

NAME: _____

Philosophy 1104: Critical Thinking

Answers to Quiz #2

October 5, 2017

TIME: 60 minutes

1. In which of the following pairs of propositions does *A* provide *conclusive* evidence for *B*? Also say whether or not *A* provides at least *some* evidence, even if rather weak (i.e. say whether *A* is *positively relevant* to *B*). Write just 'Yes' or 'No' in each column provided. [10 marks]

	<i>A</i>	<i>B</i>	Conclusive evidence?	Some evidence?
(i)	This roulette wheel hasn't come up odd in the past seven spins	The next spin of this (same) wheel will come up odd	No	No
(ii)	Mike has telepathic abilities	Sophie has telepathic abilities	No	Yes
(iii)	This untested drug helped Fred fight the flu	This (same) untested drug will help Alice fight the flu	No	Yes
(iv)	Alain is a Frenchman who drinks tea.	Some French people drink tea.	Yes	
(v)	Jill is taller than Mark, who is in turn taller than Wei Shen	Jill is taller than Wei Shen	Yes	
(vi)	Zhou's mother is a teacher	Zhou is a teacher	No	Yes
(vii)	Apple seeds contain cyanide	Libya shares border with Chad	No	No
(viii)	Eating fermented salmon heads is popular in Alaska	Eating fermented salmon heads is not popular in B.C.	No	No
(ix)	Many people testify to having been helped by acupuncture	Acupuncture really works to heal people	No	Yes
(x)	Some men are nurses	Some nurses are men	Yes	

2. Each of the following definitions is flawed in some way (each in just one way, I think, or at least one main one). Diagnose each definition as “circular”, “too narrow”, “too broad”, “loaded”, or “just wrong”. [1 mark each]

- (i) A *safe* activity, by definition, is one that never kills people or does them harm.

Too narrow

- (ii) *Philosophy* is hard to define, but it basically means analysing things in a philosophical way.

Circular

- (iii) A *rock* is a piece of solidified magma.

Too narrow

- (iv) A *Christian* is someone who believes that Jesus is both human and divine, despite the absurdity of that.

Loaded

- (v) *Awful* technically refers to something worthy of awe, or profound respect.

Just wrong

- (vi) A *weak* person is someone who is not strong.

Too broad

- (vii) *Politics* is derived from *poly* + *ticks*, meaning ‘many blood-sucking parasites’.

Loaded (Wrong)

- (viii) Anti-semitism is any kind of attack on or criticism of Jews, or the nation of Israel.

Too broad

3. Based on the text below, identify briefly any indications that the consensus supporting a low fat diet is possibly not well founded. Note that these indications may not be explicitly stated in the text, but can be inferred. [5 marks]

In 1988, the US surgeon general, C. Everett Koop, proclaimed ice cream to be a public-health menace right up there with cigarettes. Such high-fat foods were causing coronary heart disease, obesity, and other deadly ailments. Within a few years, the USDA produced its 'food guide pyramid', which recommended lots of starchy grains, and very little fat. Today, this recommended low-fat diet seems just common sense – after all, obese people have too much body fat, so eating less of the stuff is a no-brainer. Also, heart disease is caused by too much fat in the blood clogging up your arteries. Surprisingly though, the scientific research this diet is based on didn't start until the pioneering work of Dr. Ancel Keys in the 1950s.

Dr. Keys compared fat consumption and heart disease rates in the US, Japan and 4 other countries around the world. He found that the more fat in the diet, the more heart disease. Other scientists criticised his conclusion that eating fat causes heart disease, but fortunately Dr. Keys found a key ally in the American Heart Association, who supported him in a 1960 report. (In fact, he helped to write the report.) This report was big news, and put Dr. Keys on the cover of *Time* magazine. Happily, the lengthy *Time* article barely mentioned the fact that many other scientists still questioned the idea.

After the *Time* article, the fat-obesity-heart disease link really gained momentum. The McGovern report of 1977 also recommended a low-fat diet. While its lead nutritionist Dr. Hegsted acknowledged that the evidence base for this advice was still rather weak, he felt that the public needed clear guidance, not scientific ambiguity, and moreover the new diet could do no harm. One job leads to another, and so in 1980 Dr. Hegsted was appointed by the USDA (US Department of Agriculture) to draw up national dietary guidelines. Naturally, the guidelines also promoted very low fat consumption.

Despite the clear consensus that was quickly emerging, the prestigious National Academy of sciences wrote a report claiming that there was still no clear evidence that a high fat diet is bad for your health. These scientists were torn to shreds by politicians and the media for being behind the times. (It didn't help that some of them had connections to the food industry.) From that point, any nutritionist who questioned the low-fat diet was risking her career.

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|---|---|
| 1. Many qualified critics | 2. Persecution of opponents |
| 3. Lack of empirical evidence | 4. Connection with politics |
| 5. A priori bias/ power of the paradigm | 6. Information cascade (bandwagon effect) |

4. Underline words or phrases in the following sentences if they are approximate/vague, and wavy underline words or phrases that make the statement hesitant/probable. [1 mark each]

- (i) Fred's new book has something to do with sailing.
- (ii) These grey chunks are a kind of meat.
- (iii) I might have had some dealings with Mary in 2006.
- (iv) The BC Liberals possibly violated the Elections Act.
- (v) There's arguably some link between cancer and MRI scans.

5. Explain how the dispute below *might*, at least, be merely verbal. [3 marks]

"Why did you beat up my friend Jerzy? I told you to help him."

-- "Nonsense. You told me, *If Jerzy asks you for money then let him have it.*"

The phrase 'let him have it' is ambiguous. It might mean, "Let him have the money", or "beat the crap out of him".

6. Is the disagreement below merely verbal? If not, then describe the underlying substantial disagreement, saying whether it is factual, or interpretative, or evaluative.

-- "By proclaiming your view that Western colonialism was objectively beneficial in most places where it occurred, you are committing further violence against its victims."

"I have not committed any violence at all. I am just making academic arguments -- I haven't for example punched or kicked or stabbed anyone"

It *could* be a verbal dispute about the meaning of 'violence'. But I see an underlying evaluative dispute about whether it's ok to publish offensive ideas.

7. Identify the following substantial disagreements as factual, interpretative or evaluative. [2 marks each = 8 total]

(i) "Even in 2017, the nursing profession discriminates against men. Just look at the ratio of male to female nurses being hired."

-- "I don't know about that. Maybe men just don't want to be nurses?"

Interpretative

- (ii) “You shouldn’t let your kids play video games. Scientific studies show that playing such games at a young age causes permanent changes in the way the brain develops”
- “Well that may be so. No doubt brain development is influenced by what it’s exposed to. But it’s a whole new world, and the skills that kids need today are different from in the old days. They need to be able to react quickly to information that comes at them.”

Evaluative

- (iii) “After Rudy Giuliani became mayor of NYC in 1994, the crime rate dropped enormously. Obviously, Giuliani’s policy of cracking down on minor crimes worked.”
- “I doubt it. I read in that book *Freakonomics* that Giuliani’s policies had nothing to do with it. The drop in crime was the result of more abortions 20 years earlier, following Roe vs. Wade in 1973.”

Interpretative

- (iv) “Don’t be discouraged about your provincial math exam. Albert Einstein failed math in high school, and see how he turned out!”
- “Thanks dad, but that’s a myth. Einstein never failed a math test in his life. He took his college entrance exams two years early, and aced the math and science sections.”

Factual

8. The text below is a response by the EPA (the USA’s Environmental Protection Agency) to an article written by Associated Press (AP) journalists Jason Dearen and Michael Biesecker on Sept. 2, 2017. This article reported that AP journalists visited toxic sites that the EPA had not been able to access in the wake of flooding caused by Hurricane Harvey. It also made remarks critical of EPA boss Scott Pruitt, concerning his weakening of regulations to prevent water pollution, and his scepticism of about the predictions of climate scientists that warmer air and seas will produce stronger storms and increase flooding. At the end of the article, it noted that Biesecker (the second author) reported from Washington D.C.

Highlight (or circle) and number *five* ad hominem attacks by the EPA on Michael Biesecker. (If two or more attacks are very closely related, then count them as one.) In the answer spaces provided, briefly indicate the nature of each attack, e.g. bias, laziness, poor track record, lack of moral character, lack of suitable expertise. [10 marks]

- (i) Lazy
- (ii) Lack of suitable expertise
- (iii) Poor track record
- (iv) bias (Apparently he has some dislike of Pruitt, that will affect his judgement)
- (v) Poor moral character

[The text below is a modified version of what the EPA wrote. I altered slightly it to remove technical terms and increase the number of *ad hominems*. RJ]

“Yesterday, the Associated Press’ Michael Biesecker wrote an incredibly misleading story about toxic land sites that are under water. Despite reporting from the comfort of Washington, Biesecker had the audacity to imply that agencies aren’t being responsive to the devastating effects of Hurricane Harvey. Not only is this inaccurate, but such sensational statements by persons unqualified in environmental engineering create panic and politicize the hard work of first responders who are actually in the affected area.

Here’s the truth: through aerial imaging, EPA has already conducted initial assessments at 41 government-managed toxic waste sites – 28 of those sites show no damage, and 13 have experienced flooding. This was left out of the original story, along with the fact that EPA and state agencies worked with responsible parties to secure toxic waste sites before the hurricane hit. Leaving out this critical information is misleading.

Administrator Pruitt already visited Southeast Texas and is in constant contact with local, state and county officials. And EPA, has a team of experts imbedded with other local, state and federal authorities, on the ground responding to Harvey - none of which Biesecker included in his story.

Unfortunately, the Associated Press’ Michael Biesecker has a history of not letting the facts get in the way of his story, especially if it gives him a chance to tarnish Administrator Pruitt’s reputation. Earlier this summer, he made-up a meeting that Administrator Pruitt had, and then deliberately discarded information that refuted his inaccurate story – ultimately prompting a nation-wide correction.