Informal logic 1_Logical fallacies

Glossary of terms:

1. **Argument**: a reason or set of reasons given in support of an idea, action or theory. An argument provides us with good reason to believe in the likely truth of its conclusion (which can be an idea, action or theory). An argument is formed by a set of propositions which lead to a conclusion.

2. **Sentence**: A grammatically correct string of words.

3. **Proposition**: A statement or assertion that expresses a judgement or opinion. This is the meaningful content of a sentence. Two different sentences can express the same proposition.

4. **Assertion**: A confident and forceful statement of fact or belief.

5. **Assumption**: Anything that is accepted as true or as certain to happen, without proof.

6. **Fallacy**: An identifiable category of argument that does not support its conclusion.

7. **To imply**: To indicate the truth or existence of (something) by suggestion rather than explicit reference.

8. **To infer**: To deduce or conclude (something) from evidence and reasoning rather than from explicit statements.

9. **Question**: A request for information.

10. **Leading question**: A sentence that looks like a question, but it is designed to elicit a desired response (similar to a rhetorical question: a question asked in order to create a dramatic effect or to make a point rather than to get an answer.)

11. **Denotation**: The literal meaning of a word.

12. **Connotation**: An idea or feeling which a word invokes for a person in addition to its literal meaning.

13. **Critical thinking**: The analysis and evaluation of the validity of an argument in order to form a judgement. Critical thinking will supply us with a good reason to believe the conclusions of an argument. *(Is it rational to believe the conclusion based on its premises?)*

**Logical fallacies** are rhetorical tricks and traps and common reasoning errors that create unsound arguments, but which are nonetheless attractive to our minds *(They sound like good arguments but are in fact flawed arguments. However, if these fallacies are exposed clearly, slowly, loudly, confidently or forcibly enough, people most likely will believe them, if they cannot identify the flaw in the argument. If these fallacies are constantly repeated by the mass media, it will create the illusion of them being actually factual and true.)*

**However, the flaws in an argument do not necessarily mean that the conclusion is not true.** It just means that those arguments are not valid to support that conclusion. However, the conclusion could be true under other premises, propositions and arguments...or not.

This can lead to a naïve form of scepticism, in which the easiest (and laziest) thing to do would be to conclude that “we cannot be sure of anything” or “don’t believe on any argument or conclusion” because “we cannot know”. Both statements would be wrong. In fact, the reasonable thing to do would be to suspend belief, not to take this as a justification to reject the conclusion and assume its untruthfulness, as the conclusion may be true, for different reasons, under a different set of arguments.
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INFORMAL LOGIC AND FALLACIES

All arguments must possess two criteria of acceptability:

1. **Validity**: A function of the form of the argument (in both deductive and inductive arguments). An argument is valid if, assuming the truth of the premises (propositions), the conclusion follows from them. The validity of an argument is the result of the strength of the argument exposed.

2. **Well groundedness**: The question about the likely truthfulness of the propositions. The conclusion rests upon these propositions.

Types of informal fallacies:

1. **Circular arguments**: Trying to use a conclusion as a premise. The proposition and the conclusion are made of the same sentence. However, the proposition and the conclusion are likely to be expressed in different sentences, thus camouflaging the circularity of the argument. Deeply held beliefs (such as the ones found in hegemonic ideologies) are full of circular arguments (think of foundational beliefs used to justify peripheral ones. You can find them in religion, in politics, in economy...)

Examples:

- “Gold is more valuable than silver? Why is gold more valuable than silver? Because it is.”
- “Royal families deserve to enjoy privileges that are denied to the rest of that society. Why? Because they are royals.”
- “God knows everything. Why? Because it does.”

2. **Instrumentalisation of language**: Using the connotative power of semantics instead of evidence, thus camouflaging the misleading meaning of a sentence (proposition).

Examples:

- “EU migrants and UK expats in the Brexit debate.”
- “Israelis were killed and Palestinians died in the Gaza conflict.”
- “Pro-life vs. pro-choice in the abortion rights debate.”

3. **Equivocation**: Using ambiguous words that have different definitions, and changing the meaning of those operative terms in the middle of the argument.

Example:

Proposition A: “Tables are furniture.” + Proposition B: “There are tables in my statistics book.” = Conclusion: “Therefore, there is furniture in my statistics book.”

4. **Distinction without a difference**: Linguistically separating two meanings that are not distinct (Saying that two things are distinct when they are not.)
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“I am not racist; I just think that members of that specific race are lazy.” (This is in fact a racist assertion based on misconceptions and stereotypes, since race is not an element of laziness.)