

Lecture 2: Analysing Arguments

Lecturer: Right. I think we are going to start now, even though I said we would give it a minute, but actually we haven't. But we'll do a bit of revision before we start last week. Did you enjoy last week?

Class: Yes.

Lecturer: Has it kept you awake all week?

Class: No.

Lecturer: No? Good. Just a few people.

Well, we are going to start off, as we will every single week in these lectures, by doing just a bit of revision. Last week we looked at these things. We looked at the nature of argument first. Who is going to be prepared to give me the definition of argument? How are we defining argument? You can look at your notes, if you must.

Female: The premise – oh, sorry.

Lecturer: Go on.

Female: I am just remembering words. There was a premise, or possibly more than one premise followed by a conclusion.

Lecturer: Right. We didn't mention the words either premise or conclusion when we defined it.

Female: Oh I'm sorry.

Lecturer: You have got it in front of you, have you?

Female: A sentence being asserted on the basis of the others.

Lecturer: That's right. An argument consists in a sentence that is being asserted, well it consists in a set of sentences, one of which is being asserted on the basis of the others. Do you remember? An argument is a set of sentences, one of which is being asserted on the basis of the others. We looked at what it was to assert a sentence. What else can we use a sentence for, apart from making an assertion?

Female: To question.

Lecturer: We can use it to question, so instead of saying, "Shut the door." I can say, "Is the door shut?" What else can we do?

Female: Declarations.

Lecturer: Sorry?

Female: Declaration.

Lecturer: Well, that would be an assertion, really. "The door is shut".

Okay, we can also command. "Shut the door." We can do lots of things with sentences. We can reassure. "The door is shut", etc. An argument is a *set* of sentences, one of which is being asserted, which is expressing a belief on the basis of the others.

Okay, now we also learned some basic terminology. Let's go to that one. Yes, you had the terminology right. The sentence being asserted is called?

Male: The conclusion.

Lecturer: The conclusion, that's right. The sentences on the basis on which the one is being asserted are the?

Class: Premises.

Lecturer: Premises. Well done. How do we distinguish arguments from other sets of sentences? There are a lot of sets of sentences aren't there? Here is a set of sentences. The chair is blue. The lady is wearing purple. He has got a red folder. She has got a red folder, sorry.

Female: "Is it true that?" to test them out.

Lecturer: Now, can anyone remember what the, "Is it true that?" frame is a test for? It is a test.

Male: Declarative sentences.

Lecturer: It is a test for declarative sentences, that's right. If you want to know whether a sentence is being asserted or is a declarative sentence, you put it into the frame, "Is it true that?" It should make a grammatical sentence.

Okay, so a set of sentences is an argument only if...?

Female: Connections.

Lecturer: They are connected as? They might be connected in all sorts of ways. They might be being connected in that they are all true, or that they are all false, or that they are all about me, or all sorts of

ways of connecting sentences. What is it about a set of sentences that connects them, that makes them an argument?

Female: Asserted on the basis.

Lecturer: That's right, whoever said that, I can't remember. One is being asserted on the basis of the others. One of them is the conclusion, the other the reasons being offered for the one.

Okay. Do we think that something like, "If the cat is in the bedroom it will have ruined the duvet"? This is a heartfelt sentence. "If the cat is in the bedroom it will have ruined the duvet". Is that an argument?

Class: No.

Lecturer: Why not?

Male: It is a conditional.

Lecturer: It is a conditional, that's right. I am not asserting either of those sentences am I? I don't know either that, "The cat is in the bedroom", or that, "It has ruined the duvet". I am not asserting either of those as a belief, so that is not an argument.

Good, okay. Why is argument important? This is an easy one.

I thought it was an easy one. Why is argument important? Why are you here? You are here presumably because you want to learn about argument. Why?

Female: To convince someone.

Lecturer: We need it to convince others. Do you remember that argument I had up last week about Jim and Lyn? They were talking about neutrinos, and whether they moved faster than the speed of light in a vacuum. Jim just asserted the sentence didn't he, and by doing so he didn't persuade anybody of anything.

Arguments are important, because it is by means of them that we can persuade, that we collaborate in pursuit of truths. If you believe one thing and I believe another, I want to know what your reasons are for believing what you believe. You want to know what my reasons are for believing what I believe, because we both want to have true beliefs. It is only engaging in argument that we are going to collaborate in pursuing the truth.

Then, at the end, if you remember, we considered the nature of truth and reason. We made a bit of a start on it. I don't remember doing that, but that is what it says, so we must have done.

Okay, any questions from last week before I move on to this week's work?

I understand that when I move in front of the projector I have got writing all over my face. I'm sorry about that, there is nothing much I can do about that. Any questions about last week? No? Oh, one over there.

Female: I was a bit puzzled by the sentences, “I believe Marianne is wearing jeans”.

Lecturer: Oh yes. I think I said something like, “Fred believes that Marianne is wearing jeans.”

Female: “Fred believes”, and using the other form, “That”. An indication bears, if Fred believes that, then the two sentences are kind of innocuous. Whereas if that is missing, “Fred believes Marianne is wearing jeans”.

Lecturer: No, I think you might have misunderstood a little bit about last week. What I was using was a complex sentence where you had one sentence embedded in another sentence. “Fred believes that Marianne is wearing jeans,” and “Marianne is wearing jeans.” I showed you that the truth values of the two sentences vary quite independently. I used that to show you that you have got to distinguish between somebody’s believing P, so it is being true that somebody believes P, and P’s being true. *The belief they have* being true. I pointed out an ambiguity, that “Marianne’s wearing jeans is true for Fred”, can mean nothing more than Fred believes that Marianne is wearing jeans, which is perfectly innocuous. Or could be an expression of individual relativism. “Marianne is wearing jeans” is true for Fred, even if it is not true for anyone else. I pointed out how weird that is, and how we mustn’t slip from the innocuous reading into non-innocuous reading.

Male: It is true for everyone.

Lecturer: If it is true, it is true for everyone. Yes, that's the thought.

Female: So the thought-.

Lecturer: If, "Marianne is wearing jeans" is true, then "Marianne is wearing jeans" is true for you, and true for you (pointing at one person) and true for you (pointing at another person), whatever you believe. There are some beliefs that are true, even if nobody believes them. There was a time when everyone believed the earth was flat. It was a perfectly reasonable belief; it looks flat, doesn't it? We walk on it, I cycle on it, it seems, well, some of the time it seems flat. But actually, even when *everyone* believed that the earth was flat, it wasn't flat, was it? No, the belief was false.

Female: So it is the question of the actual values. It is not the way the two sentences are connected. 'That' doesn't make the difference to it? Fred believes 'that'-.

Lecturer: No, That is just-.

Female: Sorry, that was the misunderstanding.

Lecturer: Right okay, I'm glad we have sorted it out.

Okay, let's go on. This week, we are going to learn how to analyse arguments by learning how to set them out logic book style.

First we are going to deal with ambiguities. We will be doing this first. We did a bit of this. We did make a start on analysing arguments last week, because you already know, believe it or not, what it is to set out an argument in logic book style. We are going to learn about identifying premises, conclusions, and we are going to do things, all of which are necessary to properly analyse an argument. (Slide 4)

Okay, so let's get started. We have successfully analysed an argument when we've revealed its structure; and we reveal its structure by setting it out logic book style. This is an argument set out logic book style (slide 5). You may remember this argument from last week. Okay, so there are the two premises, and the conclusion.

Male: Just checking. Are we going to have handouts of your slides?

Lecturer: Yes. Sorry, I should have said that. I should have welcomed you all, and indeed welcomed all the podcast people, and said there are handouts for all the slides, so you don't need to be writing everything down.

Yes, this is what it is to set out an argument logic book style. And incidentally there are different conventions here. Some people do it

by putting the two premises and then a line to mark the conclusion. Of course you don't have to write 'premise one' etc., out in full, because that is a bit of a bore, frankly, when you are doing it often.

Okay. Premise one, "The mail is always late when it rains." Premise two, "It is raining". Conclusion, "The mail will be late." Can you see that the structure of that argument is revealed? You can start to see. Put your hands up if you think this is a good argument.

Yes. You see, it becomes much easier to evaluate when you can see the structure of an argument. Our aim today is to learn how to analyse arguments and set them out logic book style.

But let's have a look at ambiguity first. A word or phrase is ambiguous if it can be understood in different ways. The very same word or phrase can have different interpretations. But there are different types of ambiguity. (Slide 8) This is where I wish I knew the bells and whistles for PowerPoint, because I would have brought these in one by one. But I don't know how to do that, so you have got them all at once. But we are going to talk about them one by one.

Okay so a lexical ambiguity is a single word that can be understood in more than one way. So, how many meanings can you think of for the word "bank"? Give me a few.

Class: [Cross talking].

Lecturer: Oooh!. Put your hand up.

Female: Where you put your money.

Lecturer: Where you put your money. A financial institution.

Male: An aircraft banks when it turns.

Lecturer: An aircraft banks when it turns, exactly, so it doesn't need to be a verb.

Male: A blood bank.

Lecturer: A blood bank. Yes okay, I hadn't thought of that one.

Female: A sand bank.

Lecturer: A sand bank. Oooh. This is nice. We are going to get more than even I thought. Do you have another one?

Male: It was the same one.

Lecturer: Right, okay.

Female: Using it metaphorically. Banking on something.

Lecturer: Yes, you can bank on something, good. That is not that bank, but it is banking on something. Wow. That was good. I wish I'd asked you before. Good. That is a lexical ambiguity, so you can get one word that means different things.

Then there is structural ambiguity, words in a sentence or phrase that can be grouped together in different ways. "I saw in my paper the black taxi drivers were on strike". Now okay, how is that structurally ambiguous? There is no word in that that is ambiguous is there? It is ambiguous in the way it is put together.

Put your hands up.

Female: It could mean the car really, rather than the actually driver.

Lecturer: What could mean the car?

Female: Black.

Female: Black cab.

Lecturer: Yes, that's right. Black could go with taxi. The drivers of black taxis are on strike. Or what else could it mean?

Female: The drivers are black.

Lecturer: The taxi drivers who are black are on strike. Yes, okay. What about, “Every pretty girl loves a sailor”? There is an old chestnut for you.

Female: Loves a particular sailor?

Lecturer: Is there one sailor such that every girl loves *him*, the lucky chap? Or is it that every girl loves a sailor, but a different one in each case? How boring. Okay, good. That is structural ambiguity.

Then there is an ambiguity of cross-reference. A word or phrase might refer to more than one thing, or more than one person. “Jazz doesn’t want Jane at the party because she doesn’t like her”. What is the problem here?

Female: Which one is it referring to?

Lecturer: Okay.

Female: Who is, “She”?

Lecturer: It. Which is the “It”? The reference of which is questionable.

Female: She.

Male: She.

Lecturer: 'She' and 'her', exactly. The two pronouns. We don't know whether - well, we will see later what it could be. But yes, there are different ways of removing that cross-reference, aren't there? Actually, the sentence as it is at the moment doesn't make it clear which it is, so there is an ambiguity here.

Then there are pragmatic ambiguities, when a sentence could be used to do different things. What might you do with the sentence, "I rang the police"?

Female: Inform?

Lecturer: You could inform someone. "I rang the police".

Female: [inaudible]

Lecturer: You could, yes, I mean again, "I rang the police." You are telling somebody that, "I rang the police: you don't need to" or something like that. Anything else?

Male: You're not sure you did: "I rang the police?"

Lecturer: "I rang the police?" Yes, okay. Is that again informing? What are we doing with that one?

Female: [Cross talking].

Lecturer: It could be the police you rang, rather than the fire brigade, or the cat was up the tree, and I rang the police instead of the-.

Female: "I rang the police?"

Male: It could be a question.

Lecturer: It could be a question. "I rang the police?" With that lovely Australian intonation. Actually it is not lovely, is it?

Female: It could be either, "I rang the police" as opposed to telling them in any other way, or it was the police I rang.

Lecturer: "I rang there rather than running there", or something like that?

Female: Yes.

Lecturer: Okay, good. Lots of different ambiguities there. You see there are all different types of ambiguity in that sentence. Also, a string of words can be ambiguous when spoken but not written. (slide 9) As I was just writing that out, I heard on the radio this 'picture/pitcher of water'. I thought – wait ... I mean it was obvious on the radio which it was. But can you see how that's an auditory ambiguity, but the minute you write it down it is not ambiguous at all. But it is certainly an ambiguity when spoken.

We can also say, "Do *swallows* fly south for winter?" "Do swallows *fly* south for winter?" "Do swallows fly south for *winter*?" etc. By intonation we can get a lot of differences into that sentence.

Ambiguity is really not a good thing when it comes to arguments. Especially when it comes to analysing arguments, because you've either got to rewrite the sentence to get rid of it: If you know that it is, "One sailor that every pretty girl loves", you can just re-write it so you have got, "There is one sailor and every pretty girl loves him."; or you have got to produce two analyses which is a bit of a nuisance isn't it, to represent each meaning.

If this were a premise of an argument, where we had, do you remember, the ambiguity of cross-reference? You would have to do two arguments. One with that (indicating one version) as the premise, and one with that (indicating another version) as the premise. I think ... is there any other meaning? I am not sure. But if there are multiple meanings, if there are more than two, you would

need a different analysis to cover every meaning. Ambiguity is a real nuisance.

I said earlier that philosophers have a name for being pedants. They like you to say what you mean, they like you to be clear. But the reason for that is: I can't get at your thoughts, except through your language, or through your language and your behaviour. But it is your linguistic behaviour that enables me to get to your thoughts. How else would I be able to get to your thoughts? If your language isn't clear, then your thoughts are not clear to me, are they?

I have often had undergraduates try and convince me that they have a thought there *really*. It is just that they can't put it into language. You know, I try this, I try asking that, I try asking that. In the end I conclude, if they still can't get it out, that they haven't got a thought there at all have they? What they have got is a vague sort of mish-mash of concepts that are going round in their head. There is no thought, because thoughts are expressible in language. You can get out an incomplete thought. A good tutor should be able to pick it apart a bit and make of it, a coherent thought. What there isn't, is a thought that can't be expressed in language. But your language must be precise for me to get at your thought. If the language you use is ambiguous, I have got two thoughts, and I don't know which is yours. Two thoughts, or even more maybe. Ambiguity is a real nuisance.

Okay, well we have looked at it now. Now we are going to assume that we don't have problems with ambiguity. We are going to look at how to reveal the structure of an argument.

(Slide 13) Here is a list of things I thought you might like a little list of things that you can tick off as you go through the leader in your paper the next morning, to try and analyse your argument.

First you have got to identify its conclusion. That is usually fairly easy. Next, it's premises. I say it is easy, but actually if you try it with the leader of your paper, you will find it is not as easy as it looks. But you are trying to identify the conclusion, then the premises, then you need to eliminate irrelevancies.

Human beings, when they use language, they don't just use it to inform; they also add all sorts of other things. Expressions about how they are feeling, or explanations of a premise they have just made, or something like that. You have got to get rid of all those if you are trying to analyse an argument, because they are just going to distract you. They are going to lead you away from what you are doing.

You'll also find that we may add in many things to an argument that are not necessary. But we also leave things out of arguments that *are* necessary. Many arguments are enthymemes, as they are called: arguments with suppressed premises. Often that is acceptable, but sometimes it is not, and we need to know the difference between when a suppressed premise is a perfectly reasonable thing to do, and when suppressing it is not reasonable. Finally, we need to make the language consistent. I am going to go through each of these steps, so that is just a list so you have got a handy mnemonic.

Female: How do you spell enthymeme?

Lecturer: It will come up in a minute, I think. If it doesn't, I will spell it again for you.

Okay, any questions about this list? Chris?

Male: Are we only talking about deductive arguments here?

Lecturer: At this point we are not (we're talking about *all* arguments). That is a perfectly good question. Next week we are going to look at the different types of arguments, inductive and deductive. We have much more reason to want to analysis deductive arguments, because we have got mechanical ways of testing them. But as a matter of fact, *this* would apply to inductive arguments as well.

Male: Okay.

Male: Why do you use the word, "controversial"?

Lecturer: It seemed to me the right word to use. I mean there are some suppressed premises that are not ... well actually, I am going to talk about it. If that question still comes up when I have done so, perhaps you can ask it again.

Okay. First we are looking at identifying the conclusion. The conclusion of an argument is a sentence that's being asserted on the basis of the other sentences. It is not always at the end of the argument. People often assume that whatever sentence is at the end of an argument is going to be the conclusion, but that is

absolutely not the case. Where is the conclusion of this argument (slide 16)?

Female: The beginning.

Lecturer: Right. It is “Marianne is wearing jeans” isn’t it? Can you all see that that’s the conclusion of that argument, even though it is right at the beginning of the argument? It often comes at the beginning, because sometimes people assert what they are going to assert, but then they argue for it.

What about this one (Slide 17)? I did change the slide then didn’t I?

Female: Yes.

Female: No.

Lecturer: Yes I have changed it, yes. I should have made a different argument shouldn’t I, then I would know! Where is the conclusion in the middle of this? Oh.

Male: In the middle.

Lecturer: Dead easy that one isn't it?! The conclusion is, "Marianne is wearing jeans" again, but this time it is in the middle. "It is Friday, so Marianne is wearing jeans, because Marianne always wears jeans on Friday". Okay, again, there it is in the middle.

(Slide 18) It is sometimes possible to identify the conclusion, because it is indicated by some sort of "conclusion indicator": 'so', 'therefore', 'hence', 'consequently'. Lots of conclusion indicators.

(slide 19) Here we have an exercise that is dead easy. Which of these arguments has a conclusion indicator? Think about it, and put your hands up when you have got an answer. Don't yell it out, because then, other people may not have finished.

[pause]

Put your hand up when you have got the answer.

[pause]

Okay, I think that is most of you. Who is going to tell me? Would you like to tell me? Which of these arguments has a conclusion that is indicated by a conclusion indicator?

Male: One, two and three.

Lecturer: Right. Does everyone agree with one?

Class: Yes.

Lecturer: Yes. What is it (exercise one)?

Class: 'Therefore'.

Lecturer: 'Therefore', yes. Fairly blindingly obvious that one. Okay, two. Right, what is the conclusion indicator there?

[discussion]

Female: After all.

Class: No, no.

Lecturer: I don't think "After all" indicates a conclusion at all. I don't think there is a conclusion indicator in that sentence.

Male: Yes. I was seeing "And", but I understand that it is not the [inaudible] ...

Lecturer: You were thinking that that was a conclusion indicator. Okay, it certainly can be a conclusion indicator. But I don't think it is functioning as one in that sentence. But you said three. Which is the conclusion indicator there?

Male: 'So'.

Lecturer: Does everyone agree?

Class: Yes.

Lecturer: Good. Does anyone think there is a conclusion indicator in four?

Class: No.

Lecturer: Some of you didn't get that far. Okay, there isn't.

Good, okay. There are conclusion indicators in numbers one and three, but not in numbers two and four. You can never rely on the presence of a conclusion indicator. Sometimes, conclusion indicators, I mean actually, "after all" can be a conclusion indicator, as can, "and." But if they are not functioning to pick out the sentences being asserted, then it is not a conclusion indicator.

The only foolproof way of identifying a conclusion is by its role in the argument, and this is very important: *the fact that it is the sentence that's being asserted on the basis of the other sentence.* The one for which the argument is being made: that is what makes it a conclusion.

Again, if over the next week you have a look at the leader in your paper, you will see that in the leader, in any serious paper, there will usually be one or two conclusions. You identify them by the role that they are playing in the sentence; the fact that they are being asserted.

Sometimes the best way to determine which sentence is the conclusion of an argument is by reading out the argument. Put on your acting hat, and you just read it as if you were making it. That will actually quite often illuminate for you which the conclusion is.

(Slide 22) Okay, can you identify the conclusions? Would you all like to work separately on this for the moment? I don't mind if you work together. Because some of them are a little ... Identify the conclusion of this argument, and then we will do it together.

Female: Can you focus it a little bit?

Lecturer: Is it not focused?

Female: Well, not as good as the others.

Lecturer: I'm afraid I can't actually. Can you see it?

Female: Yes.

Lecturer: I can get a technician to come and focus it.

Female: No, it's okay.

[pause while task is completed]

Lecturer: Actually, some of you start from this end. That would be quite useful. Chop the room in half. You start from the bottom, and you start from the top, and that way we will ...

[pause while task is completed]

Okay. Let's have a look at them together. Looking at the top one, "Help is urgently needed, in view of the fact that 200 people are dying daily". What is the conclusion of that argument?

Class: "Help is needed urgently".

Lecturer: "Help is needed urgently", well done. That was an easy one.

What about this one? "Some contribution to the magnetic field comes from electric currents in the upper atmosphere, otherwise we can't account for the relation between variations in the magnetic elements and the radiation received from the sun". Would somebody like to put their hand up and tell me which ... go on.

Female: The beginning.

Female: The first one.

Lecturer: The beginning? Would you like to read out the sentence?

Male: "Some contribution." That one.

Lecturer: Okay. "Some contribution to the magnetic field". Yes, I agree. Does everyone else agree?

Class: Yes.

Lecturer: What about number three, number two rather. Put up your hand.

Female: "Strikes are unlikely to wither away in any democratic country."

Lecturer: Yes, and we have got a lovely conclusion indicator here haven't we, "it follows". "Strikes are unlikely to wither away in any democratic country so long as communists have strong minority influence". Okay, and number four, this side of the room. Anyone get to that?

Female: The effect of ACTH is not due.

Male: Is not due.

Lecturer: Okay. It is again the first sentence. "The effect of ACTH on gout is not due to increased renal acid clearance alone".

Okay. We have got another indication there with "since." An indication of a premise in this case.

And the last one? I don't know if there is any such thing as 'verdin' actually, but it doesn't matter does it? What is the conclusion here?

Female: The nests of verdin?

Male: The nests of verdin.

Lecturer: Again, it is at the beginning. “The nests of birds are surprisingly ubiquitous.”

I have got answers to all the exercises here (indicating the stage), so you will be able to check them up later on.

Female: “Because”, for whatever sort of sophisticated form of word you use, you can just put “because” in front of each one, can’t you?

Lecturer: You mean a “because” can be used as a premise indicator, and indeed a conclusion indicator sometimes.

Female: Yes.

Lecturer: Yes. “because” is a very interesting one actually. We actually use it to mean, “for the reason that.” It is not clear that it isn’t actually very different from, “for the reason at.” But we do use it. Perhaps I will talk about that a bit at the end if we have got a bit of time left. Yes, “because” is a very useful word in arguments.

Any other questions about that one?

Okay. (Slide 23) Here are five things just to summarise identifying conclusion. Five things that you need to be able to do, to discover, to discern conclusions.

[Pause while students read slide]

Okay. Let's move on to the second ... or are there questions about identifying conclusions? Then I will move on to identifying premises.

(Slide 24) Okay, let's look at identifying premises. Those sentences which are offered as reasons for believing the conclusion. A sentence that is a conclusion in one argument, might of course be a premise in another argument. Any declarative sentence can be used as either a premise or a conclusion. I can't ... it would be interesting to think if there was any declarative sentence that could be used only as one or the other. I don't think so. But again, what is important is always the role that's being played in the sentence.

(Slide 26) Premises, like conclusions are sometimes indicated by the premise indicators – “because”, “as”, “for” – but again, the only foolproof way is by identifying the role that it plays in an argument.

(Slide 27) Sometimes an argument contains two sentences conjoined by, “and”. When you are analysing the argument, you should consider whether to represent them as one complex sentence, leave the “and” in, or whether to separate them and leave out the “and”. I have got an example of that I think (Slide 29).

You should split up a conjunction whenever you need both sentences for the conclusion to follow. Because you are going to end up splitting it up at some point, you may as well split it up right at the beginning. In the sentence, “It is Friday today, Marianne always wears jeans on Friday, so Marianne is wearing jeans today”, which is the conjunction?

Class: [inaudible discussion].

Lecturer: It is the first sentence. "It is Friday today, and Marianne always wears jeans on Friday." Sorry, first part of the sentence. That has a comma. It is best to split that up, because can you see that the argument depends on both these sentences?

Class: Yes.

Lecturer: Therefore you need both of them to come out. This argument, "It is Friday today. Marianne always wears jeans on a Friday. Marianne is wearing jeans today" reveals, the argument's revealed better than it would be by leaving the, "and" in. Do you see the difference?

Male: In that statement, the premise and the conclusions are controlled entirely by the joining word.

Lecturer: Yes, indeed they are.

Male: You could switch it round, but the conclusion could be, "It is Friday." It is not the role the sentence is playing, it is only the "so" word that made it a conclusion, and nothing else.

Lecturer: Sorry, I am not with you. Do you want me to go back to the argument? Or no, we have got the argument there.

Male: Yes. What I am saying is, I think for me anyway, it read the “so” word, when you first quoted that anyway.

Lecturer: Okay. Let me put it back, and then we can see what you are ...

Male: It is going back to.

Lecturer: That one?

Male: Yes. But when that came up a few slides back, it had “It is Friday. Marianne always wears jeans on Friday, so Marianne is wearing jeans today.” It is only the word, “so”, that makes that the conclusion. Because if you drop the word, “so”: “It is Friday today. Marianne always wears jeans on Friday. Marianne is wearing jeans.” Couldn’t the conclusion be, “It is Friday”?

Lecturer: Yes.

Male: Yes, you just swap them.

Lecturer: Yes, you just swap them round.

Male: What I am saying is, it is-.

Lecturer: This is indicating

Male: [This is the only] way of knowing.

Lecturer: Yes, okay, fine. But why is that a problem? Because that is the way of knowing.

Male: I just got conflicted with what you said, when you said that the foolproof way is the role a sentence plays.

Lecturer: Ah, okay. Good, yes, I see what you mean. What you are saying is that *that* sentence, and *that* sentence, could be playing the same role, were it not for that.

Male: For that, yes.

Lecturer: But actually what I am claiming is, in this argument, *that* sentence is playing the role of conclusion, and *that* is indicated by *that*. Do you see what I mean?

Male: Yes, I understand, yes.

Lecturer: Yes. You could only work out that that's the conclusion, because it is (the conclusion) of this argument. Because it is playing that role, in this argument. If we changed the, "so" round, "so it's Friday, Marianne is wearing jeans, and Marianne" we'd have to say, "Marianne only wears jeans on Friday, so it is Friday." Then you have got a different argument, and a different sentence really playing the role.

Male: Yes. That's fine.

Female: But you could wear jeans everyday.

Lecturer: But what I am saying is I am right to say it is the role. You could only tell the conclusion by the role it is playing in an argument.

Male: Yes, as long as that, "so" went with it.

Lecturer: No.

Male: If you wrote that down without the word, "so" in it.

Lecturer: Yes. You wouldn't do that though, because I am talking about the role, that sentence is playing that role in that argument. If you change the argument, you are also changing the role of the sentence.

Male: Okay I accept that, yes.

Lecturer: Do you see what I mean?

Male: Yes.

This became a little confused. The fact is that 'It is Friday' *could* be the conclusion of an argument, for which the premises are 'Marianne only wears jeans on a Friday' and 'Marianne is wearing jeans'. But this *isn't the argument being offered here*.

Female: But you could be wearing jeans every Tuesday as well. It doesn't mean you only wear them on Friday.

Lecturer: No. That's why I said if we change the argument I'd have to put only instead whatever it is that's here. But I think this is a red herring, and we are in danger of letting it distract us, so let's move straight on.

Okay. Do you see why it is best to split up the conjunction here? To get the two sentences out, rather than leave them as one sentence. Chris?

Male: I don't think I can see an occasion when you would want to leave the "and" in honestly. Leave it as a clear argument.

Lecturer: Okay. Let me just give you one.

Male: Okay.

Lecturer: Be careful, because not all "ands" conjoin sentences. This is another reason it is nice to split them up. Sometimes "and" is used to join other parts of language, and sometimes it is used restrictively. Let's have a look at some of these. (Slide 32) Here is an exercise.

Okay. Which of these sentences can be represented as a simple conjunction? I.e. two separate simple sentences. "Claude is a black and white cat."

Class: No.

Lecturer: No. Why not?

Male: He is one cat.

Lecturer: It is one cat, yes. He can't be both black and white. You could say, You can't have "Claude is a black cat" and "Claude is a white cat". The "and" there is conjoining these two predicates (i.e. 'black' and 'white'), not two sentences.

What about, "Charles is a stupid boy"?

Male: No.

Lecturer: There is no, "and" there, but actually there is an "and." Can anyone tell me what it is?

Class: Stupid and boy.

Lecturer: "Claude is stupid" and "Claude is a boy." That's right. That actually is an *implicit*, "and."

"The clever twin was always teasing her dim-witted sister." Is there an, "and" in there?

Male: No.

Female: No.

Male: No.

Female: The twin is clever, and always teasing his dim-witted sister.

Lecturer: Okay. We have got a suggestion here. “The twin is clever.” and “The twin was always teasing her dim-witted sister.” Is that a reasonable analysis of number three?

No, it is not actually. Can anyone tell me why?

Female: I think one is clever and the other one is dim.

Lecturer: Good, that is exactly right. We are using “clever” to pick out the twin who is teasing her sister, if you see what I mean. We need it in. It is not separate. To illustrate this - I will come to you in a minute if I may.

Okay, look at these last two here. “The policeman, who is watching through binoculars, ducked just in time.” If you take the commas out, “The policeman who is watching through the binoculars ducked just in time.” One of these is a conjunction, and one of them isn’t. Which is the conjunction?

Female: Five.

Lecturer: Okay. Anyone think, well I am giving it away now, but no, it is four isn't it?

Lecturer: Have a look. Listen to the English. Listen to my meaning. In which sentence am I giving *two* bits of information about the policeman, and in which sentence am I only giving *one* bit of information? "The policeman, who is watching through binoculars, ducked just in time." "The policeman who was watching through binoculars ducked just in time."

Did you see here, I am saying something that could be, "The policeman was watching through binoculars." and "The policeman ducked just in time." Whereas here, I am using "Watching through binoculars" to identify the policeman who ducked just in time. Do you see?

Class: Yes.

Lecturer: You can always do this. You speak English as well as I do. If you listen to the way you would say it, you will work out the meaning of the sentence: 'that is a conjunction, that one isn't'.

"And" is a very slippery word in English. It often conjoins sentences, but it often doesn't, it conjoins other parts of language. (Slide 33) There are all sort of ways you can use the conjunction without using "and." "Although it was snowing, she went out with wet hair." Do you see that means she went out with wet hair, and she went out when it was snowing? "He was rich but nice." Do you see that

that “but” actually means, “and”? Perhaps with a slightly added implication of something.

“It was comfortable if a little cold.” What is that “if” doing there?

Class: “And”.

Lecturer: It is playing the role of “and” again. The word “and” is very slippery. It comes in when it doesn’t mean “and”, and it is not there when it *does* mean “and.” Always be a little wary when you see, “and” in an argument.

Female: I don’t think it is the same thing.

Lecturer: Sorry?

Female: It is a negative. Saying, “It is comfortable, and a little cold.” It was [inaudible].

Lecturer: You are implying a little more than “it was comfortable, and ...”

Female: ... there was one positive implication, that is the word “if” or “but”: one is positive and one is negative.

Lecturer: I completely agree. If you say, "It was comfortable, if a little cold", you are actually implying something just a little more than, "and" aren't you? You are implying it was unusual perhaps for it to be comfortable. And certainly it is unusual that, "He is rich but nice". No rich people are nice are they? This is rather odd. I agree with you, an indication is left out. But for the purposes of logic, actually, "and" is what we need there. That's what the argument is saying.

Male: Where is your evidence that no rich people are nice?

Lecturer: I have no evidence at all!

Female: You *believe* it.

Female: I don't even believe it, no! Now, do you remember what we said about using sentences, and mentioning them last week? (I cite this as my defence.)

Male: Can you go back to number three?

Lecturer: Yes. When you say number three?

Male: Sorry. When you explained it, I am not sure if this is right. But it seems to me that the clever twin, right, may be teasing her dim-

witted sister, which is not the other twin. It could be a third or fourth sister. I think there is ambiguity there.

Lecturer: Yes, the sister may not be the twin. Yes, you are quite right. Yes, that is ambiguous as well. But I still think it is not a conjunction.

Male: No, I agree.

Lecturer: But yes, you are right. There is also an ambiguity. Well spotted.

Okay. (Slide 34) Now, there are two major problems to be aware of when identifying premises. One is that the person offering the argument may have uttered all sorts of 'fluff' in addition to the argument: words, phrases or even sentences that are irrelevant in the argument. The other is that the person offering the argument may not have uttered sentences that *are* relevant to the argument, that you think, "Ah, hang on. There is not an argument here unless we put this sentence in here."

Let's have a look at these. Irrelevancies are ubiquitous in everyday arguments. Have a look at this argument (Slide 35).

[Pause while class reads slide]

Now, that sounds like something you might say, doesn't it?

Class: Yes.

Lecturer: Or something that somebody else may say to you. But there is quite a lot, I mean there is a clear argument in there, but there is also a lot of other things.

What I want you to do: can you identify the premises and the conclusion of this argument, and also some irrelevancies? Identify the conclusion, and put your hand up when you have got it.

[Class discussion]

Female: "I am fed up".

Lecturer: Don't shout out. Just put your hand up.

Female: "I am fed up" is the conclusion.

Lecturer: Yes. Could you put your hand up when you have got the answer, and let everyone else come to the answer too.

Okay. "I am fed up" is the conclusion you think?

Female: Yes.

Female: No.

Male: It is irrelevant.

Lecturer: Okay, who else has a different conclusion. Did you have your hand up?

Female: "The post is going to be late again."

Lecturer: "The post is going to be late again." Everyone agreed?

Class: Yes.

Lecturer: Yes. The premise is?

Female: "It is pouring."

Female: "It is raining."

Lecturer: "It is pouring."

Female: "The mail is late."

Lecturer: "The mail is always late when it is raining." Okay, good. Is everything else irrelevant? Now you thought that, "I'm fed up" was the conclusion. Do you agree that it is not, now? Okay. What have we got? We have lost the word "again". Have we?

Female: Yes.

Lecturer: No, we have left it in, but we could have lost it couldn't we?

Male: Yes.

Lecturer: It doesn't add anything to the argument. The "again" is for emphasis isn't it? "The post is going to be late again." Okay, what about, "I am fed up"?

Male: Irrelevant.

Class: Irrelevant.

Lecturer: Irrelevant. I mean it is just somebody expressing her emotions on top of the argument. "The mail is always late when it is raining, because the postman doesn't like getting wet." We seem to have lost that. Why have we lost, "Because the postman doesn't like getting wet"?

Male: Irrelevant.

Female: It is irrelevant.

Lecturer: It is irrelevant isn't it? It doesn't add anything to the argument. All it is is an explanation of premise two. Do you see? We do this all the time. As we are making arguments, we think that we need to support one of our premises perhaps, so we will add in another little sub argument to support this premise. But actually when we are analysing the argument we want to leave out those little sub arguments. We might want to put them in as a separate analysis, but we want get them out here.

I mean, once you have stripped away the bare bones of that argument, it is much clearer. There we are, (slide 37) that is where we have got too. Is that what we had there?

Male: Yes.

Lecturer: Yes. Well, well done. You came to it, exactly. There we are. That is getting rid of the irrelevancies.

Yes, well that is what I have just told you. We all, I mean were you taught at school not to use, “saying” too often, or “it’s nice” or?

Class: Yes.

Lecturer: You have got to vary your adjectives. You have got to vary your verbs and everything like that, because it makes life much more interesting, doesn’t it? Well so it does. But when you are doing logic, it is actually an irritant, because you want everything to be just expressed exactly by what you mean.

Okay. Now it was clear that you knew what was irrelevant, and what wasn’t, there, so that was great. But you’ll find that actually that becomes easier again, when you are looking at much more complex arguments like the leader of your newspaper, or the one that you are going to do at home this week that I am going to give you. You’ll know you need to be a bit more careful about what the irrelevancies are.

Okay. (Slide 41) You may find, when you are analysing an argument that you think some premises are missing. There you are. There is the spelling of ‘enthymeme’. An argument with a suppressed premise is called an ‘enthymeme’, and they are extremely common. That is because it would be boring beyond belief if everyone explicated every presupposition or common belief that underpins their arguments.

If Priya tells Sarah that she is taking her umbrella because she thinks it's raining, if she were to add, "and my umbrella will stop me getting wet", Priya is not the sort of person you'd want to end up at the pub with. We just don't eke out all our arguments with every single premise that we might otherwise need. We can assume, can't we, that anyone she is talking to is going to know this. This is common knowledge.

With enthymemes, the crucial thing is to distinguish between benign premise suppression, like the one with Priya and the umbrella, and the suppression of a premise because it is controversial. Now that isn't on. It is very easy, because we want to convince other people, and if we think we can do so by leaving out a premise that actually is something they are not going to agree with, then we will leave it out.

What we need to be alert for is premises that are being suppressed: not because they are benign and a matter of common knowledge, but because they are actually quite controversial.

(Slide 44) Here is an enthymeme in which a controversial premise is suppressed. Have a look at it, and tell me what the controversial premise is.

[Pause while class reads]

Put your hand up when you have got the answer, rather than yelling out.

[Pause while class reads]

Okay. Anyone at the back?

Female: Is it that an embryo is a person? Is that the controversial?

Lecturer: Sorry, say that again.

Female: That an embryo is a person.

Lecturer: Yes. Is that what other people think?

Class: Yes.

Female: An innocent.

Lecturer: An innocent person. Yes, absolutely. "In human therapeutic cloning the embryo is always killed. Human therapeutic cloning is wrong, because it is wrong to kill innocent persons". Well okay, I mean that sounds like a good argument on the face of it isn't it? It is wrong to kill an innocent person, so if that is what therapeutic cloning is, then surely we should ban it. But the premise in there that's controversial is the one that the human embryo is an innocent person. Lots of

people believe that, and lots of people disagree with that. Because it is controversial, because some people agree and some people don't agree, you absolutely *cannot* leave it out of an argument, because without it, the argument is not correct. Does that answer your question about why I put 'controversial' in there?

Male: Yes.

Lecturer: Because it is the very controversy that makes it very important to make it explicit.

(Slide 45) Okay, are there controversial suppressed premises in these arguments? Let's look at the first one. "Female circumcision should be permitted in Somalia, because it is an integral part of Somali culture." Does anyone think there is a suppressed premise in there?

Female: Yes.

Male: Yes.

Lecturer: Okay. What do you think the suppressed premise is?

Female: That everything which is cultural should be permitted; such as suttee, a thing which the English have stood up against, for

instance.

Lecturer: Okay. Does everyone agree that that is what the suppressed premise is, or does anyone have something different? The suppressed premise was, "If it is an integral part of culture, it should be permitted."

Female: Or it's good.

Lecturer: Yes, is that what you are saying? Did you have a different one?

Female: Which implies that anything that is part of culture is good.

Lecturer: Okay. We don't we need to look at the implications of the suppressed premises we are putting in; we just need the suppressed premise.

But that argument is not a good argument is it, until you put that premise in. Once you put that premise in, immediately the argument starts to look weaker doesn't it? Because we can think of lots of examples of things that have been culturally ... or integral to a culture. Suttee is a very good example: burning widows. Anything else cultural that we don't permit?

Male: Bound feet.

Lecturer: Yes. Did we ban that, or did it just die out? But yes, we wouldn't like it to start again would we? Would we, those of us who would get our feet bound?

Any other cultural practice?

Male: Child sacrifice.

Lecturer: Child sacrifice, yes. There are lots of cultural practices we are not going to go for. Once you put that premise in, you realise that this is ... Okay, what about, is there a suppressed premise in argument two?

Female: No.

Male: Yes.

Lecturer: Okay. What is it?

Male: [inaudible discussion].

Female: A gender issue.

Male: "The wife must be".

Male: Yes, "The wives' must be."

Lecturer: Yes I think that is what it is. "Wives must be female. Or wives are female." Jim is male, so he can't be someone's wife." That is right isn't it? But there's got to be something missing here. Now is this a controversial suppressed premise?

Male: No.

Lecturer: No. It really isn't is it? I mean we just, we accept that. I mean I am not begging any questions here about gay marriage or anything like that. Or maybe I am, but if I am I apologise to anyone who is bothered about it, I didn't intend to.

The idea is there that that is a suppressed premise, but it is not a controversial one.

What about number three? What is the suppressed premise?

Male: "Cars need petrol to run."

Lecturer: "Cars need petrol to run." Okay. Is that controversial?

Class: No.

Lecturer: No. Again, we can leave that out.

What about number four? "We can never be sure that someone is guilty, therefore the death penalty should be abolished."

[inaudible discussion].

Lecturer: Who thinks it is controversial? Put your hands up.

Okay. Who thinks it is not controversial?

Okay. What is the suppressed premise?

[class discussion]

Lecturer: Hang on. I have got to the point where I can't think. Let me just see what I have got on the answer sheet. This is my crib sheet here.

Male: We should only put somebody to death if we are convinced that they are guilty.

Lecturer: Yes. “The death penalty should be abolished”, I’ve got, “if there is a risk of using it on someone innocent.”

Okay. Is that controversial or not? Put up your hand if you think it is. Put up your hand if you think it is not.

Okay, that makes it an even more controversial premise, because actually you don’t even know there is a controversy there. In fact, there is a controversy there. A lot of people, in the States for example, a lot of people would accept that somebody innocent may die. But it is worth it, because it is enough of a deterrent. I mean if you don’t agree with that, that’s just the very nature of a controversial premise isn’t it?

Okay. With enthymemes – with suppressed premises – don’t be, and in my experience this is always, it is a very ... when you are a beginner you want to make your arguments absolutely watertight. You want to put all these suppressed premises in. But actually, if they are common knowledge, if they are blindingly obvious, you don’t need to put it in. It is only if they are controversial that you need to put them in. A question over here?

Male: I am just going to say, it would change completely if you said, “In the UK, we can never be sure that someone is guilty.” That would be therefore less controversial. But if you put, “In the USA we can never be sure”, that would be controversial.

Lecturer: It is certainly true that controversy can be culturally specific, yes, whether something is controversial or not can be culturally specific, yes. I think there are probably quite a few people in this country

who might agree, I don't know. I am sure there are many people in the States who would go the other way.

Male: Yes.

Female: The difference there, in this country, the hanging of Bentley ...

Lecturer: The 16 year old who shot a policeman?

Female: Yes. Craig went, yet Bentley was 18.

Lecturer: Yes. I am not going to get into controversies.

Female: But the difference there resulted in a change in law.

Lecturer: Yes. But it resulted in a change in law because it really highlighted the fact that we feel very uncomfortable ... whatever we think about the death penalty, we feel very uncomfortable about innocent people being executed. But I don't think that will stop. It hasn't put the controversy to rest has it? Certainly not worldwide, and it is worldwide we are talking about here, I think.

Okay. I gave you a list of seven things we need to know to identify a conclusion. (slide 46) Here are some things that we need to know

to identify a premise. So have a look and see if you have got questions about any of them.

[pause]

When you come to look at the handouts for this, you will find they are being put vertically rather than across, which will cause you to think, "Something has gone wrong here." Have another look, and look at it down rather than across, and you will find that it solves itself. Sorry, do carry on.

[pause]

Okay, any questions about identifying premises?

Female: Could you just explain number seven?

Lecturer: Number seven?

Female: Is that benign or not?

Lecturer: Well that is really, I am using 'benign' to mean 'not controversial'.

Female: Okay.

Lecturer: Okay. Any other questions there?

No? Let's move on.

Okay, (slide 47) let's finally look at making the language of an argument consistent. This is, again, more simple in the way we are going to be doing it here, than you will find it when you are working on your leader in your newspapers. How might we make the terms here more consistent? Premise one, "It is pouring." Premise two, "The mail is always late when it is raining." Conclusion, "The post is going to be late."

Female: We could change 'pouring' to 'raining'.

Lecturer: Good. We have got, "pouring" and "raining" here. Why? Just for interest? Well let's get rid of one of them. Anything else?

Male: "Mail" and "post".

Lecturer: We have got "mail" and "post". Again, why? We don't need that. If we get rid of that one, and we just choose one of the terms, it doesn't matter which, and see immediately how much clearer the argument looks.

Then the other one - oh, didn't I? Yes, okay, I haven't done it. But the other one was the mail. Yes. Now, can you see how much simpler the argument is? You have taken an argument that has got all sorts of things like, "I am fed up. The mail is late again. The postman hates going out when it is cold", etc., and you have just reduced it to that. Much, much clearer, and much easier to evaluate.

Okay, now I was going to say we could do that at home. But actually we have got 25 minutes left, and if my voice holds out, we could actually do this together. Or, we could use it as a question time. Actually, I'm not sure my voice is going to hold out.

Can you turn the sound off a minute? Because I am going to have a coughing fit. Talk amongst yourselves.

No, start working on the argument!

.....
Our attempt to work on this argument was hopeless! Unless you are interested in its hopelessness, you can stop reading here and start again on page 79. [Marianne Talbot]

Lecturer: I might have headed it off. Let's try it again.

(Slide 53) Right, now here is an argument isn't there? There you are, I have been lulling you into a false sense of security by using all these very easy arguments. Let's have a look at this one.

Okay, have a look, identify the conclusion – don't forget you have got a list of steps that you might use to identify the conclusion – and then tell me which is the conclusion. I promise you there is one. Put your hands up when you have got it, don't yell it out, let other

people come to it. It looks like there are quite a few who have got it already.

[pause]

Hand right up so I can see how many of you. Okay, that is a fair number. What do you think the conclusion is?

Male: "I am not being cruel when I pull my cat's tail."

Lecturer: Everyone agree?

Put your hand up if you don't agree. Right up, so I can see you. What do you think the conclusion is?

Male: "I am only cruel if I inflict pain."

Lecturer: Okay. Why do you think that's the conclusion?

Male: Sorry, I've changed my mind.

Lecturer: Okay. That was easy. Did you have another one? No. Okay.

Male: I've got another one.

Lecturer: You've got another one. Go on.

Male: "I'm not a sinner."

Lecturer: "I'm not a sinner"?

Male: Yes. Or "I've not sinned" ... "I cannot be said to have sinned."

Lecturer: Oh, I see.

[inaudible discussion]

Lecturer: So actually, what you are doing is removing inconsistent terms, is it?

Male: Yes. I am trying to ...

Lecturer: This is not the moment to remove inconsistent terms. I mean well done for doing so, but if that is what you are doing. I do think it is a

very good thing to do things in the order that I have given you, because that way you have got a sort of tick list of things that you need to do. Of course, as you get better at it, you can do it all at once. You can start removing inconsistent terms as you identify the premises and conclusions, but let's just identify the conclusion at the moment.

Okay, "I am not being cruel but I pull my cat's tail." Put your hand up if you agree that that's the conclusion.

Lots of hands not up. Okay, well, I think it is the conclusion too. "I am not being cruel when I pull my cat's tail."

Okay, right, let's have a look at the premises. Have a look at them and put your hands up when you have got the premises.

Put your hand up, don't yell out. Let other people work on it as well.

[pause]

Hands right up if you have got premise one? Okay, just a bit longer.

[pause]

Okay. What is premise one?

Class: "I am only being cruel if I inflict pain."

Lecturer: Okay. "I am only being cruel if I inflict pain." Good. Okay, premise two?

Male: Not sure there is one.

Male: "My cat".

Lecturer: This is the really difficult one. Don't yell out. Let them have time to do it.

[pause]

Okay. No, we've had you. We've had you too. Somebody right at the back there. Gentleman at the back.

Male: "Animals aren't moral agents".

Lecturer: "Animals aren't moral agents." Okay, actually, I shouldn't have written that down. I should have asked whether people agree. Do people agree with that?

Class: No.

Lecturer: No. Sorry sir. What do you think it is?

Female: That's an irrelevance.

Female: I'd say, "Cats can't suffer." It doesn't say, "Cats can't suffer", it says 'innocents can't suffer', then it is a long rambling explanation of why cats are innocent.

Lecturer: So "cats can't suffer" is what you want?

Female: Yes.

Lecturer: What you are doing is you are getting rid of some irrelevancies at the same time, which is actually the same as what you have done over there. Okay, any other bids for premise two back there?

Female: I thought it was, "God would not allow innocents to suffer."

Class: Yes.

Lecturer: "God would not allow innocents to suffer."

Class: Yes.

Lecturer: Okay. Any other?

Female: There is an implicit one, which is that it is okay for sinners to suffer.

Lecturer: Yes. Do you think that ought to be put down as well? I mean that may be an implication of the argument, but our job is not to work out the implications of an argument, it is to identify the argument. I agree there is an implication, but I am not sure we should need to put it down.

Female: Are you including suppressed?

Male: Yes. "I am only being cruel if I inflict pain."

Class: [mumbling].

Lecturer: We have got that as premise one. I thought I had heard that before somewhere. Yes, over there.

Male: That “pulling the cat’s tail does not inflict pain.”

Lecturer: “Pulling the cat’s tail does not inflict pain.” Okay, lots of options on that one aren’t there? Can I have a volunteer to come up and hold this up?

Female: I don’t understand.

Male: The volunteer is me?

Lecturer: Yes. You happen to be in the front.

Male: That let’s me off having to give an answer.

Lecturer: Oh no, no, no. I think perhaps we will make him give answers shall we?

Okay, we’re agreed on premise one aren’t we? “I am only being cruel if I inflict pain.” We have got the conclusion, which is, “I am not being cruel when I pull my cat’s tail.”

Okay, shall we start by making some terms consistent? Things like that. Maybe that will help. Do you see what I am doing now? I am taking the list of things that I gave you to do. When we have got a

problem with how to identify a premise here, we may try to make the premises and conclusions we do have consistent. Okay, how might we do that?

Female: You have got “pain” and “suffering”.

Lecturer: Sorry?

Female: You have got “pain” and “suffering”.

Lecturer: I am thinking between just these two. We have got the premise, “I am only being cruel if I inflict pain” and the conclusion, “I am not being cruel when I pull my cat’s tail.”

Female: We can change it round.

Lecturer: We can change one to the other can’t we? “I am not being cruel if I pull my cat’s tail.” Or we could have done it, and in fact perhaps we should have done it the other way round. Do you see, “I am only being cruel if I...”

Class: “Inflict pain.”

Lecturer: We don't have to leave in the "Inflict pain" do we? "I am not being cruel when I." Actually, that is not going to work. We are going to have to leave, "pull my cat's tail."

Male: I think there is an implied premise there between those two things.

Male: Yes.

Lecturer: Okay. That might help us to get premise two.

Okay. God, I am going to take this off and start again.

It is now looking so. Are you having trouble with your arms there (to the volunteer holding the page)?

Male: I am just worried I'll have to hold the other one as well. I am alright.

Male: Get another volunteer.

Lecturer: "I am only being cruel if I inflict pain, when I pull ..." How's that? "... my cat's tail.

Male: Yes.

Lecturer: I'm not sure about that.

Class: [inaudible discussion]

Male: You are not being cruel in that sense necessarily.

Lecturer: "I am not being cruel". You know the difficulty with doing these things on the hoof is it all starts going wrong in the middle.

Female: "Pulling the cat's tail does not inflict pain."

Lecturer: Erm ... Are you having trouble with your arms there?

Male: No, I am alright. I will move them about a bit when I need to.

Lecturer: Good. Okay.

Male: It is very heavy considering it's a bit of paper.

Lecturer: "I am only being cruel if I inflict pain. God wouldn't allow the innocent to suffer". Okay, what did you come to on this? You said there are all sorts ...I mean there is a lot of irrelevances in the ...

and do you remember what I said about, we often explain premises as we give them? What is being explained there? What is the premise itself?

Female: “God would not allow the innocent to suffer” as a premise.

Lecturer: Or even simpler than that.

Female: “My cat is innocent.”

Lecturer: “My cat is innocent.” Do you see if we put, “My cat is innocent” here? “God would not allow the innocent to suffer, and my cat, not being a moral agent in the first place, since she is an animal, and animals are not moral agents, cannot be said to have sinned. My cat is an innocent.” So, “I am only being cruel when I inflict pain. My cat is innocent.” We need something else here.

Female: What’s it got about God not allowing the innocents to suffer?

Male: Yes. You have got “God doesn’t allow ... pain on innocents.”

Female: “Innocents don’t suffer”.

Lecturer: “Innocents don’t suffer”, or something along those lines.

Male: It doesn’t say that.

Lecturer: No, but it does say, “God doesn’t allow the innocent to suffer”.

Male: Oh, so how can you leave out “God”?!

Lecturer: “God doesn’t allow innocents to suffer.” I am not sure we are doing so well here. “My cat is innocent”, “God doesn’t allow ...”, “I am only being cruel if my cat suffers”.

Female: “When I pull its tail”.

Lecturer: “When I pull its tail.” Yes. “If my cat suffers” Okay. “...I’m not being cruel”.

Female: Is it simpler than that? Is it saying that pain is cruelty?

Lecturer: Well *inflicting* pain is cruelty.

Female: I don’t understand this at all.

Lecturer: You don't understand it at all. Okay.

Female: It means that ...

Lecturer: That is not your fault.

Female: It means that innocents don't suffer even if they are ... they don't suffer because they are innocent?

Lecturer: I tell you what I am going to do. I am going to find what I had myself. Well, one I prepared ... Oh, hang on, am I going to be able to do this? I need to find it. This is a ...

Class: [inaudible discussion]

Lecturer: This is what happens when you try and do logic when you've got a cold. That's my excuse and I'm sticking to it.

Hang on, lecture two this is, isn't it? We want lecture three.

Class: [inaudible discussion]

Lecturer: Right, you must *promise* not to look at any answer but the first one (changing slides to the next lecture). Okay. There we go.

Female: I can't see it anyway.

Lecturer: Let me move that down so you can't see, well no, you can't.

Female: It's too small.

Lecturer: It's too small is it?

Male: No, that's alright.

Class: [inaudible discussion]

Lecturer: Let me get it up. Okay, we will make that, is that better?

Class: Yes.

Lecturer: There we go. I've got, "Pulling my cat's tail is cruel only if my cat suffers." "I am only being cruel if my cat suffers when I pull my cat's tail." You have pretty well got that.

Okay then, conclusion, "Pulling my cat's tail is not cruel." "I am not being cruel when I pull my cat's tail." Again, you pretty well got that. It is premises two and three, that should be. You have got, "My cat is innocent." Premise two is, "If my cat is innocent, she will not suffer." Okay. Do you see how that comes from the original argument?

Class: Yes.

Lecturer: You identify the conclusion. You identify the other premises. Get rid of all the stuff about God. I am sorry, I have taken God out of that again. You really didn't want me to do that, but here we are, this is the explanation. I deemed God and what he will allow irrelevant. It is merely an explanation of why my cat won't suffer, when what is important to the argument is only that the cat won't suffer. Okay. "My cat not being a moral agent because she is an animal" is also irrelevant; because what matters is only that she is innocent.

Female: How can it be?

Male: How can a cat be innocent?

Female: It means if somebody is innocent they don't suffer?

Lecturer: Now, do you remember when we were talking about arguments, we are not talking about whether the premise is true, we are only looking at what the premises *are* at the moment.

Let me say that again. When you are identifying the argument, you are not worrying about how good the argument is, because we analyse the argument first, and *then* we evaluate it. Okay, so we analyse it, then evaluate. It may be that some of the premises are false. It may be that the argument is a bad one. Ignore that: it is not relevant at this point.

As a matter of fact, this argument is valid, and we will look at that in week four. But that doesn't necessarily mean – as we will also see in week four – that all of the premises are true.

I am assuming that in making “she cannot be said to have sinned” into “my cat is innocent”, that all I am doing is making the terms consistent. I am not changing the meaning of anything.

Female: Sorry.

Lecturer: Yes?

Female: [inaudible question]

Lecturer: Because I made a mistake. Can you see that I have got premise two here, and premise two? Which I hope I will have seen before next week, but here I am doing it this week.

Okay.

Female: Why can't you just leave out "My cat will not suffer" and then all the discussion about the innocents is an explanation?

Lecturer: Okay. "Pulling my cat's tail is cruel only if my cat suffers. My cat will not suffer." Everything else being an explanation. "Pulling my cat's tail is not cruel." You're right, you could – yes, well done. Do you see what was being said there?

Male: Yes.

Lecturer: Actually we can get out all this stuff about innocence and make it even simpler, because the skeleton of the argument doesn't even depend on innocence does it? All it depends on is the cat not suffering for whatever reason. The cat doesn't suffer. Thank you very much. You can keep that as a souvenir if you like. Chris?

Male: I would argue there is no second or third premise, because I don't think I either of those are derivable from the arguments you have put forward.

Lecturer: You don't think?

Male: Either premise two or premise three can be derived from the arguments as you have put them forward.

Lecturer: From the argument that we had?

Male: In other words I don't think you can make those terms consistent.

Lecturer: Say that again.

Male: I don't think ... you have argued that you are making premises two and three by making the terms consistent throughout the argument. I think that is a dubious step.

Lecturer: All have done is taken away, "My cat cannot be said to have sinned" and changing it to, "My cat is innocent." Why is that not an innocence?

Male: I don't think that is quite the same statement.

Lecturer: Why not? Okay, let's get them out here so we can have a look. I have said, "My cat cannot be said to have sinned" and "My cat is innocent" mean the same for the purposes of this argument. You don't think they do. Why not?

Male: Okay. I might say that for this argument. But I think as a generalisation, it is quite a dangerous statement to make.

Lecturer: I mean I certainly agree. Well, no, I agree that maybe for the purposes of some other purpose, they are not the same. But I think for the purposes of this argument, they are equivalent.

Another question?

Female: I can see what you are saying, but I would have thought that by suppressing the “God” bit, you are suppressing a controversial premise, or whatever it was. Because the cat is innocent depends on all sorts of belief that God wouldn’t ‘blah, blah, blah, blah’...

Lecturer: You are quite right that any mention of God should immediately alert you to some sort of controversy here. I think you are absolutely right to have your interest piqued by this. But I think again, it comes back to, “For the purposes of this argument”. What we are identifying is what is being asserted, and what are the reasons that are being offered for it. I think that if you have a look at that, or even the paired down argument, you really don’t need to appeal to God. You need to appeal to God perhaps in order to justify one of the premises. But we are not at this point asking even whether the premises are true, never mind whether the argument is a good one. We are just asking, “What is the argument?” Again, to go back, I mean we are going to take this off now. I mustn’t forget my ... can I take this off?

Male: Yes.

Lecturer: Oh no, I don't want. There we are, I must try and remember to change ...

Female: Premise two.

Lecturer: Premise two to premise three. Of course, I have got to find you an argument for next week. Actually I will leave that in here. You are going to need another argument aren't you? Where will I find one? Wait a minute.

You are getting a preview of the online course. Oh damn. It's the same argument. Okay, let me find another one.

I'll tell you what. If you email me, or I can get Hazel, I will send Hazel an argument for you, and she will email it all out to you. Is there anyone not on email?

Two people, three people. If you could write your names down and give them to me, I will ask Hazel to post you something for that. You will all have an argument for ... Oh, I have put that out without.

Right, just to see where we have got to ... we got a bit lost there, because it is very difficult to think about things like that right at the end of the lecture.

But, what we have looked at today is analysing an argument. The reason we have done that is because later in the course, starting from week four, we are going to be looking at evaluating arguments. But you can't really start evaluating arguments until you have identified arguments. That is what we have been doing today.

When you are looking at the newspaper, go home tonight, have a look at the leader of your newspaper, and ask yourself, "Okay. What is the argument of this leader? What is the claim being made? What are the reasons being given for it? What's all this irrelevant guff here? Or is there another argument? Are there two arguments here that I need to put together? Get rid of the irrelevancies; get rid of the inconsistent terms; put in any suppressed premises (I would hope there wouldn't be any suppressed premises, but there might be); leave out the ones that are benign, and see if you can get the argument from your newspaper. I am very happy, I will send you the argument by email, but also, if you want to bring in your newspaper and the analysis that you have got from that, I will be very happy to mark that separately as well.

Okay, now there is a question from the back here.

Female: Sorry, if I could just briefly revisit the God bit.

Lecturer: God? Yes. Always a good idea to revisit God.

Female: If you take out the rest of the argument about the pain and the pulling the tail and all the rest, just take the bit about the cat being

innocent, and innocents don't suffer. The only premise you have for the conclusion that innocents don't suffer is that God makes that so. If you take God out, what is your premise for saying that innocents shouldn't or don't suffer?

Lecturer: You don't have one. The premise is, "My cat is innocent. Innocents don't suffer." Is that right?

Female: Yes.

Lecturer: Now what you are asking is what justifies my saying that is true.

Female: In that sentence, I don't mean in a general way.

Lecturer: Yes. I am saying, there is no justification, because the argument itself has another separate justification. You might say there is another argument implicit in that argument, that goes, "God doesn't allow the innocent to suffer. My cat is innocent, therefore my cat won't suffer."

Female: Yes.

Lecturer: And it is the conclusion of that argument that is actually the premise in the argument that concerns us.

Female: Yes, I would agree. Therefore I don't see how you can take God out. I am not making a religious comment, I just don't know how you can take it out of the sentence!

Lecturer: We are looking just for the argument for the conclusion, which was something I have completely forgotten.

Class: "If I pull my cat's tail."

Lecturer: "If I pull my cat's tail".

Female: Oh I see. You can't sub-divide, and say "Well, what about that ..."?

Lecturer: No. Because when you are analysing an argument, you look for the conclusion of *that* argument, and the premises of *that* argument. The conclusion of that argument was, "I am not being cruel if I pull my cat's tail." Therefore, the God is irrelevant. Make sense?

[The idea is that once you have identified the conclusion anything that isn't a reason for that conclusion is irrelevant to that argument. *Marianne Talbot*]

Female: Right. Yes.

Male: It is irrelevant because you truncated it, at the point of, “My cat is innocent.” But that point, to truncate it, even though there is more information there, that says, “My cat hasn’t sinned. People who don’t sin are innocent.” so-

Lecturer: Yes. In the argument about the postman and the mail being late, I also had in there something about, “The postman hates getting wet, and therefore the mail.” I left out the explanation for one of the premises there, because it was irrelevant to the argument that concerns us.

Now, at some point we are going to say, “Okay. Is this a good argument?” That will involve us asking, “Are the premises true? Does the conclusion follow from the premises?” Now, if we become interested in the truth of the premises, we may want the argument for the premises. But we are not looking at that at the moment.

Male: But you truncated information.

Lecturer: I took out what was irrelevant.

Male: No, why is it irrelevant? Because the last point on the chain of events in there, is the one where you have got to question the truth of it or not. But they are all linked together. “My cat is innocent. Sinners aren’t innocent. My cat hasn’t sinned, therefore he is innocent”.

Lecturer: Okay. Let's just - I realise some people are going to have to go to catch a train. I'm sorry, this is ...

Male: I mean we can do this later. Am I the only one who thinks that?

Female: No, I agree entirely.

Lecturer: Okay. I'll tell you what. We will start next week by having a look at this again - how about that? That is probably the best way to do that.

Okay, there is coffee and tea in the common room. Go and help yourself. I will be in there in a minute.

END AUDIO