



Learning Centre

## Recognizing Logical Fallacies: Developing Strong Arguments

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The great Enlightenment philosopher, Immanuel Kant, travelled many imagined miles in his mind through the course of his life, touching on life's big questions and trying to answer them through reason. However, Kant is a tough read; it seems the more complex an idea, the harder it is to write about. The academic writer is not given the same latitude afforded to Kant and must present arguments in a clear, coherent fashion. In other words, we must not only know what we want to say on a topic but also *how* we are to say it as well. Familiarizing ourselves with logical fallacies can provide us a skill that will strengthen our own arguments.

This handout is intended for students who are familiar with dense, argumentative pieces, rich in language and long on digressions, yet are still learning to communicate their criticisms and critiques through the written word. Our aim here is to help you formulate strong arguments and present them in a way that does not make your reader do headstands. Poor Kant may have benefited from this handout.

### What we mean by logic

Our thesis is the backbone of a strong argument. How we arrive at our paper's central point, with our wits still intact, rests on our ability to deduce and infer an original insight from our research. Daunting as that may seem, our task as writers does not end there; our point must still be argued in a coherent fashion. Forming a cogent argument can be difficult but learning how to identify fallacious claims in others' arguments helps us learn to recognize those same problems in our own work.

Arguments abound in our society; everyone from a politician on the local stump to a truck driver protesting a new tax employs them in order to convince an audience of their point. However, most of us don't use logic when arguing; instead, we argue in emotional, subjective terms. For example, our campaigning politician might take a few swipes at her opponent because she wants to win an election. The truck driver, of course, is

arguing from a similar perspective, thinking only of how much the tax will cost him. Neither of our two examples is concerned with the larger context. That is, the politician does not consider how our democratic spirit rests on healthy debate, not adversarial jockeying for power. Similarly, our truck driver is not thinking of how taxes collected go towards building more highways and financing more transit options. Academic papers ask something different of us: objectivity. Although each discipline asks its writers to present research according to their own specific criteria, guidelines and formats, the need for a persuasive argument is universal.

## **Beware the tyranny of logic!**

It might seem strange for a handout on logical fallacies to caution its readers about its usage; you might say it's illogical. However, logic does not help us stumble on *definitive* arguments, but instead helps us form *better* arguments. These better arguments are more convincing and strengthen our overall writing efforts.

As mentioned above, Kant was a philosopher who tried to solve the head scratching complexities of life through reason alone. Another German philosopher, Friedrich Nietzsche, came along some time after Kant and said, "Hang on a second here, we need more than reason!" We are complex creatures, and assuming we will know the whole truth is just asking for a lot of trouble. But that does not mean we shouldn't try to get close.

Contentious issues like abortion elicit strong emotions on both sides. Sound arguments exist for both the pro life and pro choice camps, but sadly, in today's political discourse, where mudslinging prevails, respectful debate is drowned out by coarse sloganeering. *A good debater will acknowledge that her experiences and personal convictions inform her perspective, but do not dictate where she will stand or how she will argue.*

Logic then supplements our personal views by leading us to more persuasive conclusions. *Avoiding contradictions, considering opposing views, and refining our positions in our writing is what we are after.* Identifying common pitfalls that lead to poor reasoning and/or hasty conclusions will help us reach this goal.

## **Logical Fallacies**

Below we use multiculturalism as a theme to show how weaknesses in arguments are often logical fallacies. The Latin name for each fallacy is followed by an explanation of what it means. The example that follows in each case is a poorly-formed argument that suffers from a logical fallacy. Below that statement the problem is fleshed out,

illustrating how the argument does not work. Later we provide practice in recognizing logical fallacies in arguments.

## **Topic:** Canadian Multiculturalism

**Ad hominem:** attacking someone's character in order to avoid debating an issue

**Faulty argument:** Canadian multiculturalism is a policy supported by left-leaning radicals who neither value, nor cherish, Canadian values, and thus betray their heritage.

**Problem:** Such fiery rhetoric often consists of an attack on one's character, or worse, insinuates something the audience would find repulsive. Many of our politicians use **ad hominem** attacks to malign their opponents. This faulty argument links multiculturalism to seditious acts of rebellion instead of addressing the issue itself. Quite obviously, one can be a firm, committed patriot while upholding the virtues of multiculturalism. In fact, Canada was a country built on immigration, and multiculturalism reflects its heritage. Ad hominem attacks try to shift the focus from the issue to the person.

**Dicto Simpliciter:** an unqualified generalization

**Faulty argument:** Multiculturalism is beneficial for all cultural groups within Canada.

**Problem:** The implication is that no cultural group within Canada would have an objection to multiculturalism. In order to prove this statement is untrue we would only need to find one cultural group that does not benefit. That's not hard, since the Québécois would clearly object to such a claim. They could argue that their unique position within Canada is threatened by multiculturalism. Words like "all", "always", "everyone", "no", "nobody" and "never" are often signs of an **unqualified generalization**.

**Hasty Generalization:** a conclusion based on insufficient evidence

**Faulty argument:** Vancouver's recent gang violence involving ethnic minorities suggests multiculturalism has failed to assimilate immigrants to Canadian values.

**Problem:** This argument involves a **hasty generalization**. A short period of time is not long enough to analyze how immigrants have assimilated into Canadian society. Furthermore, only a few criminals of immigrant origin have been implicated among the thousands of law abiding citizens who have come from other countries. A longer view

would show that the vast majority of immigrants work and contribute to Canadian society in a way that constantly regenerates our values.

**Ad Misericordian (an appeal to Pity):** appealing to your audience's emotions to make your argument stick

**Faulty argument:** Many immigrants who migrate to Canada come from terrible situations and face persecution in their native countries for holding views we find acceptable; therefore, multiculturalism is an important policy if we are to have just immigration standards.

**Problem:** If we want to argue that multiculturalism is a sound policy, the statement above won't help because it is based on emotive reasoning, not objective analysis. It fails to take into account the many immigrants who are not persecuted. Should those immigrants migrating from politically safe environments be allowed to come to Canada? We would answer yes in most cases; therefore, this appeal to pity does not make a strong argument in favour of multiculturalism. Also, we cannot make arguments by only conjuring up 'terrible situations'. Playing on our audience's emotions is not convincing since the world is filled with tragic scenarios. This type of reasoning is best left to the poets. Therefore, this **appeal to pity** fails to convince us of its validity.

**False Analogy:** comparing unrelated groups, categories, etc. (apples & oranges)

**Faulty argument:** Supporting a multicultural policy of immigration is like inviting everyone you care about to your birthday party.

**Problem:** Clearly, immigration and birthday parties are different. The implication of inviting everyone you deem an attractive potential immigrant would mean your country might be overrun with incoming people, unlike the birthday party, which probably could accommodate everyone you knew. Making false analogies like this is a tempting strategy but in academic papers, it's a mistake.

**Hypothesis Contrary to Fact:** starting with an untrue premise and proceeding to a conclusion

**Faulty argument:** Without Pierre Elliot Trudeau, Canada would never have created a multiculturalism policy; therefore, our current tolerance of other cultures is due to Trudeau's leadership.

**Problem:** Multiculturalism did not belong to Trudeau alone; our tolerance towards other cultures owes much to our Canadian traditions. Canadian attitudes about other cultures did not dramatically change when multiculturalism was adopted as an official policy. In other words, this statement suffers from being a **hypothesis contrary to fact**.

**Straw man:** deliberately misrepresenting an opponent's position by arguing a different point in order to avoid a direct claim or challenge.

**Faulty argument:** By advocating for a more inclusive immigration policy, proponents of Canadian multiculturalism are ignoring how historical feuds persist between different nationalities, such as the one that still exists between the Israelis and Palestinians.

**Problem:** This statement suffers from both its lack of relevance and the inference it makes. What does a Middle Eastern conflict have to do with Canadian multiculturalism? Once someone brings a **straw man** into the argument it makes it very hard for us to argue against it, usually because it involves something seen as universally bad and not relevant to the debate. In fact, it is quite common for people to use Hitler as a straw man. Some call this fallacious style of arguing Reductio ad Hitlerum. (see Wikipedia: Straw man arguments.)

## Let us logically continue to the exercises...

Leaving behind the issue of multiculturalism, let's take a look at some statements containing logical fallacies. We are not trying to be logicians of the highest order (we will leave that task to stuffy ol' Kant); we want to get better at spotting shoddy claims.

Next to the statements below, write which of the seven fallacies highlight its skewed logic. Then, explain what the problem in the argument is.

1. **Faulty argument:** US policy since 9/11 is the modern incarnation of fascist ideology.

**Fallacy:** \_\_\_\_\_

**Explain:** \_\_\_\_\_

\_\_\_\_\_

2. **Faulty argument:** Gay marriage should be universally legalized in order to compensate for the unjust discrimination and alienation perpetuated by heterosexual legislators.

**Fallacy:** \_\_\_\_\_

**Explain:** \_\_\_\_\_

\_\_\_\_\_

3. **Faulty argument:** Without post-secondary education, one has no hope for a future career.

**Fallacy:** \_\_\_\_\_

**Explain:** \_\_\_\_\_

\_\_\_\_\_

4. **Faulty argument:** Recreational marijuana use invariably leads to lower energy levels in workers, making them less productive; therefore, our current economic slump has much to do with an increase in pot-smoking.

**Fallacy:** \_\_\_\_\_

**Explain:** \_\_\_\_\_

\_\_\_\_\_

5. **Faulty argument:** Given the rising cost of tuition, post-secondary institutions are becoming more elitist.

**Fallacy:** \_\_\_\_\_

**Explain:** \_\_\_\_\_

\_\_\_\_\_

6. **Faulty argument:** Those claiming the Nazis as a German phenomenon distinct from other forms of European fascism, and the Holocaust as being uniquely horrific, are arguing that other forms of state murder are not as significant.

**Fallacy:** \_\_\_\_\_

**Explain:** \_\_\_\_\_

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7. **Faulty argument:** Stephen Harper cannot be trusted on economic matters, given his past support for George W. Bush.

**Fallacy:** \_\_\_\_\_

**Explain:** \_\_\_\_\_

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## Is this the logical conclusion?

You may have noticed that some of the arguments you just looked at were very seductive claims that perhaps you would want to make. In fact, here is nothing wrong with some of the ideas. It's just that there are better ways to argue those points.

The next time you pick up a newspaper or hear something suspicious in class, you will have the tools to call to task whoever is making the fallacious claim. This will prove valuable in your academic career. Heck, it might even help you become a better citizen. At the very least, you will be the person at the party everyone fears arguing with, given your new grasp of logical fallacies.

**Answer Key**

1. **Faulty argument:** US policy since 9/11 is the modern incarnation of fascist ideology.

**Fallacy:** False Analogy

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**Explain:** Fascism is characterized by dictatorship, one party-rule, and severe suppression of dissent. The US is a democratic state with private ballots and multiple parties so comparing the two does not work.

2. **Faulty argument:** Gay marriage should be universally legalized in order to compensate for the unjust discrimination and alienation perpetuated by heterosexual legislators.

**Fallacy:** An appeal to pity (Ad misericordian)

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**Explain:** There are better arguments for legalizing same-sex marriage than this statement, which appeals to audiences' emotions, rather than arguing why gay marriage is the right thing to do legally i.e. equality, rights etc.

3. **Faulty argument:** Without post-secondary education, one has no hope for a future career.

**Fallacy:** Unqualified generalization (Dicto Simpliciter)

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**Explain:** This claim is an unqualified generalization. It tries to speak for everyone when many contrary examples exist that would prove it's false. Notice the use of 'no hope'.

4. **Faulty argument:** Recreational marijuana use invariably leads to lower energy levels in workers, making them less productive; therefore, our current economic slump has much to do with an increase in pot-smoking.

**Fallacy:** Hypothesis contrary to fact and a Dicto Simpliciter

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**Explain:** Recreational marijuana use does not necessarily have an effect on job performance. Claiming workers who indulge in recreational drug use are responsible for its woes uses an untrue premise to support a far-reaching conclusion.

**Explain:** The economy is a complex animal. Reducing its misfiring to one sole reason, whether absurd or not, fails to adequately diagnose the problem.

5. **Faulty argument:** Given the rising cost of tuition, post-secondary institutions are becoming more elitist.

**Fallacy:** Hasty generalization

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**Explain:** Tuition fees may be rising but that does not necessarily mean universities are becoming elitist. To prove this, you would need more evidence (perhaps a tour of pub night might help support this claim).

6. **Faulty argument:** Those claiming the Nazis as a German phenomenon distinct from other forms of European fascism, and the Holocaust as being uniquely horrific, are arguing that other forms of state murder are not as significant.

**Fallacy:** Straw man

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**Explain:** Arguing that German fascism differed from other European types, or that the Nazis' Jewish policy was distinct from other forms of anti-Semitism or extreme racism, are both debatable points. However, accusing people who hold this view as arguing for a position that diminishes other atrocities clearly misrepresents the point being debated. In other words, it is not being challenged on its merits and instead is 'straw manned'.

7. **Faulty argument:** Stephen Harper can not be trusted on economic matters, given his past support for George W. Bush.

**Fallacy:** Ad hominem

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**Explain:** By linking Harper with an unpopular president, this statement distracts the reader from the real issue being discussed, presumably economics. Given that Harper is a trained economist, this statement tries to disparage the Prime Minister, and thus discredit him entirely, without actually discussing his policies.

Note: For more practice try making a list of fallacious claims you have heard, or you have made, and see if you can identify what fallacy they commit.