let's get started. Welcome to everybody here and welcome to everyone on the podcast. Delighted to see so many of you – it's very nice to know that so many people want to do critical reasoning.

Tell me, why do you want to do critical reasoning? Give me some feeling for what it is that you want to do.

Female: So that I can voice my opinion more clearly.

Lecturer: So that you can voice your opinions more clearly, or more convincingly, perhaps?

Female: More convincingly.

Lecturer: Yes, because it sounds to me as if you would probably do it very clearly...

Female: Convincingly.

Lecturer: But convincingly is important, isn't it?

Male: To win arguments with my children.

Lecturer: Yes, well, you can forget that. Children don't play fair, haven't you noticed that? But yes, okay, I understand the motivation.

Male: So that I can understand arguments being put forward. I can understand [a politician] being interviewed, and I think, "He's right, yes, I agree with that, and no mistake."

Whereas I know we can't all be right.

Lecturer: Right, that's interesting. That makes me think that you'll probably be quite good at critical reasoning because you listen to an argument and you think, "Yes, that sounds good."

But then has anyone had this experience: you listen to the argument making the opposite case and you think, "Oh, yes, that sounds good, too"?

Everything I read I'm convinced by, at least momentarily, which is why, at some point, you've got to stand back and look at the arguments in their own right and as yourself, "Okay, which one of them is really the argument?" Good.

Female: So that I can quickly see when someone's trying to pull the wool over my eyes.

Lecturer: So you can quickly see when somebody's trying to pull the wool over your eyes. I can't promise to show you quickly but if you practice the things that I tell you, you will inevitably become quicker at seeing this. Yes.

I wonder how often people actually try to pull the wool over people's eyes?

Female: Politicians do.

Lecturer: Politicians? Right. Just two more and then we'll move on.

Male: To be conscious and discern what is a valid argument and what is an invalid argument.

Lecturer: Okay, to be able to see – can I change that to “good argument and not good argument,” and in week three you'll see why I'm doing that. Last one.

Female: I want to write a thesis and I want to give good arguments –

Lecturer: Oh, you're writing a thesis and you want to give good arguments?

Female: Yes.

Lecturer: One of the reasons that you'll look at critical reasoning is because you want to evaluate the arguments of others. Another one, of course, is because you want to make sure your own arguments are good.

Of course, writing a thesis you certainly want your arguments to be good.

Good. (Slide 3) So in these six lectures we're going to be covering these topics. Notice that I've reversed these two from the leaflet you first got.

There's something at the back which I think does give you an outline with the reverse that I have reversed. But it's not terribly important, you're getting exactly the same things. Okay, have you all read that?

In today's session, we're going to look at this lot, so we're going to look at what argument actually is at the very nature of an argument. We're going to distinguish arguments from other uses of language, because there are many things that look like an argument but are not in fact an argument.

We're going to look at some basic terminology, most of you probably know it already, but it doesn't do any harm to look at it explicitly.

We're going to start on the analysis of arguments, but we'll be doing a lot more of that, I think it's next week or in week three. We're going to consider why argument is important.

You might think that that's obvious, but never mind, it doesn't matter having a closer look at it; and we're going to briefly consider the nature of truth and reason, where you wouldn't expect to come to a philosophy lecture and not give a little bit of thought to the nature of truth and reason, I hope.

We're going to start by looking at a clip of the Monty Python's famous argument clinic. To do this, I've got to get out and get in here somewhere. Here we are. I'm sure you're all familiar with this but...

"M: Come in.

A: Ah, Is this the right room for an argument?

M: I've told you once.

A: No you haven't.

M Vibrating: Yes I have.

A: When?

M: Just now.

A: No you didn't.

M: Yes I did.

A: You didn't

M: I did!

A: You didn't!

M: I'm telling you I did!

A: You did not!!

M: Oh, I'm sorry, just one moment. Is this a five minute argument or the full half hour?

A: Oh, just the five minutes.

M: Ah, thank you. Anyway, I did.

A: You most certainly did not.

M: Look, let's get this thing clear; I most definitely told you.

A: You did not.

M: Yes, I did.

A: You did not.

M: Yes, I did.

A: You didn't.

M: Yes, I did.

A: You didn't.

M: Yes, I did.

A: Look, this isn't an argument.

M: Yes, it is.

A: No, it isn't. It's just contradiction.

M: No, it isn't.

A: Yes, it is!

M: It is not.

A: It is, you've just contradicted me.

M: No, I didn't.

A: Oh, you did!

M: No, no, no, no, no.

A: You did just then.

M: No, nonsense!

A: Oh, this is futile!

M: No, it isn't.

A: I came here for a good argument.

M: No, you didn't; you came here for an argument.

A: Well, an argument's not the same as contradiction.

M: It can be.

A: No, it can't. An argument is a connected series of statements to establish a definite proposition.

M: No, it isn't.

A: Yes, it is! It's not just contradiction.

M: Look, if I argue with you, I must take up a contrary position.

A: But it isn't just saying, "No it isn't."

M: Yes, it is!

A: No, it isn't!

A: Argument is an intellectual process. Contradiction is just the automatic gainsaying of anything the other person says.

M: No, it isn't.

A: Yes, it is.

M: Not at all.

A: Now look.

M: (Rings bell) Thank you. Good Morning.

A: What?

M: That's it. Good morning.

A: I was just getting interested.

M: Sorry, the five minutes is up.

A: That was never five minutes!

M: I'm afraid it was.

A: No, it wasn't.

M: I'm sorry, but I'm not allowed to argue anymore.

A: What?

M: If you want me to go on arguing, you'll have to pay for another five minutes.

A: But that was never five minutes, just now. Oh, come on!

M: (Hums)

A: Look, this is ridiculous.

M: I'm very sorry, but I told you I'm not allowed to argue unless you've paid!

A: Oh, all right. There you are.

M: Thank you.

A: Well?

M: Well what?

A: That was never five minutes, just now.

M: I told you, I'm not allowed to argue unless you've paid.

A: I just paid!

M: No you didn't.

A: I did!"

[End of clip]

Lecturer: Right, I think that's quite enough. Good one, isn't it though?

I forgot to tell you to keep an eye out for two distinct definitions of argument. Did anyone get them?

Male: Yes, academic process.

Lecturer: One's an intellectual process, I think he said, but he said a little bit more about what that means. Did you get that? Don't worry if you didn't.

Female: Connecting series' of statements.

Lecturer: He said something about a connected series of statements, that's right. There was also another definition of argument, did anyone get that?

Male: Contradiction.

Lecturer: To contradict each other, exactly. Well done. That's right. So M says, I've forgotten which one M is now, "But if I argue with you, I must take up a contrary position. And A says, "An argument is a connected series of statements to establish a definite proposition."

Both of them are right, and what this tells us is that in English, the word "argument" is ambiguous, it has more than one meaning.

One meaning corresponds very well to what M says, and the other one corresponds very well to what A says.

We're not going to use quite the definitions used in the argument clinic. Here are the definitions we're going to use. (Slide 9)

Argument Sub 1 occurs whenever two people disagree and each tries to persuade the other of a case, so I daresay your children do this just before they beat you in arguments. Is that right?

The other one: Argument Sub 2 consists in a set of sentences such that one of them is being asserted on the basis of the other(s); it might be just one or there might be more than one.

The two definitions capture the difference between arguing *with* someone and arguing *for* something.

Can you tell me which one is the one that we're interested in in studying critical reasoning? [Cross talk 0:08:56].

Arguing *for* something rather than arguing *with* someone. Our interest is mainly in Argument Sub 2 as I've been calling it, and this is because to argue well *with* someone, it's necessary to argue well *for* something. You can't argue well with someone until you know how to argue for something.

So our definition of argument is this (slide 13): it's a set of sentences such that one of them is being asserted on the basis of the others.

So one of them is being asserted – that's quite important, and the other important thing is that it's on the basis of the others, so the others are being used as grounds for the one, or the others are being given as *reasons* to believe the one.

Let's have a closer look at that definition. The first thing we need to know is what counts as a sentence that's being asserted. Anyone of a certain age, people around my age, at school we were probably taught grammar – that may not be true of people who are quite a lot younger – so we probably know about assertoric modes and forces and moods and things like that.

But not everyone does, so let's revise this. (slide 15) We do many different things with the sentences of language. If I were to draw a model of a language, it would look something like this (drawing on flipchart) . It would be a set of concentric circles like so, and in the middle would be strict and literal truth conditions, or meaning.

Then there'd be *force* and then there'd be *contexts* out here, and *tone* in here.

For example, let's say Desmond asks me "Is he a good philosopher?", and I say "His handwriting is excellent". What have I said?

Female: He's not a good philosopher.

Lecturer: That he's not a good philosopher, exactly so. But notice that what I said doesn't have the strict and literal meaning, "He is not a good philosopher", does it? So how did you all understand that when I used something that had a completely different meaning?

Answer: I used something the meaning of which was completely wrong in the context, and that alerts you to the fact that I'm doing something odd with the meaning, do you see what I mean, and because you speak English you're able to pick up on it.

What's your name, sir?

Male: Alan.

Lecturer: Alan has come late to every single lecture and in the fourth lecture he comes in again, slams the door and rustles to his seat, and I say to him, "Hello, Alan, early again?" What have I said?

Female: That he's late.

Lecturer: I'm using sarcasm, aren't I? The *tone* of what I've said here – I do apologise, Alan, this is so unfair of me – but the tone of what I've said has inverted the meaning of this case, hasn't it?

What about if I say, "I'm not angry"? Again, you get the meaning of what I've said, well, actually it's not the meaning there, it's the tone on its own, isn't it?

So if we have strict and literal truth conditions like, "The door is shut," I can, in English, do lots of different things with those strict and literal truth conditions.

For example, I can ask questions by saying, "Is the door shut?" Or I can issue commands by saying, "Shut the door." I can do it in a tone of sarcasm or irony or anger, or anything like that, and I can do it in a context where if we're out on Dartmoor or something like that, I would have to mean something other than *shut the door* by "Shut the door."

So we can do extraordinary things with language, and our meaning is conveyed by all sorts of things other than the meaning of the words that we use.

We do different things with sentences: we can ask questions; we can issue warnings; we can provide reassurances; we can issue commands.

We signal which of the things we're doing in all sorts of ways, but a standard way in which you know that I'm asking a question, for example, rather than asserting a belief, is by the force of what I'm saying.

But the standard force of our sentences is assertoric force, or assertoric mode. If I assert a sentence, and let's assume I'm being sincere, that I'm not trying to pull the wool over your eyes or whatever, if I assert a sentence, then I'm expressing a belief.

I would utter a sentence that I believe to be true, and the sentence that I'm uttering will be a declarative sentence. So when we're arguing with each other, the sentence for which

we're arguing will be uttered in assertoric mode, it will be being asserted. The person using the sentence, if he's sincere, will be expressing a belief.

So all these sentences (slide17) are in assertoric mode, they're all declarative: "The chair is blue"; "I'm happy"; "Nothing travels faster than the speed of light in a vacuum."

Another rather important distinction is, notice the quotes on these sentences. In each case the quotes show us that the sentence is being *mentioned* rather than *used*. In other words, I'm talking *about* the sentence, I'm not *using* the sentence with its normal meaning.

The effect of the quotes is to show that we're talking about the sentence rather than using it. So if I write "chair" and I write: chair, the first one has quotes and the second doesn't, I can, of say this one, ("chair") that it has five letters. It makes sense to say "chair" has five letters but only if there are quotes around chair.

If I say: "chair has five letters", without the quotes, (of course it doesn't work in spoken English). But if I say: "chair has five letters", can you see that that's ungrammatical, it doesn't have the right meaning, if I say ""chair" has five letters", then it works.

The difference is that the quotes have the effect of showing that I'm talking here about the word "chair", whereas the lack of quotes here say I'm talking about the thing: chair. Do you see?

Don't worry, again, if this is new to you, because it'll come up nearly every week so we'll revise this again.

So a sentence used in assertoric mode, a sentence that's asserted, a declarative sentence used sincerely, is used to express a belief, something that the person believes to be true.

(Slide 18) The test for whether a sentence is declarative or not is if it makes a grammatical question when substituted for X in this frame: so "is it true that X", if you can put X in there and make it a grammatical sentence, you'll know that the sentence is declarative. Let's do a few of those. (Slide 19)

What about the first one? Is that a declarative sentence? Put your hands up if you think it is, yes.

Good. Those who said yes is right because we can say that, "Is it true that the retail price index has fallen?" That's a perfectly grammatical sentence, isn't it?

So that fits the frame test and shows that that's a declarative sentence. What about, "We need tomatoes"? Put your hand up if you think "yes".

It's a bit harder, isn't it? It is true that we need tomatoes?

Female: No.

Lecturer: I'm not asking the question, I'm mentioning the sentence rather than *using* it. Do you see where the quotes become important? Will I have to do that every time...

Is it true that we need tomatoes? That's a perfectly grammatical sentence, isn't it? Isn't it? Does anyone think not? Is it true that we need tomatoes?

You probably wouldn't ask it like that if you were really asking it. You'd say, "Do we need tomatoes?" or, "Do we really need

tomatoes?” or something like that. But I think that’s a perfectly reasonable declarative sentence. Anyone disagree? No.

What about, “Are you ill?” Put your hand up if you think that’s a declarative sentence.

You’re right, it’s not. Because, “Is it true that are you ill?” isn’t a grammatical question, is it, because that’s already a grammatical question. You can’t put, “Is it true that,” in front because questions aren’t true or false, are they? It’s only statements or sentences that are true or false, not questions.

So if you say, “Is it true that are you ill?” you’re saying something nonsensical, something that doesn’t really have any meaning at all.

What about this last one, “I hereby resign from the committee”? I can’t remember what I said about this one.

Put your hand up if you think yes. Okay, put up your hand if you think no. I think both answers are perfectly reasonable.

What I’ve actually said on the answer to this I think it’s debatable, because what this is, is a sentence that’s called a “performative”.

Sometimes when we use sentences we do it to actually perform an act. So when you said to your spouse as you got married, “I hereby plight my troth,” or whatever it was you said, that was actually the act of marrying them.

Or when the vicar said, “I hereby pronounce you man and wife,” he was actually *marrying* you, he was doing something, he wasn’t just expressing a belief. In the same way, “I hereby resign from the committee,” isn’t just an expression of a belief that you are resigning from a committee, is it? It’s also the *action* of resigning from the committee. So it’s a difficult one, that one.

What about this one? Put up your hand if you think no. Good, you're getting it. That's another question, so, "Is it true that when did you see jazz?" is not a grammatical question, is it?

What about, "Close the door"? No? "Is it true that close the door?" doesn't work, does it? What about, "Don't worry"?

Male: No.

Lecturer: No, again. So you can see that the frame test will always give some indication, maybe not always conclusive, because that one's still debatable, whether something's the expression of a belief or not.

Any questions about that before we move on to the next thing we need to look at? Any questions about an assertion or a declarative sentence or expressing a belief? No? Good.

(Slide 20) The second thing we need to look at it if you remember, our definition of an argument is: a set of sentences such that one of them is being asserted on the basis of the others.

We're talking about sets of sentences here, and it's very important that an argument is *not* a single sentence – it must be a set of sentences.

Have a look at this argument and tell me what you think of it, and I'll read it out for the sake of the people on the podcast, so sorry if I bore you to tears.

(Slide 22) Jim says, "Nothing travels faster than light in a vacuum," and Lynn says, "But that may not be true. I've heard that neutrinos travel faster than light in a vacuum."

Jim says, "Nothing travels faster than light in a vacuum," and Lynn says, "But what about that experiment they did in CERN? Didn't they show it may not be true even though it's part of Einstein's theory of special relativity, and even though physicists have believed it to be true for over 100 years?"

Jim says, "Nothing travels faster than light in a vacuum," and Lynn says, "So you keep saying, but have you heard of the experiment or not? I agree that the chances are high that something was wrong with the experiment, but didn't the people announcing the experiment say that they wouldn't be announcing it if they hadn't checked for errors and found none?" and Jim says, "Nothing travels faster than light in a vacuum."

What's wrong with Jim's argument here? [Cross talk 0:22:28].

It isn't an argument, is it? You'd want to batter him over the head if that's how he argued with you. At least some of you know, Lynn is wrong here; there was quite a lot of publicity about the fact that those experiments were shown to be wrong.

But if she hadn't seen that, and actually the publicity for the fact that the findings were shown to be wrong was nowhere near the publicity for the fact that the findings had been put out there in the first place.

So somebody could easily have missed the fact that it was shown to be wrong. If Jim, who knows that the experiments have been shown to be wrong, argues like this, Lynn can be completely forgiven for not accepting it.

All Jim is doing here is asserting a belief of his, and maybe Lynn's in love with him and therefore, if Jim believes P, she believes P, but this would suggest not. Anyway, that's a very bad argument: Jim believes P, therefore P.

Jim is giving Lynn no reason at all to accept his belief, and we'll talk a bit more about that later. There's a question over here.

Female: Jim sounds very infantile, it's the way little children...

Lecturer: It's the way little children argue, yes. One of the ways in which you can argue Sub 1 with someone is by beating them over the head; you may get them to say they believe you or they agree with you. Whether they do agree with you, of course, is a different thing entirely.

But yes, Jim is not making an argument here, whereas Lynn is, isn't she? She's giving reasons for thinking that neutrinos travel faster than light in a vacuum.

Jim isn't arguing well because he's merely asserting the same sentence over and over again, and the fact that he's probably right, in other words the sentence he's asserting is true, is irrelevant; he's never going to persuade anyone of anything until he offers *reasons* for the belief that he's expressing.

To offer reasons for his belief would be to make an argument of the second kind.

Do you see they were having an argument of the first kind there, but Jim at least wasn't putting an argument of the second kind, and you can see that you have no reason whatsoever to believe him.

So we argue *only* when we assert a declarative sentence and we offer reasons for believing that sentence. We've got to offer reasons as well as the simple assertion.

So an argument consists in at least two sentences or a set of sentences, one of which is being asserted on the basis of the others, not just one sentence on its own. You cannot get an argument out of one sentence.

(Slide 26) But here's a complication. I had a dress on and I went back to change just to make this a bit more convincing.

Marianne always wears jeans on Mondays, and it's Monday today, so Marianne will be wearing jeans.

Okay, is this a declarative sentence?

Male: Yes.

Lecturer: It is. But it's a single sentence, isn't it? There's only one sentence here but this seems to be an argument, doesn't it? Anyone think not?

Female: It just looks like a statement to me, it doesn't look like an argument of any kind.

Female: Unless somebody engages you in disagreeing with it, in which case you will have to think, "Why not true?"

Lecturer: Okay. I'll tell you what. I think you're wrong about that and I'll be telling you in a minute why I think you're wrong, but you might continue to think you're right after I've said it, in which case come back to me and say. Is that right?

Male: Does the word “so” make it into an argument?

Lecturer: The word “so” doesn't make it into an argument but I completely agree with you if you're saying that the word “so” indicates an argument, I agree with you.

Female: A conclusion –

Male: It's two statements –

Lecturer: It indicates a conclusion, exactly, yes. Sorry, what were you saying, sir?

Male: It's two statements in the one sentence.

Lecturer: Okay, you're saying that there are two sentences in the one sentence, we'll have a look at that in a minute.

Male: No, two statements.

Lecturer: Two statements.

Female: Also, if you took “and” out and put a full stop, you've got more than one sentence that says exactly the same.

Lecturer:

Good, well done, this is exactly right. Consideration of that particular case where you had one sentence that appeared to some of us to be an argument shows that we've got to distinguish between *simple* sentences and *complex* sentences.

It is a simple sentence, it's a sentence the parts of which are *sub-sentential*. There's a lovely word for you, you can take that home and use it for your children, that'll impress them.

Okay. "John loves Mary". That's a simple sentence. It has parts. We know it has parts because if you move the parts around and say, "Mary loves John", you've got a completely different sentence, haven't you, a sentence with a completely different meaning but which is constituted of the same parts.

So every single part of that sentence is subsentential. No part of the sentence is itself a sentence, is it?

So these are *simple* sentences, or sometimes you'll hear me say "atomic sentences", they're atoms of sentences, you can't split them up and find more of the same sort of thing.

So these are atomic, or simple sentences, and a complex sentence is a sentence some parts of which are themselves sentences.

So "John loves Mary and Mary loves John" is a single sentence, isn't it? You can try the frame test and you'll see that it's a declarative sentence, it expresses a belief, a very happy belief.

But it's made up – the parts here are sentences, there are two sentences there, connected by what we call a "sentence connective" or a logical constant, so the word "and", so there are lots of different ways of combining sentences into complex sentences.

I could say, “If John loves Mary, then Mary loves John.” which is sadly not necessarily true we all know. Or I could say, “John loves Mary or Mary loves John,” one or the other, not both.

Or I could say, “John loves Mary if and only if Mary loves John.” There are lots of different ways of combining sentences into complex sentences, but what’s important is that you’ve got a complex sentence when you’ve got a sentence some parts of which are themselves sentences. Okay, are you with me?

If we go back to the argument we had before...or rather when I said that a single sentence is not an argument, I meant that a single *simple* sentence isn’t an argument. It can’t be an argument. Can anyone tell me why it can’t be an argument?

Female: Isn’t it a conclusion?

Lecturer: Yes, it might *be* a conclusion, of course. In other words, it might be an assertion. It’s because there are no reasons given for it.

You’ve got to have at least two sentences to make an argument, because you’ve got to have one sentence that’s being asserted and the other sentence that’s being offered as a reason for believing that one.

So a single *simple* sentence can’t be an argument. But a single *complex* sentences might be an argument, and it’s going to be an argument only if it can be analysed into a set of sentences – more than one sentence – that are related to each other in the right way.

What is the right way? How do sentences have to be related in order to be an argument?

Male: Well, they might have “because” between.

Lecturer: That wouldn't necessarily make them an argument, no. Think back to the definition I gave you of “argument”. The answer to this question comes straight from that definition.

Male: The subsentences have got to be relevant to each other.

Lecturer: I don't think I had anything about relevance in my definition. This is where it'd be useful if you had the hand-out, wouldn't it? This is why you haven't got the hand-out.

Female: Sorry, if you link them by putting in “and therefore”, you've got a logical conclusion.

Lecturer: What would “and therefore” or the “so” or the “because” or whatever indicate? [Cross talk 0:31:32]. Can you put your hands up?

Male: You're justifying what you said.

Lecturer: Yes.

Female: Yes, because they support each other.

Lecturer: Good. Yes, exactly so. The definition of argument, and I now wish I had it again, or maybe I do. To make an argument, one sentence in the set must be being asserted on the basis of the others. (Slide 33)

That's the relation between the sentences in an argument. Any set of sentences that aren't related in that way are not arguments, and we'll do some exercises on this in a minute so we get more of a feel for what it means.

But in order for two or more sentences, any set of sentences to be an argument, one of them must be being asserted and the others offered as reasons for believing the one. Okay, any questions about that? No? You sure? Okay.

(Slide 34) So here are two complex sentences, we're going to have a look and see if they can be analysed into arguments, and then we might go back and have another look at the "Marianne's wearing jeans..." da-da-da.

Here's one: "The mail is always late when it rains, and it's raining, so the mail will be late again".

The second one is: "If it's summer, then the bees will be pollinating the flowers".

Let's have a look at the first complex sentence and ask: is there a sentence that's being asserted on the basis of the others?

We're taking the definition of an argument and we're asking of this particular complex sentence whether it fits the definition of the argument, whether there's any subsentence, simple sentence within the complex sentence that's being asserted on the basis of the others. Well, is there?

Female: Yes.

Lecturer: Good, you're absolutely right. Put up your hands if you think you know what that sentence is. Go on, you were first. Which sentence is being asserted on the basis of the others?

Okay, so, "The mail will be late again" is being asserted, isn't it? You say, "Oh, the mail will be late again." There it is, it's being asserted on the basis of the other sentences that make up this complex sentence.

So the complex sentence is made up of lots of simpler sentences, and that's one that's being asserted on the basis of the others. So immediately you know that you've got an argument here.

Which sentences are being offered as a basis for the assertion of "The mail will be late again"? Put your hands up. Priscilla?

Female: The mail is always late when?

Lecturer: The mail is always late when it rains. Good. Jill, is it?

Female: Linda.

Lecturer: No, Jill is there. Linda.

Female: And it is raining.

Lecturer: "It is raining". So there are two sentences on the basis of which the other sentence is being asserted. So, "The mail is always late when it rains," and, "It is raining".

So the sentence that's being asserted on the basis of the others is called the *conclusion*. Quite a few of you already know that, you've already mentioned the word, and the sentences that are being offered as the basis for the assertion are called the *premises* or the argument.

So the premises are the reasons given for the conclusion. The conclusion is the one that's being asserted on the basis of the others.

We can analyse our first complex sentence logic book style, and we'll be doing this several times in the process of these lectures.

Premise 1: The mail is always late when it rains. Premise 2: It is raining. The conclusion: The mail will be late. I left the word "again" off because it doesn't really add anything to this.

Okay, any questions about that? Can you see how *that* single sentence that can be analysed into *that* argument? Anyone, any questions about that?

Male: Is it valid to change the sentence around to test, or put the conclusion first and say because: The mail was late because it was raining? Is that too simplistic?

Lecturer: Did you say, "Is it valid to do that?" You're allowed to say that at this point in the lectures, but you'll see that there's a point beyond which the use of "valid" for that is going to be frowned

on because “valid” has a very specific definition in critical reasoning, and I warn you now, perhaps try not to use it until you know how to use it.

But you didn't know that, so I completely forgive you.

Male: It's just an idea to put the conclusion first to help you assess...

Lecturer: The mail will be late because the mail is always late when it...
Yes, that would be a way of doing it, yes. Actually, I'm just thinking about it, when we talk about analysing arguments next week, I will tell you to identify the conclusion first and then see what reasons are being given for that conclusion.

So yes, okay, you've put it a different way from the way I've put it but it's exactly the same idea. Somebody else?

Female: What happens if the conclusion was: “The mail is late when it rains”?

Lecturer: That isn't the conclusion so I can't really say what would happen if it were the conclusion.

Female: Because that's what the assertion was in that argument.

Lecturer: There's something completely right about what you're saying, and we'll be seeing this next week. The sentence, sorry, what was it? “The mail is always late when it rains.” (writing on the flipchart)

In this argument it's a premise, but it could easily be a conclusion. There is absolutely nothing intrinsic about a sentence that makes it into a premise or a conclusion.

Something is a premise, a something, a sentence or a statement is always either a premise or a conclusion because of the role that it's playing in the argument.

So you're absolutely right to think that that could be a conclusion, but of course here it isn't, and therefore you haven't got any reasons for that here, but you could easily think of some. Does somebody want to think of some?

"The postman doesn't like getting wet."

Female: Is it a sweeping generalisation. It's not a true premise or ...

Lecturer: We're not worried about the truth of the premise at the moment. All we're worried about at the moment is what counts as an argument. We'll look at evaluating arguments over the whole of our six weeks, but until we know what an argument is, we don't really want to start on evaluating them.

So let's not worry at the moment, if you can possibly help it, because I realise the truth is very important to us, but let's not worry about that at the moment.

What we've got here is an argument. I may as well just say, if that premise is true and that premise is true, that premise has got to be true, doesn't it? So that's a good argument, it's a valid argument.

That's using valid in its absolutely correct way, but let's not look at that at the moment, it might just confuse us. Any other

questions about how that complex sentence became an argument, was analysed into an argument?

In that case, let's practice on the example I had before: (slide 26 again) Marianne always wears jeans on Mondays, and it's Monday today, so Marianne will be wearing jeans.

You'll like this one because they're true, because I went back to change.

Is there a sentence there that's being asserted?

Female: Yes.

Male: Yes.

Lecturer: Okay, what is it? [Cross talk].

Marianne will be wearing jeans. Okay. The "so" is a giveaway there, isn't it, just as you said.

So there is a sentence that's being asserted: "Marianne will be wearing jeans," on the basis of which other sentences? [Cross talk].

"It's Monday today" and "Marianne always wears jeans on Monday". That's not true, incidentally, but "it's Monday today" is true.

So you can see that here we've got a complex sentence that can be analysed into the simple sentences: "Marianne always wears jeans on Mondays". "It's Monday today".

So we just drop the sentence connective, we don't need it anymore, and we can drop the "so" as well, because we just

write 'conclusion', and so we've got Premise 1: Marianne always wears jeans on Monday. Premise 2: It is Monday today. Conclusion: Marianne will be wearing jeans.

So there we have a complex sentence which is analysable into a set of sentences which are related in the right way to be an argument. One sentence is being asserted on the basis of the other sentences.

Have I convinced you it is an argument?

Female: Absolutely convinced.

Lecturer: Oh, jolly good, that's a relief. I don't know what else I would have said there.

The terminology you've got, what the conclusion is, it's the sentence that's being asserted, and the premises are the sentences that are being offered as reasons or on the basis of which the conclusion is being asserted.

(Slide 41) Our first complex sentence can be analysed into a set of sentences related in the right way to be an argument. They're related as premises to conclusion, the conclusion is being asserted on the basis of the premises. So all I'm doing there is adding some technical terminology to the definition we already had.

Now let's look at our second complex sentence. (Slide 43) Is there a sentence that's being asserted here on the basis of the other sentences?

Male: No.

Lecturer: Put up your hands if you think there is. What's the sentence that's being asserted?

Male: Bees will be pollinating the flowers.

Lecturer: The bees will be pollinating the flowers. Those people who *don't* think that's being asserted, why not? Speak up.

Female: Because the premise, it should be: Bees always pollinate the flowers in the summer. Then there should be a pronoun

Lecturer: Right, no, let's stop you right there. We're not talking about any "should be's" here. We're talking about, we've got a sentence here and I'm asking you, *of that very sentence*, not of some other sentence that I might have written up here, I'm asking *of this very sentence*, is it an argument or can it be analysed as an argument?

Do you see how what you were saying was...

Female: Yes, because it hasn't got a statement about the bees pollinating the flowers before it.

Lecturer: No, that's not the reason. I'm asking of this very sentence, is there a sentence that's being asserted on the basis of the others? I think what you're saying is quite rightly, it might be if this other sentence was there, but the other sentence isn't

there, so let's ignore that and let's just say *is there a sentence here that's being asserted?* You think yes. Who thinks no and go on, give me a reason?

Female: It's because of "if", I think not.

Lecturer: Okay, because of the "if", you think that shows that, "The bees will be pollinating the flowers," is not being asserted. You're absolutely right.

Some of us here might think that, "The bees are pollinating the flowers," is being asserted on the basis of the sentence, "It's summer."

So we have got an argument. The premise is: It's summer.
The conclusion is: The bees will be pollinating the flowers.

If I say to you: Is it summer the bees will be pollinating the flowers? Am I *asserting* either that it's summer *or* that the bees are pollinating the flowers.

Female: It's sort of conditional, isn't it?

Lecturer: It's not sort of conditional, it is conditional, that's exactly what it is. I'm not asserting either, am I? Listen again and use your understanding as a speaker of English to tell me if I'm not right: "If it's summer, the bees will be pollinating the flowers".

Does my saying that entail that I believe it's summer?

Male: No.

Male: Yes.

Lecturer: Does it entail that I believe that the bees are pollinating the flowers?

Female: No.

Lecturer: The only thing it entails is that I believe that *if it is summer the bees will be pollinating the flowers*. Doesn't it? In other words, I'm asserting that because I believe there's a connection between these two events or states of affairs that I'm describing and I'm asserting that there is such a connection.

There is no argument here. This is not an *entailment*, it's an *implication*, and there's a difference between an entailment, which is a "therefore", if you like, and an implication, which is an "if then".

So the words "if then", and notice I've left the "then" implicit. But, "If it is summer, then the bees are pollinating the flowers," is a sentence connective just like "and". It connects two sentences to make a complex sentence.

All that that original sentence is is a complex conditional sentence, it's not an argument.

Female: It's not an argument either because there are not more than one.

Lecturer: There are not more than one what?

Female: Set of sentences given the... You need more than one –

Lecturer: No. There are plenty of arguments that have only one premise. A set of sentences consisting of one premise and a conclusion might be an argument, yes, so there are arguments with one premise.

We tend to use arguments with two premises in teaching logic but you mustn't be misled like that, there can be 10 premises or there can be just one premise. Any other questions about that?

A lot of people make this mistake. They think that they can use an "if then" instead of a "therefore", or a "therefore" instead of an "if then", but actually they play completely different roles in language, in reasoning. Any other questions about that?

Female: Yes. Where "therefore" can be entailed "if then" is an implication.

Lecturer: An implication. An "if then" statement is an implication or a conditional, and a "therefore" is an entailment.

Actually, there are things I should say about that but I'm not going to because it would just mislead you. "Therefore" plays a completely different role in language than "if then" but let's ignore that.

Male: What if it's in response to a question: Who's been pollinating the flowers? Or something like that.

Lecturer: It would be something like: "Are the bees pollinating the flowers?" Or something like that.

Male: Could be.

Lecturer: So you say, "Are the bees pollinating the flowers?" and I say, "Well, if it's summer, the bees are pollinating the flowers?" Am I arguing or am I stating a belief that there's a link between it being summer and the bees pollinating the flowers?

Again, I'm not saying either that it is summer or that the bees are pollinating the flowers, am I?

Male: If I said, "Who's been pollinating the flowers? It's suddenly summer. The bees have been pollinating the flowers –

Lecturer: Yes, but that's again a *different* sentence, isn't it? There's no reason whatsoever why I can't make an argument with, "The bees are pollinating the flowers," but this isn't one of them. Does that answer your question though?

Male: Absolutely.

Lecturer: Good. Any other questions about that? No? Good. This light is so bright I can hardly see you.

So someone's saying, "If it's summer, the bees are pollinating the flowers," they aren't asserting either of the simple sentences that make up this complex sentence. They're merely drawing our attention to a connection of to their belief in a connection between it being summer and the bees pollinating the flowers. They're asserting the whole conditional, not any sentence that makes up a conditional.

(Slide 49) So we can't analyse the sentence into Premise 1: It's summer. Conclusion: The bees are pollinating the flowers.

As you see, that would be a lousy argument anyway. So the sentences are conditional and that assures that neither of the sentences, either the antecedent clause or the constant clause is being asserted.

Oh dear, here I am saying it all again. (Slide 50) So the complex sentence isn't analysable into a set of sentences that are related in the right way. Remember, what we're looking at is whether a complex sentence can be analysed into an argument.

Looking at the definition of argument which is hugely important which is that an argument is a set of sentences one of which is being asserted on the basis of the other, we see that we can't analyse that second sentence that way, we lose all the meaning if we try.

So we had two complex sentences there, one of which was analysable into an argument, the other wasn't.

So arguments are set of sentences where one of the sentences, the conclusion, is being asserted on the basis of the other, namely the premises.

(Slide 51) Here's an exercise for us: which of the following sets of sentences are arguments? I'm going to let you look at them

just for two minutes, not long enough for you to do them but long enough for you to get a feel, and then we'll do them together.

I said I wouldn't be long enough, some of you may have started from the bottom which would have been useful. I should have told you that some of you should start at the bottom.

"Towards lunchtime clouds formed and the sky blackened. Then the storm broke."

Now that's certainly a set of sentences, isn't it? Is it an argument?

Group: No.

Lecturer: No. Well done. Why isn't this an argument? [Cross talk].

No, you can have arguments where the conclusion doesn't follow from the premises, they're just *bad* arguments. What we're trying to do at the moment is recognise an argument....they're just *statements*.

There is a relationship that we're stating, isn't there, but what is the relationship?

Female: The storm *followed* the other sentence.

Lecturer: Good. Who said that? There's *temporal* priority, exactly. What you're saying is that *firstly* the clouds formed and *then* the sky blackened and then the storm broke. So there's a relation,

they're related temporally, but that's not the relation of an argument, is it?

Group: No.

Lecturer: No, okay, good. What about No.2? Put your hand up if you think it is an argument. Well done, anyone who put their hand up then is right. What's the conclusion of this argument?

Group: Edinburgh is north of Oxford.

Lecturer: Edinburgh is north of Oxford, and Premise 1?

Group: Manchester is north of Oxford.

Lecturer: Manchester is north of Oxford, and Premise 2?

Group: Edinburgh is north of Manchester.

Lecturer: Edinburgh is north of Manchester. You see, it's dead easy. Which words are we leaving out?

Female: "Since".

Female: “And”.

Lecturer: “Since” and “and”. What’s “since” doing here? It’s indicating something, isn’t it? What’s it indicating?

Female: Causation.

Lecturer: Not causation. Edinburgh isn’t caused to be north of Oxford by the other things, is it?

Female: Connection.

Group: Given that.

Female: *Given that*, exactly. What this is doing is actually indicating the premises of the argument. Words like “so”, “therefore”, “hence”, “consequently”, etc., are always indicating an argument, as you’ll see next week.

What about the “and”? What role is the “and” playing, given that we can leave it out when we set out an argument logic book style?

Female: It’s joining two phrases.

Lecturer: It’s joining two what?

Group: Two premises.

Lecturer: Two sentences or premises, yes. Not two phrases. “And” isn’t always a sentence connective. “And” can connect two predicates as well. “Jasper is a black and white cat,” the “and” there is linking black and white, isn’t it, not two separate sentences. We’re not saying, “Jasper is a black cat, and Jasper is a white cat,” when we’re saying, “Jasper is a black and white cat.”

So you've got to be a bit wary of seeing an “and” and assuming you've got two sentences here. We’ll do this again next week as well so you’ll see this.

But the “and” is operating here as a sentence connective again, or a logical constant.

Male: Couldn’t you just put a comma there?

Lecturer: You could just put a comma there, yes. That would be perfectly good English, wouldn't it? Commas quite often play the part of “and”. Unfortunately, they also play many other roles as well, again as we’ll see next week, but yes indeed, you could put a comma there.

Male: So in that kind of situation where you’re linking two premises together, which would be more appropriate, an “and” or a comma? Doesn’t matter?

Lecturer: Doesn't matter. Absolutely irrelevant, and of course, both would drop out when you're setting out the argument logic book style anyway. Your aim as budding logicians is to see what you can get rid of, and an "and" is something, actually you don't get rid of it because it's still there in the structure of the argument, as is the comma if it's playing that role.

But you get rid of it in its verbal form, if you like, linguistic form.

What about: "Witches float because witches are made of wood and wood floats"? Put up your hand if you think that's an argument, bad or good?

Lecturer: Again, you're right, this is an argument. What's the conclusion?

Group: "Witches float".

Lecturer: "Witches float". Okay, and Premise 1:

Group: "Witches are made of wood".

Lecturer: "Witches are made of wood", and premise 2?

Group: "Wood floats".

Lecturer: "Wood floats". So we've got a perfectly good logic style argument there. Premise 1: Witches are made of wood. Premise 2: Wood floats. Conclusion: Therefore witches float.

Which words are we leaving out?

Group: "Because". "And".

Lecturer: "Because" and "and". Good. Again, which role is the "because" playing here?

Female: "Since".

Lecturer: The role of "since", that's right, good. The "and" is again a sentence connective, isn't it, or a logical constant? It's taking two simple sentences and making a complex sentence out of them, a complex sentence with two sentences as parts.

You know it's complex because the parts are not subsentential, they are themselves sentences.

What about, "Since Jesse James left town, taking his gang with him, things have been a lot quieter"? Is that an argument?

Group: No.

Male: Yes.

Lecturer: It's not? Tell me why you think it might be an argument.

Male: The conclusion is "things have been a lot quieter." The premises is given "Jessie James has left town taking his gang with him," but it's not a hard one. There could be other interpretations of why things are a lot quieter.

Lecturer: I said it could be a bad argument. [Cross talk]. Well, it would be a very bad argument, wouldn't it? Because what you're suggesting is that the conclusion is: Things have been a lot quieter. The premise is: Jessie James left town taking his gang with him.

Male: It's one –

Lecturer: I suppose if you added a suppressed premise, but you have to do quite a lot to it, don't you, to make it an argument?

Female: I should say it was very noisy.

Female: If we said his gang was very noisy –

Lecturer: Or something like that. But what we're doing is we're adding something in to make it an argument, wasn't it? As it stands, it's not an argument. It's just, again, another claim of temporal priority: first Jessie James and his gang left town, and then it got quieter, or *as they left town it got quieter*.

Male: My error was that you said, "Look at the sentences and nothing else."

Lecturer: Yes, you were putting something else in. When you say that's an error, it may be an error in a class of critical reasoning, but actually we often do this. When we look at suppressed premises, you'll see that actually, it's quite right to suppress many premises, and therefore it makes perfect sense that you should be adding things in to make something an argument.

But when we're trying to learn what arguments are, I'd rather you looked at just what I've got there rather than add in.

Question at the back there.

Male: You're not just giving us a man's name, you're giving us a name that is notorious because he is a gangster. So lying behind the name is the assumption that this man is a gangster and he causes trouble in town.

The second one is: Jessie James had a gang. That's a piece of history. That's the second premise, and his gang has been taken with him out of town, so that's the second premise.

So given those two premises, isn't it reasonable to then conclude things have been a lot quieter? It follows from those two premises.

Lecturer: But the thing is those two premises aren't there, are they? You're adding these premises in. I absolutely see where you're coming from, you're making an argument out of two sentences that are not yet an argument. We do that all the time so it's not

wrong to do that, but in the context of asking, “Is this an argument?” this *particular* sentence, I’d like you to just leave in what’s in there, rather than add something.

I can see you’re not happy with that.

Male: What did I add?

Lecturer: You added, “Jessie James was a notorious gangster,” I can’t remember exactly –

Male: You gave us that name. You could have said Joe Bloggs.

Lecturer: Okay, let’s say (writing on flip chart) “Jessie James is a gangster”. “Jessie’s gang is noisy”, “therefore since Jessie’s gang left town, it has been less noisy”. Is that the argument that you –

Male: Yes.

Lecturer: Can you see that that isn’t – I mean I’m not denying for one minute that we *could* make an argument of this kind, but just as I said to, was it you, Kim, in the front there, the fact that a sentence *could* act as a conclusion doesn't mean that it is acting as a conclusion in this set of sentences or in this argument.

So you're asking, "Is there something that is being asserted here?" Answer: I think there is. I think you are asserting things have been a lot quieter.

There's an implicit explanation of that there which is that Jessie James was there with his gang, so that's where you're getting an argument, isn't it? You're seeing the "Jessie James leaving town" as an explanation.

Male: Yes.

Lecturer: Yes. I'm not wholly convinced that that explanation is actually explicit in there.

Male: But you take my point?

Lecturer: But I absolutely take your point.

Male: If you had a Joe Bloggs there, then it's straightforward. It's not an argument then.

Lecturer: I think the word "gangs" would have been a bit of a giveaway because you expect a gang to be – I mean King Lear's gang of soldiers were notoriously, and any gang...

Let's carry on: "If it's snowing then it's cold". Is that an argument? Put your hand up if you think it is.

Female: No.

Lecturer: No. Did you think it is? Why?

Male: Well, you just had the one premise, but no conclusions.

Lecturer: If I utter this sentence: "If it's snowing then it's cold," am I asserting either that it's snowing, or that it's cold. [Cross talk]. It's conditional.

I might say now, "If it's snowing, it's cold," which would be true, wouldn't it, and I believe that if it was snowing it would be cold, but I don't believe it's snowing, and I don't necessarily believe it's cold. Actually, I do believe it's cold but that's got nothing to do with...

Female: I also don't think it's an argument. Because you have to say that it's snowing –

Lecturer: "If it's snowing then it's cold"?

Female: No, it's cold. Only then you can say it's an argument, then it is cold.

Lecturer: I don't think we can say it's an argument. Let's not think about what we would do *if* it had this, that and the other.

Female: But if it's an argument, also –

Lecturer: What about: "The fence got under the fox and ate the chickens"?

Group: No.

Lecturer: "The fox got under the fence and ate the chickens"? No?
Good. "If you're cold you should turn the heating up or put a jumper on"?

Group: No.

Male: A general question. If you've got a question in any part of the sentence, does that immediately mean it's not an argument?

Lecturer: That's a good question. Not necessarily is the answer, because the argument may consist of the other parts of the sentence. So the mere presence of a question somewhere certainly shouldn't stop you from thinking it could be an argument.

What you can't do is use a question as either a premise or a conclusion, because it's only declarative sentences that arguments are made up of, and a question isn't a declarative sentence. Do you see what I mean?

Good, well done. So now we know more about the nature of an argument but we might want to know why arguments are

important, and I think we should look at this in the first session that we're doing.

Slide 53 Arguments are important because when we give reasons for our beliefs, the reasons that we give are reasons for everyone. They're reasons to believe that the conclusion is true, not just true for me or whoever's giving the argument, but simply true.

To give a reason is to give a reason for believing that something's true. I know that people have trouble with this, (Slide 54) but do you see that nothing Jim says here gives any reason for believing in the truth of this.

All Jim does is expresses a belief of his own. Some of his beliefs will be true and some of his beliefs will be false, which is exactly the same for all of us.

So if he wants to make an argument, he's got to give us a reason for believing that his belief really is true and it's not just believed by him to be true.

Sometimes people get confused about the idea that truth is truth for everyone, so I'm going to do a little thought experiment here.

"Fred believes that Marianne is wearing jeans." Anyone called Fred here? That would make it very neat. You're called Fred? How useful. Do you believe I'm wearing jeans?

Male: Yes.

Lecturer: Good. (Slide 56) Okay, "Fred believes that Marianne is wearing jeans." Do you see that this is a complex sentence, isn't it? It's a sentence one part of which is itself a sentence.

So there's a sentence: "Marianne is wearing jeans" that's embedded in a larger sentence, "Fred believes that Marianne is wearing jeans." (Slide 57) So just to make that clear, here are some pretty colours.

So "Fred believes that Marianne is wearing jeans" is the embedding sentence, and "Marianne is wearing jeans" is the embedded sentence. Okay?

I want you to answer some of these questions. (Slide 58)
Could the *embedding* sentence be true whilst the *embedded* sentence is false?

Group: Yes.

Lecturer: Yes. So it could be that Fred believes Marianne is wearing jeans, but Marianne's actually not wearing jeans. I don't know, maybe Fred's a bit mad or he left 10 minutes ago and I changed from my jeans into a dress and he still believes I'm wearing jeans but he's wrong now.

The *embedding* sentence could be true while the *embedded* sentence is false. Could the *embedding* sentence be true and the *embedded* sentence be true?

Group: Yes.

Lecturer: Yes, that's actually the situation that we're in, isn't it? Could the *embedded* sentence be true whilst the *embedding* sentence is false?

Group: Yes.

Lecturer: So could it be true that Marianne's wearing jeans but not true that Fred believes that Marianne's wearing jeans? Obviously. If Fred decided he couldn't be bothered to go to the logic lecture today and didn't turn up, he wouldn't have the belief that Marianne's wearing jeans but I'd still be wearing jeans.

Finally, could the embedded sentence be true whilst the embedding sentence is also true? I think we've had that already, haven't we? So what's the one I've missed out? [Cross talk].

Yes, both be false is what we need. Could the *embedded sentence* be false whilst the *embedding sentence* is also false?

Group: Yes.

Lecturer: Yes. So Fred didn't turn up today, he decided to stay in bed and I decided not to wear my jeans, so we have a situation where both these sentences are false.

What I'm trying to get you to see here is that the truth values of the embedding sentence and the embedded sentence vary completely independently. This isn't surprising because the sort of fact that makes true "Fred believes that Marianne is wearing jeans" is a fact about?

Female: Fred, right?

Lecturer:

Fred and his beliefs. The fact that makes true “Marianne is wearing jeans” is a fact about? [Cross talk 1:09:16]. Me and my clothes, exactly.

Sentences and beliefs are made true by facts. The truth values of the embedded sentence vary quite independently but there's a common logical blunder, very common logical blunder that people make about this.

If we say that “Marianne is wearing jeans” is true for Fred, can you see that that's one way in which we might express the idea that Fred believes that Marianne's wearing jeans?

(Slide 60) That's ambiguous. We could mean that Fred believes that Marianne's wearing jeans, or we could believe that Marianne is wearing jeans is true for Fred, though not for anyone else. Do you see?

So that's actually an expression of what's called cognitive relativism. The idea would be that what makes it true that Marianne is wearing jeans is a fact for Fred, not for anyone else.

(Slide 61) The first meaning, “Fred believes that Marianne is wearing jeans” is completely innocuous, isn't it? There's nothing, no big deal about saying that for Fred, it's true that Marianne is wearing jeans and to mean by that that Fred believes that Marianne is wearing jeans.

All that means is Fred believes it's true that Marianne is wearing jeans, and of course any belief you have is something that you believe to be true. That's what a belief is, isn't it?

So that's perfectly innocuous. But the second meaning, (Slide 62) “Marianne is wearing jeans” is true for Fred but not for anyone else is completely weird, isn't it?

Do you see why it's weird?

Male: No.

Lecturer: Okay, well, let me explain. (Slide 62) There are only two possibilities here, aren't there? The first one is: I am wearing jeans. In which case, "Marianne is wearing jeans" is true for everyone. It is just true, not just Fred, so the embedded sentence is true and so is the embedding one.

Or the other possibility which is that I'm not wearing jeans, in which case "Marianne is wearing jeans" is not true for anyone, not even Fred.

So even if Fred does believe it's true, he has a false belief here, doesn't he? It's true for Fred means Fred believes it, that's fine, but it's true for Fred when it's not true for anyone else has got to be wrong, hasn't it?

Female: Unless Fred doesn't understand fashion.

Lecturer: Let's assume that Fred doesn't understand fashion, just be sexist about this. Why would that make it true for him? [Cross talk].

I think we're going to abstract away from when people (Fred) don't understand things (fashion) because it's just a red herring.

Male: But surely doesn't that refer to the case of Fred still being in bed or hasn't come to the lecture and he believes that you're wearing jeans?

Lecturer: If Fred believes that I'm wearing jeans, is it's true for Fred that I'm wearing jeans? If it is, what meaning of "It's true for Fred that I'm wearing jeans" do we mean?

Do we mean that Fred believes I'm wearing jeans, which is fine, or do we mean that it is true for Fred that I am wearing jeans even though it's not true for anyone else, and even though I'm not wearing jeans? Do you see what I mean?

How could it be true for Fred that I'm wearing jeans if I'm not wearing jeans? Other than Fred believes I'm wearing jeans. But "Fred believes I'm wearing jeans" is a very different plane, isn't it? Do you see the logical blunder I'm getting at here? Do you see how easy it is...

Okay, quite a few people are shaking their heads here so we'll go over this again.

Female: What about if Fred was hallucinating? How do we deal with the
—

Lecturer: Well, then his belief is, when Macbeth said, "Lo, there's a dagger in front of me," or words to that effect, was there a dagger in front of him?

Female: No.

Lecturer: No, so he had a false belief, didn't he? So it may have been true for Macbeth that there was a dagger in front of him in the sense that Macbeth believed falsely that there was a dagger in

front of him, but it wasn't true for Macbeth that there was a dagger in front of him even though there wasn't a dagger in front of him.

Male: Don't you just love logic?

Lecturer: Don't you just love logic? Yes, and this is why I love logic. Do you see the difference there?

Female: But then it's a true belief for Macbeth but not a true fact?

Lecturer: No, it's *not* a true belief for Macbeth. Macbeth has a false belief, doesn't he?

Female: All right.

Lecturer: I'm determined to get this through. Macbeth believes there is – that backwards E is just “there is” – a dagger in front of me. But Macbeth's belief is false. Do you accept that? That's what Shakespeare wrote so let's assume –

Female: But it's objective and subjective, isn't it?

Lecturer: Okay. So we might say that it's true for Macbeth that there's a dagger in front of him by which we mean Macbeth believes there's a dagger in front of him. We don't mean it is true for

Macbeth that there is a dagger in front of him, because if it's false that there is a dagger in front of Macbeth, it's as false for Macbeth as it is for everyone else.

Female: But didn't Macbeth have this funny thing which seems to be so common nowadays that the subjective truth is the truth?

Lecturer: No, we all believe that what is subjectively true for us is true. Okay, I believe that this chair is blue, okay? I believe I'm in a lecture room full of students. If I'm as a matter of fact lying in bed and I've still got this to come, my belief is false.

Subjectively, it's for me as if there is a room full of students in front of me, but if there isn't a room full of students in front of me, it's not true that there is a room full of da-da-da. Do you see? I'm determined to get this through.

Have most other people got it now? Put up your hands if you've got it. Good, that's most. I'm shaming you now. That's so mean of me again.

There's a difference between subjective truth and objective truth, and I'm inclined to think subjective truth doesn't exist at all.

Female: I agree, but some people do believe –

Lecturer: Ah, well then it should be easy to convince you. So Fred's believing that I'm wearing jeans, it's subjectively true for Fred that I am wearing jeans, but if I'm not wearing jeans, then it's objectively false that I'm wearing jeans and Fred's belief is

false. So his subjective truth doesn't translate into objective truth, if you like, and therefore it isn't true at all.

There's no such thing as subjective truth, all there is is beliefs that may be false. She's still not convinced.

Female: It's the way people use language. If people are hallucinating, you will have to make some allowances.

Lecturer: No, when Macbeth hallucinates the dagger, it is, in your language, subjectively true that there is a dagger there for Macbeth. Macbeth believes there's a dagger there. From Macbeth's point of view, there is a dagger there. But there isn't a dagger there, is there?

So there is no objective truth. Macbeth's hallucination is false, that's what a hallucination is.

Female: What about the audience, what about the people who see it? For them there is a dagger or there isn't a dagger?

Lecturer: If we're talking about a play in which there is a bloody dagger, then everything I've said has been wrong. [Cross talk]. It is not supposed to be there and I think any producer who puts a real dagger there is really irritating.

Female: Macbeth actually says, "Is this a dagger?"

Lecturer: He says what?

Female: Macbeth actually asks a question, "Is this a dagger?"

Lecturer: That's right, "Is there a dagger in front of me?"

Female: What about asking general, is it to a life 1 in general is very important.

Lecturer: Can we leave art to the side just for a second because I've stopped being able to think?

Female: If there is a forest on stage, is there a forest or is there not?

Lecturer: There's a make-believe forest on stage, I think. These are very big questions. If I say, "The little kitten in front of me is black." You've all understood that, haven't you? You're taking the little kitten in front of me to have... there is a kitten that I'm talking about. So is that sentence true or false or neither true or false?

This is a big philosophical problem, and there's a philosopher called Meinong said we will have to say that just as there is a truth about whether Hamlet, who didn't exist of course – was the Prince of Denmark. So Hamlet in some sense existed, just as this little black kitten in some sense exists.

But then you think hang on, that's a bit awkward, isn't it, if I only had to think about something for it to exist, then is the fat man in that doorway the same as the fat man in that doorway or are they different men?

I can't constrain what is true or not, is there, if I explode my ontology by allowing in anything that I can think about. That blue snake crawling up the wall, does that exist? [Cross talk].

Somebody at the back there had their hand up.

Female: When we talk about subjective and objective truth, that's very well when it's something concrete.

Lecturer: I don't believe there is any subjective truth. I just want to make that absolutely clear again. Ask that question bearing in mind that I...

Female: Yes, but user-friendly we talk about subjective and objective when we're talking about arguments or truths, that's much easier when you're talking about solid matter: the chair is blue or it isn't blue; the chair exists or it doesn't exist. Because you can touch it, it has a shape, it has a form.

If you put in the word "religion", that changes all the parameters, doesn't it?

Lecturer: No, it doesn't change any parameter. There are truths about things that are not concrete objects. It's true that you believe I'm wearing jeans. Your belief is not a concrete thing I can touch or put into my pocket, is it?

The belief "there is God", that God exists or something like that is again a belief that's either true or false. It'll be true if God exists and false if he doesn't exist, and my belief that God exists may be false or it may be true.

If God doesn't exist, then it being true for me that God exists must mean exactly what it always means, which is that I believe that God exists, not that it is true in some peculiarly subjective –

Female: I was just talking about the sentences that we were looking at. You were talking about the fact that it, it just doesn't make sense if Fred thinks you're wearing jeans when clearly you're not, it's only a truth that pertains to Fred. But that only seems to work for me for concrete objects.

Lecturer: But did you not accept what I just said about the belief God exists?

Female: Yes.

Lecturer: So do you now think it doesn't just work for concrete objects?

Female: I think it works a different way.

Lecturer: No, it works in exactly the same way, although the fact that makes the belief true is a very different sort of fact. So if I say the chair is blue, then the fact that makes that sentence true is the chair's being blue, which is as concrete as maybe you can get.

If I say, what's your name?

Female: Marilyn.

Lecturer: Marilyn believe that Marianne's wearing jeans, the fact that makes that true is the fact about your belief which is not something I can touch or point to or put into my pocket or anything, but it's still a fact, it's a different sort of fact.

If I say God exists, and he does, then that's another fact but a completely different sort of fact. So it's undoubtedly the case that there are different sorts of facts that make beliefs true, but this point I'm making about beliefs being true or false and about there being no such thing as subjective truth is the same for each of those beliefs.

Female: Okay.

Lecturer: Yes. That came out quite well. When it gets to this point in the lecture, it's always difficult to know how to think properly.

We've got five minutes left. (Slide 66) The point I wanted to make is don't be dazzled by the fact that Fred's believing something means that that belief is true for Fred which means nothing more than Fred believes it to be true.

Don't fail to see that there's something that Fred believes to be true may in fact be false. It's absolutely vital to distinguish somebody just believing something from the something that they believe. Just because somebody believes something doesn't make the thing they believe true. Very important distinction.

I just want to say the reason I went into all that, I said that when you give reasons for a belief, what you're doing is you're giving reasons to believe that belief is *true*, and reasons are reasons for all of us, and that's because truth is *truth* for all of us.

There are philosophical questions about that and you can deny that, but don't deny it on the basis of this logical blunder because that is very easy to undermine, believe it or not, it is.

Right. I was just going to summarise (Slide 67) and say okay, we've learnt that arguments are sets of sentences one of which is being asserted on the basis of the other.

A sentence is being asserted when it's a declarative sentence uttered sincerely in declarative mode.

A declarative sentence is one that makes a grammatical question when you apply the frame test, i.e. you substitute it for X as in: Is it true that X?

We've got to distinguish simple sentences, the parts of which are sub-sentential from complex sentence the parts of which are sentences.

We've got to distinguish entailment from implication, and argument is important because the reasons we give for our beliefs are reasons to believe that the belief asserted is true, and when I say that it's true, it's true for everyone, not just true for the person who asserted it. It's also true for the person who asserted it in the sense that they believe it but it's true in other ways as well.

Okay? That's it for today. We've still got time for a couple of questions if anyone wants to ask a couple of questions. One over here.

Female: Was Fred influenced by Marianne's Monday situation? He was basing his statement, his belief because he –

Lecturer: Do you believe I'm wearing jeans because it's Monday?
(asking the Man called Fred) [Cross talk]. You're right, he
does, that's his reason for believing I'm wearing jeans. Do you
have the same reason for believing I'm wearing jeans?

No, you don't? What's your reason?

Female: I can see.

Lecturer: So you can have different reasons for believing that, but an
argument may be a perfectly good reason for believing it if you
accept the premises of the argument.

Any other questions before we finish there? No? Let's finish up
and I'll see you all next week. Thank you.

END AUDIO