



### How to analyse an Argument, May 2, 2015

Argument has two steps. First, it is logic. Second is the true or false of the premise. When we analyse the first step; it is called logic. In the logic analysis we learn very few things. We learn to recognise bad logic. We've only learn 2 bad logic. One is called used mention fallacy. One is called equivocation fallacy. So when the logic is bad is called a fallacy. Why is it called a fallacy? Because it looks so much like a good logic. Now the most important thing is when we're analysing logic which is to recognise whether the logic is good or bad; whether it is logical or fallacy we are not even dealing with true or false of the context; because logic is structure. It is like grammatical structure. As long as the sentence is grammatical correct, it passes the step-1 analysis. So when we say: "*Rabbit big speak*" It fails the grammar. When we say: "*Big rabbit speaks*" it passes the grammar. Whether rabbit speaks or not, true or false we don't care.

Now, fallacy is a "big speak rabbit". OK! It almost looks passing. It almost looks like okay. The big speaks rabbit, but is it saying is the big rabbit speaking? Or, this rabbit is speaking big. OK? So, you analyse that. You analyse the structure. See if it passes or fails. If it fails, it fails. You don't have to go anywhere. It passes; if it says big rabbit speaks you go to Step-2; which is you ascertain, is this premise correct or not. That depends on background knowledge. If I have read Alice in Wonderland, I say "Yeah, true, this premise is true". Alice was following this big rabbit that speaks. So, it's finished. The logic is good and the premise is true in Alice in Wonderland. Now, you may say but it is not true in real life. Well, that's right. It is not true in real life. Not all rabbits speak in the real life. But the story book said that the rabbit is true. So if you don't have that background, you cannot ascertain. Okay?

In summary a smart critical thinker always does Step-1 first to ascertain the logic/syntax. If the argument fails logic/syntax, it is already defeated without having to do any work on Step-2. Step-2 requires background knowledge, one of the 5 pillars of critical thinking. That is why step 2 is hard work to ascertain true or false. A dumb critical thinker will undertake Step-2 first and then proceed to Step-1.

Homework:

Premise-1	Fresh baked bread taste good
Premise-2	I baked bread
Conclusion	My bread taste good

When you analyse this argument on "My bread taste good" did you take the dumb or smart method?

**2015-05-09 Transcription Critical Thinking class 10-13-Jenny**

Today is May 9, 2015 and we're continuing our critical thinking class in Year-1 core-requisite. Welcomes Tom, back from Vietnam to visit us. Very wonderful and kind of him to bring us the mixed snack from Vietnam. Okay today, I wish to help the classmates to achieve our previous learning objectives. We are still confused about what an argument is. We have not quite achieved the learning objectives of distinguishing between the Step-1 logic and the next step, Step-2 plausibility. So now, if we look at the slide on episode #10, the timing is 3 min and 15 sec. We have the slide that says argument analysis. Argument is a two-step process.

0:01:06-01:02:53 Critical Thinking video

Okay so we have learnt the argument analysis has two components, alright, two steps. What is step one?

Tammy: Evaluate the logic.

Right and what is step 2?

Tammy: Evaluate the premise.

Right, what we always get confused about is that we mix up the evaluation of logic with the evaluation of the plausibility of each premise. So, thinking back about my example. My argument was like this.

Premise 1	Pho taste good
Premise 2	Ching cooks pho
Conclusion =	Ching's pho tastes good.

Okay, now, we went through almost half an hour discussing what's wrong with this and we did not achieve the learning objectives because we keep mixing the two steps up. Understand? So, let me try again.

Pho tastes good.

Ching cooks pho.

Ching's pho tastes good.

Let us do Step-1, evaluate the logic. Is the logic acceptable?

Roy: Yes, the logic is acceptable.

No, it's not for Tom's sake but for your own sake because we have to distinguish Step-1 from Step-2. Okay, that is where we fail. All the classmates mixed up the Step-1 with Step-2. We keep criticizing that logic and say it was wrong. Now, the logic is fine. Let me give you an example.

Premise-1: pho tastes good.

Premise-2: Chi cooks pho.

Conclusion: Chi's pho tastes good.

Tom: That's confusing, pho tastes good.

So, Step-1 and Step-2 must be clearly distinguishable. Step-1 is the premises "pho tastes good". That is the premise and we don't care if the premise is true or not; that is Step-2 to evaluate the truthfulness of the premise. Okay? So my example of cooking pho is the same as

Premise-1: all rabbit speaks Italian.

Premise-2: Jack has a rabbit.

Conclusion: Jack's rabbit speaks Italian.

Step-1, the logic is perfect because Step-1 is all about...

Tammy: Logic.

And when we talk about structure or content, syntax or semantics. Step-1 is what?

Tammy: Structure.

Rights. Step-1 is structure, when we use structure and content.

Now, when we talk about syntax and semantics then which one is the Step-1?

Jenny: That is the content.

Wrong.

Roy: Syntax is the number 1. Semantic is the number 2.

Right, Okay.

So, get this now. Step-1 is evaluating the logic. Step-1 is structure. Step-1 is syntax. Okay?

Now, when we say something in English and it doesn't make sense is called a syntax error. E.g.

“Temple the Hien to Pho welcomes thinking for critical today Tom”

Tammy: No structure.

Exactly, no structure, no logic, syntax error. That's all we are doing in Step-1. Is the person making sense in his logic? In this case, it's linguistic logic. So, when I say “welcome Tom to the Pho Hien Temple for the critical thinking”; then, there is no syntax error. That's Step-1. So, Step-1, we simply see if whatever the premise presented to us is gibberish or does it fulfil minimum requirement of logical syntax. That's all it is. That's Step-1. Because if a person is talking gibberish, you don't even need to talk to him no more. There is no argument there. When a person is talking gibberish and there were many examples later he gave, such as the computer is an intelligent design. Once you do the word substitute, the premise becomes “the intelligent design is an intelligent design”. Therefore the conclusion “intelligent design is an intelligent design” is gibberish. That's Step-1, okay? So, in identifying errors in logic we call them fallacy. Because the gibberish is so like language that it almost pass for language. Like “temple Tom Pho Hien...” By the way, pho is also PHO, Pho Hien is also PHO. The word “Pho” can mean beef noodles or name of a temple depending on syntax. So, it gibberish, gibberish...

Alright, now, Step-2 when we evaluate the premise, let's do it again. Pho tastes good. Is that a true premise?

Tammy: It could be.

Roy: It is not.

Tom: I think it's true.

Jenny: Not all pho is good.

Right, not all pho is good. So, not all X are Y. Got it? So, when we evaluated the premise, we can invoke category logic to fix it. We feel it is not true. How can we make it true? Well, we invoke logic again. This time we invoke category, “not all X are Y”. Some pho tastes good. Some X are Y, but not all X are Y. Then, “Ching cooks pho”. We can accuse that of “fallacy of equivocation” or we can demand a clarification. Is he cooking the standard pho or is he cooking the Ching kitchen pho. In fact, even standard pho has a problem because we already decide that some pho taste good. If you look at all the Vietnamese restaurant, not every restaurant has good pho. Only some restaurants have good pho. So the premise “Pho tastes good?” has a big problem. So, Ching cooks good restaurant pho or bad restaurant pho or Ching's own recipe pho. So therefore, the conclusion does not follow. That is all about evaluation of the true or false of the premises. It has nothing to do with the logic part. So this is how we achieve this learning objective.

Now, one more thing I want to point out. When Tom says “I think it's true, pho tastes good” because Tom's view point is typical of a Vietnamese who just came back from Vietnam and who is sitting in the Vietnamese Pho Hein Temple. The premise is true based on his culture, right? Let's take a different viewpoint. Let's go up to the top of the CN Tower. We are now at the top of the CN Tower looking down at the population of Toronto. Okay? There are white people, black people, Middle East, Asian, Muslim, Catholic, everybody. Now throw this statement at them “Pho tastes good”. What would be 90% of the population's reaction?

Tammy: No.

Roy: Don't know.

Exactly, don't know because 90% will ask, what is pho? Got it. You are on top of the CN tower looking at the Toronto population and you say “pho tastes good”. 90% would ask “what is pho?” Different viewpoint now. Understand? I'm saying Tom said pho tastes good sitting at the Pho Hein temple. But sitting at the top of the CN Tower, Tom will say different. Because now Tom has a different viewpoint. When he looked out and see all these black and white people eating hamburger. He wouldn't say “pho tastes good” is a generally true statement because what the heck is pho. Now if you feed pho to the entire 6 million Toronto population, you still think they will all say pho tastes good?

Tammy: No.

No. Exactly. Most of them will say pho tastes bad. They're not used to the raw onion, raw ginger and the raw meat.

Tom: Even if, otherwise they wonder what it is. If they try pho and you know they might say it's bad.

Exactly. So for the 90% of the people they would say mostly “pho tastes bad”. Now, the point I'm drilling on is the viewpoint. Viewpoint, viewpoint, viewpoint which are today's lecture on viewpoint. Okay? So, we have done achieving this learning objective on Step-1 versus Step-2. All of the evaluating the truthfulness of premises belong to Step-2. All of the evaluation of gibberish belongs to Step-1. Do not confuse Step-1 with Step-2. If you confuse the two, we don't get anywhere; we will fail the learning objective. Okay? Good. So, we can close this topic and start today's lecture on the different viewpoints which is learning from actors.