Introduction to Logic

Assignment 2 Solutions

Task 1

Identify the hidden premises or assumptions in the following arguments. Note that there could be more than one hidden premise/assumption in each of these arguments.

- 1.1 The business model of internet cafes is no longer capable of success. This is because the availability of internet has skyrocketed over the past several years. Free wifi is offered in most major coffee shops and stores. Additionally, most people now have mobile devices with plans that provide them with internet access.
- 1.1.1 Success of internet café relies on an access to the internet of people Probable assumptions that make the author believe the above statement.
 - A1. People only visit internet cafes because they need internet access.
- A2. If internet access is available elsewhere, fewer people will visit internet cafes
 - A3. Internet cafes cannot succeed if not many people visit them.
- 1.2 Companies should avoid using popular networking platforms, such as Facebook or Line, as a means of communication. This is because many employees use such platforms for personal communication. Using such a platform would thus make the employees distracted and their productivity reduced.
- 1.2.1 Companies should avoid using platforms that can distract an employees and reduced their productivity.
- 1.2.2 Platform that employee use for work and personal communication can distract them and their productivity reduced.
- 1.3~A franchise restaurant pays its employees in State A \$2.00 per hour above the minimum wage, and pays its employees in State B \$1.00 per hour above the minimum wage. The franchise has three times as many employees in State A as in State B. The franchise's total expenditures on hourly wages for its employees must therefore be higher in State A than in State B.
- 1.3.1 The franchise's total expenditures on hourly wages for its employees in a state is proportional to the number of employees and the pay rate.
- 1.3.2 The number of working hours of employees in State A is no less than that in State B.
 - 1.3.3 The minimum wage in State A is no less than that in State B.

1.4 The press reports sensationalist stories in order to get people to pay attention to the news. In order to generate high ratings, reporters now only report on topics with great scandal that will compel people to pay attention. The general public is, therefore, uninformed about basic non-sensational events.

Conclusion: The general public is uninformed about basic non-sensational events.

Relies on the premise:

P: Reporters now only report on topics with great scandal.

Assumptions:

- 1. The general public receives news only from what reported by the reporters.
- 2. Basic non-sensational events are not topics with great scandal.

The author explains the premise P using the following explanans:

- E1. Topics with great scandal will make people pay attention.
- E2. Reporters want to generate high ratings.

Hidden Assumption 1: Reporting only news that get people's attention will generate high rating.

The author explains why E1 is true using the following explanans:

E3. Sensationalist stories get people to pay attention to the news.

Hidden Assumption 2: Topics with great scandal make sensationalist story.

1.5 Gotham city conducted a survey in which over half of its residents admitted that they do not recycle, and the city's recycling plant has threatened to lay off employees due to lack of work. In order to increase recycling, the city should install recycling machines in the city center, in which residents can turn in their bottles, cans, and other recyclables in exchange for discount coupons. This plan would dramatically increase the number of residents that recycle and save the jobs at the recycling plant.

Assumption:

- 1. Residents will recycle more if there are recycling machine installed in the city center.
 - 2. Residents want to get discount coupons.
- 1.5.1 Installing recycling machines in the city center, in which residents can turn in their recyclables in exchange for discount coupons, will increase recycling.
- 1.5.2 When recycling increases, the city's recycling plant will have more work to do and will not lay off its employees.

Task 2

Identify the type of informal fallacies in each of these arguments. Provide a brief explanation to justify your answer.

2.1 My friend at another university said her logic class was easy, and the one I'm in is easy, too. All logic classes must be easy!

Hasty Generalization. The speaker drew a general conclusion based on only two examples.

2.2 Guns and knives are similar -- both are tools made of metal that could be used to kill. And yet it would be absurd to restrict the purchase of knives -- so restrictions on the purchase of guns are equally absurd.

Weak Analogy. The similarity between guns and knives is not strong enough to support the conclusion.

2.3 The opposition party again opposed the reenactment of the death penalty. They must believe the lives of convicted murderers are more important than the lives of their victims. Clearly, they are wrong and the law enabling death penalty should be put into effect immediately.

Straw Man. Instead of attacking the actual argument made by the opposition party, the speaker distorts the opposition's argument, and attacks the distorted argument.

2.4

Yoda: How feel you? Anakin: Cold, sir. Yoda: Afraid are you?

Anakin: No, sir.

Yoda: See through you we can.

Mace Windu: Be mindful of your feelings.

Ki-Adi-Mundi: Your thoughts dwell on your mother.

Anakin: I miss her.

Yoda: Afraid to lose her I think, hmm?

Anakin: What has that got to do with anything?

Yoda: Everything! Fear is the path to the dark side. Fear leads to anger. Anger leads to

hate. Hate leads to suffering. I sense much fear in you.

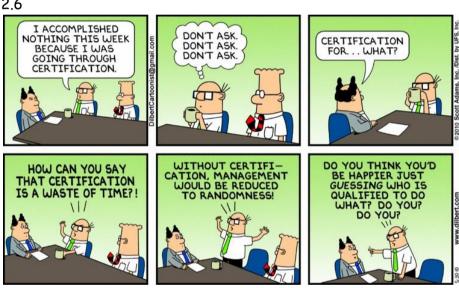
Slippery slope. Yoda made the conclusion that fear is the path to the dark side based on a sequence of steps that is not certain to happen.

2.5



Equivocation. The word "steal" used in the two contexts have different meanings.

2.6



- 1. Red Herring. The bald guy senses that his boss starts to think that he lied about going through certification. Instead of continuing to argue that he actually go through the certification, he changes to a slightly different topic.
- 2. Slippery Slope. In his argument on the importance for certification. First, that "management would be reduced to randomness" is a slippery slope.
- 2.7 "Do I trust the word of a mad man and forget the lessons of September 11th or take action to defend America? Given that choice, I will defend America every time" George W. Bush

False Dichotomy. The speaker presents the two choices as if they are the only available choices.

2.8 It has been more than a month since the Government started the lock down, and the infection rate has not decreased at all. Clearly, the lock down did not work and should be stopped.

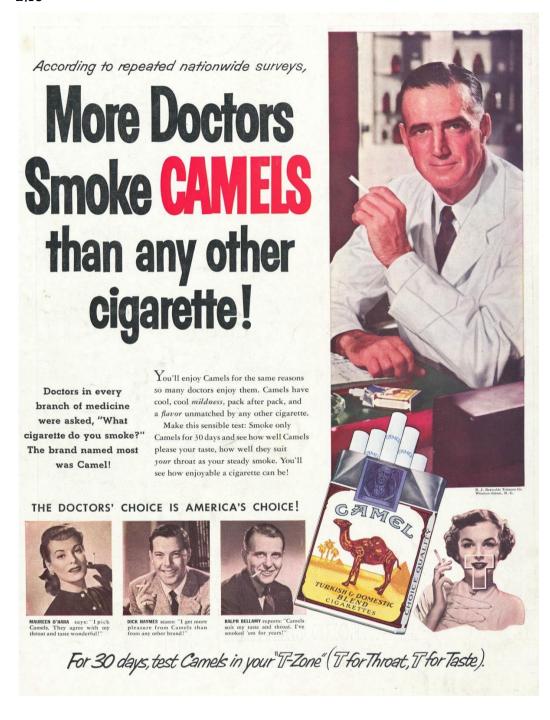
Oversimplified cause There may be many possible causes for the non-reduction in the infection rate.

Or it can be **Suppressive Evidence**. May be the author is unaware of the fact that the infection rate could actually have risen to much higher level had there not been a lock down.

2.9



False cause. Getting married may not be the cause of being happier. The latter may imply that there is a correlation between getting married and being happier. But getting married might not the cause for being happier. Maybe it's the other way round. Or may be there is some other cause for married people to become happier, not the marriage itself.



Appeal to people. The ads aimed to convince the audience that they should buy this brand of cigarettes because doctors preferred them.