

A POI (Point of Information) is a question that you ask while the opposing speaker is speaking. The POI should be no more than 2 sentences long, and it should be delivered in the form of a question. After the opposing speaker has offered a reply, you cannot reply to the response. If you disagree with the reply, you can comment in your refutation, or your partner can reply in her refutation. If it is a particularly misguided reply, you can consider raising the issue in the rebuttal speech. The content of the POI should be a criticism of some aspect of the argument of the opposing speaker. In this way, it functions like a refutation. However, your question can sometimes be simply a Point of Clarification (POC) if you believe that the opposing speaker has left out some important information for you to understand the argument that he is making.

The Refutations are criticisms of the content of the previous opposing speech with the intention of exposing a weakness in the content of one or more arguments. Each refutation should be no more than 2-3 sentences long, and it should be presented as a question. You should strive to state at least two refutations before you begin your opening speech. Some speakers prefer to place the refutations at the end of the speech, which is acceptable. However, we recommend placing them at the beginning of the speech because there is an immediate connection to the previous content of the opposing speech.

To create a Refutation, you need to listen for some common ways in which speakers make errors in reasoning. Some common ways are as follows:

- 1) A **Claim** is not relevant to the resolution.
- 2) The **Evidence** does not support the Claim.
- 3) An **Inference** is unreasonable.

Although a speaker will sometimes present a **Claim** that is irrelevant, it is more common for the speaker to present irrelevant **Evidence** or no evidence at all. A more complex error in reasoning occurs when the **Inference** is unreasonable, which means that the Evidence supports the Claim, but the opposing speaker has not convincingly stated how the Evidence supports the Claim.

An experienced debater rarely makes these general errors, so you will also need to focus your listening on additional errors in reasoning. What follows are Eight common errors in reasoning, which are drawn the tradition of logical fallacies.

**1. Modifying the Claim or Evidence.** An error in reasoning, which is traditionally called the *Straw Man* fallacy, occurs when the opposing side changes the original meaning of your claim to make it easier to refute. For example, you claim that *industrialization is the cause of global warming*. In response, the opposing side refutes the claim by stating that *all ills that beset people are due to industrialization*. After making this modification, the opposing side concludes that the claim is false. Of course, this is an unreasonable refutation because the proposition did not state that all ills that beset people are due to industrialization.

The *Straw Man* fallacy also occurs when the opposing side modifies the evidence that you provide. For example, you claim that *Calgary is a great place to find employment*. To support this claim, you use evidence that shows that *Calgary is the fastest growing city in Canada* because you reasonably infer that fast growth also means increased employment opportunities. However, the opposing side modifies your inference by stating that *Calgary is not the biggest city in Canada*, which clearly shows a modification of your evidence by replacing the idea of *growth* with *biggest*.

**2. Proposing a Different Perspective.** An error in reasoning, which is traditionally called the *Red Herring* fallacy, is also based on distorting the meaning of the original claim. However, unlike the *Straw Man* fallacy, which modifies the wording of the original claim, the *Red Herring* fallacy considers the claim from a different perspective. For example, you claim that *the level of mercury in seafood is becoming unsafe*. To refute the claim, the opposing side states that *some families need to fish to support their families*. Although this is true, it is unrelated logically because you are viewing fish consumption from a health perspective, but the opposing side is viewing it from an economic perspective.

**3. Proposing a false Outcome.** An error in reasoning, which is traditionally called the *Slippery Slope* fallacy, occurs when there are false assumptions within the Claims that are used to support the resolution. These assumptions

prevent the speaker from making a particular conclusion. Consider the following Resolution: *Going to university is necessary to create a good life.* What follows are a series of Claims that could be used to support the Resolution. **Claim 1:** *Going to university gets you a good job.* **Claim 2:** *Having a good job enables you to make more money.* **Claim 3:** *Having money enables you to have a good life. Therefore, going to university is necessary to create a good life.* In this argument, there are two assumptions that you can refute. For example, in Claim 1, you can refute the assumption that all university degrees will enable you to get a good job, and in Claim 3, you can refute the assumption that wealth alone can create a 'good life,' which implies a state of happiness.

4. **Circular Reasoning.** An error in reasoning, which is sometimes called *Begging the Question*, occurs when you say that A is true by referring to B, and then you say that B is true by referring to A. For example, in the following famous statement, Rene Descartes observed that *We justify our belief in the Bible because it is the word of God, and our belief in God's existence is justified because it is written in the Bible.* In this example, Descartes claims that (A) "we justify our belief in the Bible" because it is the (B) "word of God," and we justify (B) "our belief in God's existence" because it is (A) "written in the Bible." In other words, (A) we believe in the Bible because it is (B) the word of God, and (B) we believe in God's existence because it is (A) written in the Bible.

In another example, John Whately makes the following circular argument: *"To allow everyman an unbounded freedom of speech must always be ... advantageous to the State, for it is highly conducive to the interest of the Community that each individual should enjoy a liberty perfectly unlimited of expressing his sentiments."* This argument is circular because he claims that (A) "freedom of speech" is (B) "advantageous to the State," and then he supports this claim by saying that (B) "it is in the interest of the Community" that each person has (A) "a liberty ... of expressing his sentiments." In other words, he is saying that (A) 'freedom of speech' is (B) 'good for the State,' and (B) 'it is good for the Community (State)' when there is (A) 'freedom (liberty) of speech.'

5. **Modifying a key word or phrase.** An error in reasoning, which is sometimes called the fallacy of *Equivocation*, occurs when you change the meaning of the same word in a paragraph. Consider the following example in

which a reporter asks a CEO whether the company has paid its taxes. The reporter asks, “Your company has been accused of using various legal loopholes to avoid paying taxes. Can you say how much your company paid in taxes last year?” The CEO replies, “Every year we pay **all our taxes**, and this year is no different, so we paid **all the taxes that we owed**.” In this example, the CEO modifies the phrase, “**all our taxes**” to “**all the taxes that we owed**,” which is an equivocation because ‘paying all taxes’ is not the same as ‘paying the taxes that we owed.’

**Replacing a key word or phrase.** An error in reasoning, which is another form of the fallacy of *Equivocation*, occurs when you replace a key word or phrase in a paragraph. For example, a reporter asks a politician, “Do you support the new law that is being proposed?” The politician replies, “I think that the new law addresses an important topic, which I am familiar with. It is an important legal statement that others have been discussing often lately, which shows that the law is very important. Furthermore, it is **law** that I care much about, so I will continue to support the **topic** for as long as I am a member of parliament.” In this example, the politician equivocates by replacing the word “law” with the word “topic,” which creates an error in reasoning because the topic of the law is not the same as the law itself.

6. **Reasoning from Parts to Whole.** An error in reasoning, which is traditionally called the *fallacy of Composition*, occurs when one assumes that what is true of the part is true of the whole. For example, “if one runner in a race runs faster, he or she can win. Therefore, if every runner in a race runs faster, they all can win.” Therefore, according to the fallacy of composition, what is good for the winner (part) is not good for the whole (the competition of racing). The fallacy of Composition frequently arises in political and economic contexts. Consider the following common situations:

a) In *Voting Theory*, one assumes that that the individual voter has good judgement. However, although an individual may have good judgement, one cannot assume that all individuals have good judgement because sometimes elected officials do not represent the best interests of the nation. Therefore, according to the fallacy of composition, what is true of the part, which is the good judgement of an individual, is not always true for the whole, which is a population successfully electing a good leader.

b) In the *Division of Labor strategy*, one assumes that overall productivity increases when individual workers specialize in different jobs. However, people who do the same

task day after day become bored and unproductive, so the overall productivity does go down. In other words, what is true for the part, which is the specialized worker, is not true for the whole, which is the productivity of the company, because increased productivity occurs only when people are fully motivated.

c) In the *Tragedy of the Commons*, one also sees the fallacy of composition. For example, to eliminate hunger in the world, we need to ensure that all people have sufficient food. However, if each person could consume a shared resource, such as fish from the sea, there would not be sufficient fish for everyone, and in trying to do so, we would destroy the fish resource. In this regard, what is good for the part (each individual), is not good for the whole (the fish resource).

d) The *Free Rider Problem* also illustrates the fallacy of composition. For example, if a person chooses not to pay for using the subway, this decision benefits himself because he saves money. However, if there are too many *free riders*, there will be no “ride” for anyone. In other words, what is good for the part (the free rider) is not good for the whole, which is a city being able to offer a subway service.

**Reasoning from Whole to Parts.** An error in reasoning, which is traditionally called the *fallacy of Division*, occurs when one assumes that what is true of the Whole is true of the Part. For example, a developer buys four properties for 2 million dollars because he wants to build a store on both properties. Because you own one of the four properties, you may conclude that your individual property is worth half a million dollars. However, it does not follow automatically that each part is worth a quarter of the whole because the whole has value to the developer only as a whole.

7. **Making a False Conclusion.** An error in reasoning, which is traditionally called the *Post Hoc fallacy*, occurs when one asserts a causal conclusion between two concepts or events when the causal conclusion is not definite. For example, *Employment increased in the fourth quarter because the government eliminated the gasoline tax in the second quarter.* Although the elimination of the gas tax could have caused an increase in employment, one should not assume that the elimination of a gas tax is the primary cause, for an increase in employment is more likely caused by a product that is in high demand, which causes an increase in employment to create enough product to meet the demand. In another example, researchers investigated whether taking baths can reduce the risk of cardiovascular disease. They observed that people who took baths regularly were less likely to have cardiovascular disease or suffer strokes. The researchers concluded that baths have a beneficial effect on cardiovascular health. However, this is likely a false cause because an alternative explanation could be that those who take baths regularly have more time at their disposal and are generally less stressed.

**Making a False Analogy.** An error in reasoning, which is traditionally called the *Non Sequitur*, occurs when one asserts a causal relationship between two concepts or events which are not related. For example, “Investing in cryptocurrencies is a risk, but everything in life involves a risk. Every time you drive a car you are taking a risk. If you’re willing to drive a car, you should be willing to invest in cryptocurrencies.” In this example, the non-sequitur occurs because the comparison between investing and driving a car are very unrelated. The decision to invest in cryptocurrencies requires a considerable amount of knowledge about cryptocurrencies as a financial product, and it also requires knowledge about the financial markets in general, which is much more complex than driving a car along a busy street.

Consider another example in which the vice-president of the USA is responsible for putting in place a policy to manage the immigrants from Central America who want to become American citizens. They come to the USA-Mexican border in larger numbers than the immigration officers at the border can manage. When asked by a reporter about the situation, the reporter also asked the vice-president whether she has been to the border. In response, she said, “I have not been to the border, but I have also not been to Europe, so why should you assume that I have been to the border.” In this response, her reference to not being to Europe is clearly a non-sequitur because travelling to Europe is unrelated to travelling to the border, which is a part of her work responsibility. Also, the vice-president is trying to justify her not being to the border by stating that she does not travel very much. However, to make informed policy decisions, she needs to experience the problem by being there before making about a policy on how to manage the situation.

8. **Personal behaviour contradicts expectations.** An error in reasoning, which is traditionally called the *ad hominem fallacy*, occurs when one criticizes the argument because of another situation, or quality of character, that is not directly related to the argument. There are three commonly recognized versions of this fallacy.

a) The *Hypocrisy* version of this fallacy involves criticizing a policy that is forwarded by a person who has shown bad judgement in another aspect of his (her) life. For example, Ms. Thomson offers a detailed proposal to protect the wetlands. However, she was arrested last year for hunting without a license. Although this is very bad judgement, you commit this fallacy if you reject her wetlands proposal because it should be taken on its own merits.

b) The *Conflict of Interest* version involves criticizing a policy because the one presenting the argument appears to be driven by self-interest. For example, the cheese

industry has conducted studies that conclude that eating cheese has no adverse affect on heart health. Although there is contrary evidence by independent researchers, you commit this fallacy if you reject the studies by the cheese industry outright; instead, you need to evaluate the quality of the research.

c) The '*Do as a I Say and Not as I Do*' version involves criticizing the advice of someone because the source does not follow the advice. For example, your father advises you to exercise regularly, but you reject his advice because he does not exercise regularly. However, you commit this fallacy because the value of the advice is not dependent on the behaviour of the advisor.

a) *Refuting the Refutation*. It is often necessary to refute a refutation by the opposing side when the refutation reveals a misunderstanding of your Claim or your Evidence. How you refute the refutation will depend on your side of the debate. If you are the Proposition--and you are refuting the opposing refutation--you are stating that the opposing refutation has NOT effectively diminished your *Burden of Proof*. If you are the Opposition--and you are refuting the refutation of the Proposition--you are stating that the refutation of the Proposition has NOT effectively criticized your *Burden of Rejoinder*, which is the obligation of the Opposition side to show how the simple arguments of the Proposition do not sufficiently prove that the resolution is true.

To clarify, the phrase, *Burden of Proof*, refers to the obligation of the Proposition to provide Arguments that are convincing enough for others to consider the Resolution to be true. The phrase, *Burden of Rejoinder*, refers to the obligation of the Opposition to criticize, through refutation and POIs, how the Proposition has failed to provide sufficient proof for why others should accept the resolution. It also refers to the obligation of the Opposition to provide Arguments that are convincing enough for others to consider the Resolution to be unacceptable.