

Public Speaking

Argument Building

What is an 'argument'?

What is meant by an 'argument' in a debating context?

The dictionary provides us with the following meanings of **argument (n)**:

1. (Related to a discussion)
 - a) A discussion between parties who disagree.
 - b) An angry discussion; a quarrel.
2. (Related to reasoning)
 - a) A course of reasoning demonstrating a claim is true or false.
 - b) A fact or statement put forth as proof or evidence.
 - c) A set of statements in which one is a logical conclusion based on the others.
3. (Technical) A summary or short statement of the plot or subject of a literary work.
4. Four more technical uses of the word...

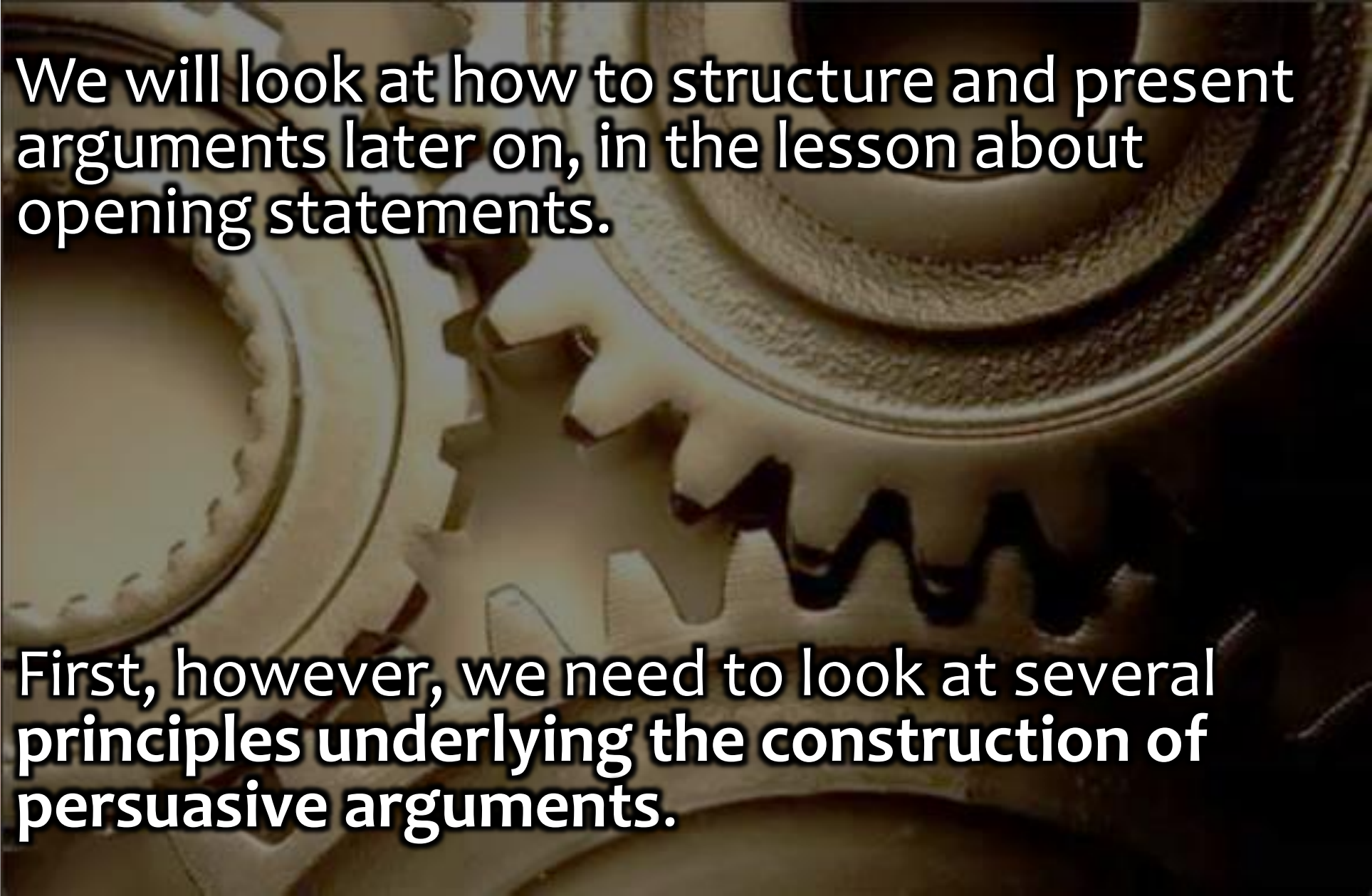
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You are probably most familiar with meaning 1-b, but this lesson is about **2-a**.

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Principles underlying argument building

A close-up photograph of several interlocking mechanical gears. The gears are made of a light-colored metal, possibly brass or steel, and are arranged in a way that shows their teeth meshing together. The lighting is dramatic, with strong highlights and deep shadows, emphasizing the texture and form of the gears. The background is dark and out of focus.

We will look at how to structure and present arguments later on, in the lesson about opening statements.

First, however, we need to look at several **principles underlying the construction of persuasive arguments.**

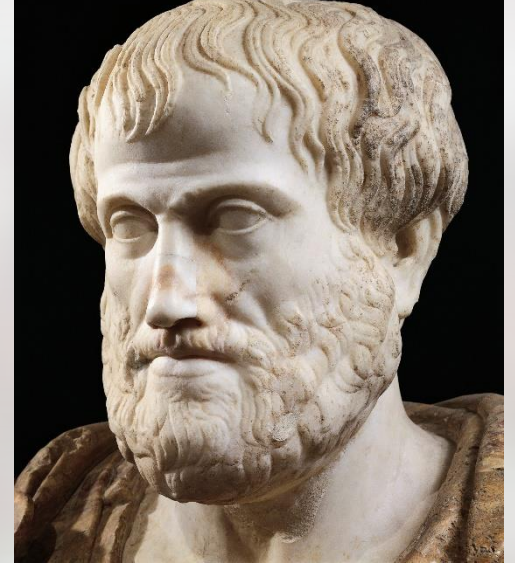
Principles underlying argument building

Persuasion is aimed at **influencing the opinion or behaviour** of other people.

To achieve this, you must appeal to your audience on an **emotional** level by using the following three **Aristotelian elements**:

- Establish **credibility** (*ethos*).
- Use faultless **logic** (*logos*).
- Evoke **feelings** (*pathos*).

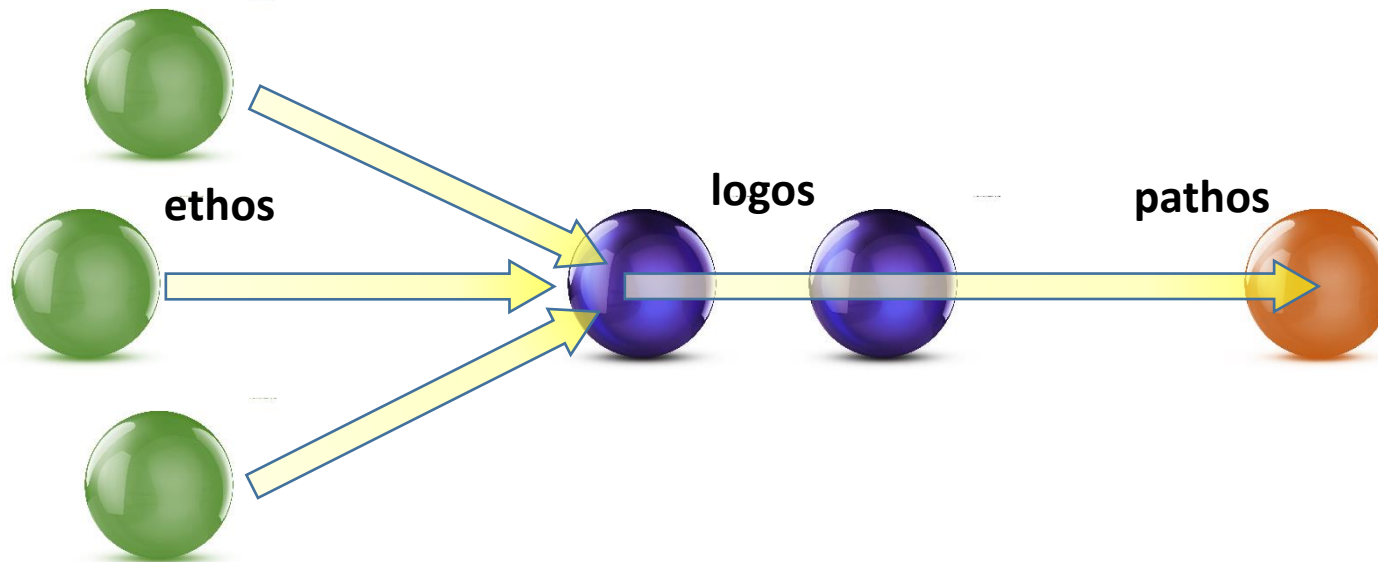
Aristotle



Principles underlying argument building

Building an argument involves constructing a **causal chain**:

1. Ethos: Start with indisputable **facts, examples, and expert testimony**.
2. Logos: Use **flawless logic** that uses these facts to develop your argument.
3. Pathos: Reach an **inevitable conclusion** that plays on your audience's emotions.





Ethos

Building persuasive arguments

Be credible (ethos)

Think of **facts**, **numbers**, and **stories** you have that either support the logic of the causal chain of your position or undermine the opponent's position.

Each piece of evidence must comply with the following criteria:

1. It must be a **fact** rather than an opinion (unless held by a very reputable person). Opinions can be easily rebutted as being subjective and biased.
2. It must be **current** and **valid**. Using outdated or invalid evidence destroys your credibility; if your audience believe you have an “anything goes” attitude, they will not take your side.
3. The source must be **credible**. There is lots of fake news and misinformation these days.
4. It must be **relevant**. Irrelevant evidence has no persuasive quality and can be dismissed out of hand by your opponent.





Logos

Building persuasive arguments

Reasoning approaches

There are two approaches to building a causal chain:

- **Deductive reasoning** involves using a general idea to reach a conclusion about a specific case (“big to small”).
Example: All birds have feathers. All robins are birds. Therefore, robins have feathers.
- **Inductive reasoning** involves using specific pieces of information to make a general conclusion (“small to big”).
Example: Every time you eat peanuts, you start to cough. You must be allergic to peanuts.

Note: The difference is similar to the difference between holistic thinking (induction) and analytical thinking (deduction).

Principles underlying argument building

Consider both sides of the coin

Always **consider your opponent's position** as well as your own.

Try to **anticipate** the important points your opponent might have, so you can **preemptively undermine** them in your opening statement, and point out why your position is better. Thinking about this will also be a significant help during later debate phases.



Principles underlying argument building: Logical fallacies

A logical fallacy is a statement that uses **flawed logic** to argue a point.

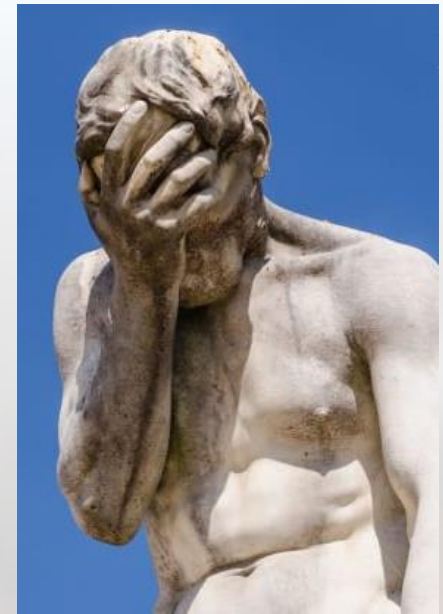
Logical fallacies are extremely important when it comes to debating:

- You must make sure your arguments don't contain logical fallacies, because they **weaken your position** and invite attacks.
- If you spot any fallacies in your opponent's motion, use them to **attack** or **undermine** your opponent by pointing out the fallacy and correcting them. This will make them lose the point and make you look good.

Note that the conclusion from a fallacy does **not have to be wrong**; it's the **reasoning that led to that conclusion** that's faulty. Nevertheless, if you successfully point out a fallacy, you almost always win the point.

Because debaters are usually deliberately placed under time pressure, **logical fallacies are very common**.

There are many types of logical fallacies, and most have (difficult) names. The next few slides show the most common ones.



Logical fallacies — **Hasty generalization**

A generalization based on **insufficient evidence**.

Example:

Over the last year, deaths from drug overdoses in New York have doubled. Therefore, more Americans than ever are dying from drug abuse.

How to avoid:

When using a generalization, make sure it is based on undeniable evidence that applies to every aspect included in your statement.



Logical fallacies — Circular reasoning

An argument that **repeats the same point** using **different wording** and claims this to be 'evidence'.

Example:

President Reagan was a great communicator because he had the gift of being able to talk effectively to people.

How to avoid:

Comparing the statements making up your premise and your conclusion and make sure they are not the same.



Logical fallacies — **Bandwagon appeal**

A claim that an idea should be accepted because a **large number of people** favour it or believe it to be true.

Example:

Everyone is getting the new smartphone that's coming out this weekend, you must get one of these excellent phones too!

How to avoid:

Consider the point on its own grounds without considering what others think about it.



Logical fallacies — **Non sequitur**

A conclusion that **does not follow** logically from preceding statements.

Example:

Bert loves children, so he would be an excellent school teacher.

How to avoid:

Make sure your causal chain uses good logic.



Logical fallacies — **Ad verecundiam**

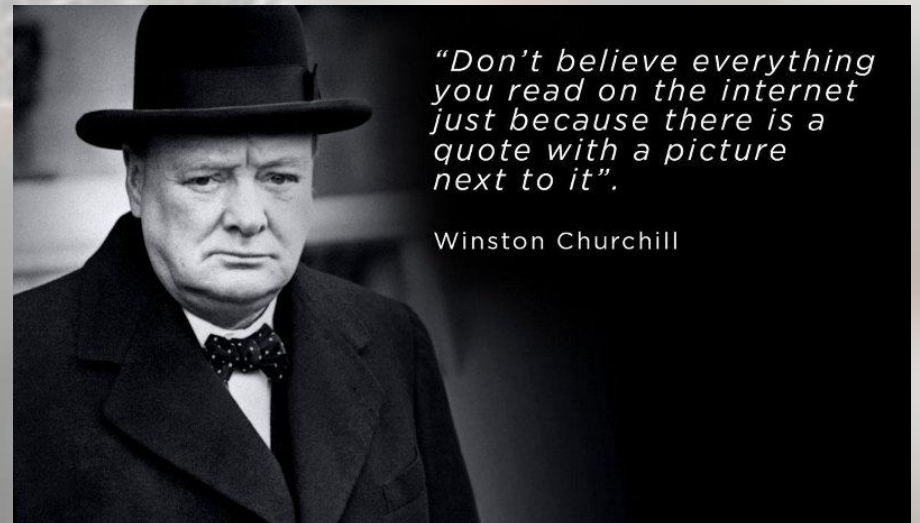
Making an **improper appeal to an authority or celebrity** who supports the argument but is not an authority in a field relevant to the motion.

Example:

Taylor Swift has one of our heating systems in her house; If you get one today yourself you are guaranteed to be warm this winter!

How to avoid:

Unless they are credible and recognized in the right field, don't appeal to an 'authority' as the basis for the legitimacy of your claim but make your own argument.



Logical fallacies — **Slippery slope**

Predicting a disastrous result based on assuming a **causal connection that doesn't really exist** and is therefore not likely to happen.

Example:

If we let people work from home, our employees will spend less time in meetings. If they have fewer meetings, fewer decisions will be made. Many projects will fail and soon, the company will be bankrupt..

How to avoid:

Make sure the conclusion of the causal chain is likely to follow from the beginning. If it doesn't, validate every causal connection to find the flaw in your logic.



Logical fallacies — **Black and white**

Presenting **only two options** when in reality there are **more**.

(Note: This leads to a weak position because if used by the opponent it can force you to make a choice you don't want to make and if used by yourself the opponent can destroy your credibility by providing an alternative.)

Example:

*Learn how to program a computer,
or you won't be able to get a decent
job after college.*

How to avoid:

Think about all possible alternatives before narrowing down to only two or even one.



Logical fallacies — Red herring

An argument that focuses on an **irrelevant issue** to **detract attention** from the real issue.

Example:

A mother and child are walking in the shopping mall.

Child: “Mommy, I want that toy!”

Mother: “Let’s go home and eat some ice cream!”

How to spot:

If your opponent attacks you on a particular small detail, it is probably a red herring. Counter it by bringing the discussion back to the real issue under discussion.



Logical fallacies — **Ad hominem**

An attack on the **person** proposing an argument **rather than on the argument** itself.

Example:

Trump said that Canadians are smuggling American shoes across the border because import tariffs are so high in Canada, but he is a liar, so it's probably not true.

How to avoid:

Leave out any personal remarks about the opponent that have nothing to do with the motion.



Logical fallacies — **Strawman argument**

A misrepresentation of the position of the opponent.
The opponents position is changed to a different, weaker one (the 'straw man'), and then attacked. Meanwhile, the real argument of the opponent hasn't been addressed at all.

Example:

Boyfriend: "I don't fancy going out tonight." Girlfriend: "You never want to go out anymore."

How to avoid it:

Make sure you understand your opponent's position clearly.



A photograph of a microphone with a silver mesh grille, positioned in the center. The background is a heavily blurred crowd of people, suggesting a public event or rally. The overall tone is slightly desaturated, with a focus on the microphone as a symbol of communication.

Pathos

Principles underlying argument building

Evoked your audience's feelings (pathos)

To make sure your argument evokes feelings that are useful in persuading your audience, use the following method:

1. FIRST, choose an emotion that is **useful** for supporting your position and that will work on **this particular audience**.
2. Make sure the conclusion of your argument is worded in such a way that it **evokes the feelings** needed to play on the emotion you chose.

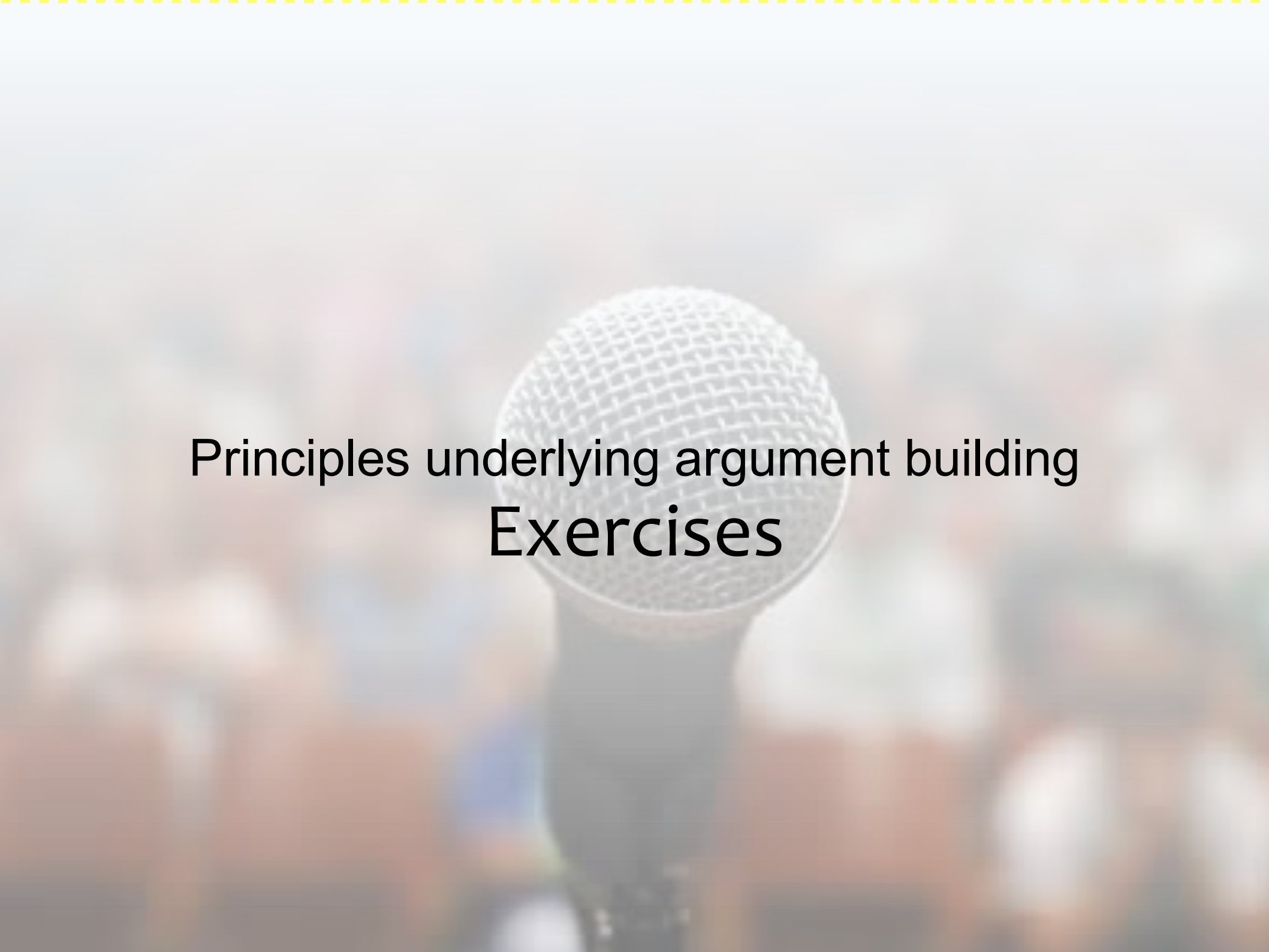
Example: Suppose you are in favour of banning smoking. (1) A good emotion to use is **fear**. (2) Your argument should end with a conclusion like "smoking regularly might kill you". -> Now you can go and think of evidence that supports this, for example "the CDC published data that prove that smokers are 30 times as likely to get lung cancer than non-smokers" and "lung cancer is the deadliest of all cancers" and so on, and apply logic to that to come to this conclusion.

Principles underlying argument building

Evoked your audience's feelings (pathos)

The following emotions are useful for evoking feelings that support your position or conflict with your opponent's position:

- **Happiness;** "If you do this, then you will be happier".
- **Justice;** "If you do this, then a group of people will get what they have the right to".
- **Freedom;** "If you do this, then something bad will not happen".
- **Belonging;** "If you do this, then you will be part of our group".
- **Patriotism;** "If you do this, then your country will look better/stronger".
- **Greed;** "If you do this, then you will get rich".
- **Fear;** "If you don't this, then a bad thing will happen".
- **Guilt;** "If you don't this, then the bad thing that happens will be your fault".
- **Anger;** "Don't let someone do this, or else a bad thing will happen".

A microphone is positioned in the center of the frame, with its silver mesh grille clearly visible. The background is a blurred crowd of people, suggesting a public event or a lecture hall. The text is overlaid on the microphone and the background.

Principles underlying argument building Exercises

Exercise 1: Which evidence?

Which of the following pieces of evidence are useful and which are not? Why (not)?

- A. In 2021, the US Centers for Disease Control and Prevention reported that people who smoke are 15 to 30 times more likely to get lung cancer than non-smokers.
- B. A publication by cigarette manufacturer Camel in 1953 clearly showed that there is no proof that cigarette smoking is one of the causes of lung cancer.
- C. My 92-year-old grandfather always ensured me that playing soccer is more dangerous for your health than smoking.
- D. The confession of a former tobacco executive, which led to courts in 46 US states to condemn tobacco companies to pay 206 billion dollars over 25 years to cover healthcare costs, confirmed that cigarette manufacturers knowingly increased the addictiveness of their products to get more customers.

Exercise 1: Which evidence?

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- A. In **2021**, the **US Centers for Disease Control and Prevention** reported that people who smoke are 15 to 30 times more likely to get lung cancer than non-smokers. *(Recent, very reputable source.)*
- B. A publication by **cigarette manufacturer Camel** in **1953** clearly showed that there is no proof that cigarette smoking is one of the causes of lung cancer.
(Dated, biased source known to be untrustworthy.)
- C. My 92-year-old **grandfather** always ensured me that playing soccer is more dangerous for your health than smoking. *(Opinion.)*
- D. The confession of a **former tobacco executive**, which led to courts in 46 US states to condemn tobacco companies to pay 206 billion dollars over 25 years to cover healthcare costs, confirmed that cigarette manufacturers knowingly increased the addictiveness of their products to get more customers.
(Source is an insider whistleblower and was proven to be right in court.)

Exercise 2: Which fallacy?

Consider the following statements. Which fallacy are they an example of?

- | | |
|---|-------------------------|
| 1. <i>Happiness is the most important value in life because all other values are inferior to it.</i> | A. Hasty generalization |
| 2. <i>Everybody in this family got married before they were 25, so you should too. I know just the right partner for you.</i> | B. Circular reasoning |
| 3. <i>If we provide free healthcare then where does it stop? Soon people will be asking for free cars, free cell phones, free food, free everything. The more free stuff people get, the less they will work, which will lead to economic ruin.</i> | C. Bandwagon appeal |
| | D. Non sequitur |
| | E. Ad verecundiam |
| | F. Slippery slope |
| | G. Black and white |
| | H. Red herring |
| | I. Ad hominem |
| | J. Strawman argument |

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 2. *Everybody in this family got married before they were 25, so you should too. I know just the right partner for you.* **Bandwagon appeal (C).**
 3. *If we provide free healthcare then where does it stop? Soon people will be asking for free cars, free cell phones, free food, free everything. The more free stuff people get, the less they will work, which will lead to economic ruin.* **Slippery slope (F).**
- A. Hasty generalization
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Exercise 3: Spot the fallacies

Consider the following motion:

To save energy, smartphones should contain software that limits charging them to 1 hour per day.

Identify the logical **fallacies** in the opposition's position statement:

“Limiting the time you can charge a phone is a great idea because it reduces the time young people are exposed to social media. If they can spend only a short time each day chatting with their friends, we will save a lot of electricity we can then use to manufacture more products and boost the economy.”

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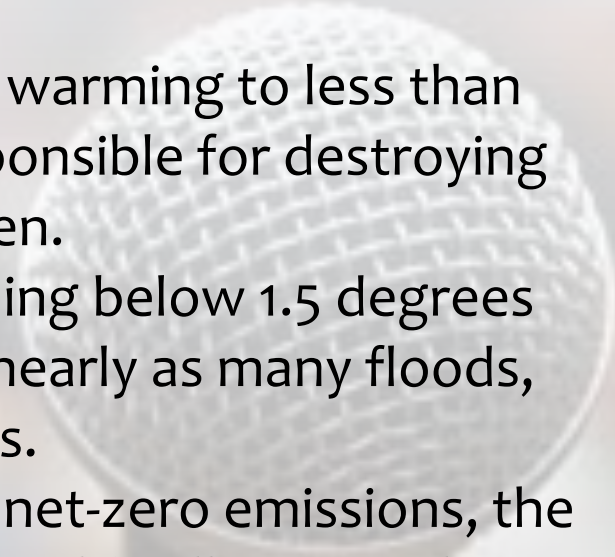
“Limiting the time you can charge a phone is a great idea because it reduces the time young people are exposed to social media. If they can spend only a short time each day chatting with their friends, we will save a lot of electricity we can then use to manufacture more products and boost the economy.”

Examples of fallacies it contains and how to attack them (there are probably more):

1. **Red herring:** The time spent on social media is **not the core issue** of the motion, but a sensitive topic for most audiences.
2. **Non sequitur:** The conclusion that shorter phone use reduces the time spent on social media is **not logical**: young people will prioritize it and reduce playing games or watching movies instead.
3. **Non sequitur:** Charging a phone for one hour is enough to charge many phones completely or at least to 80% or so, so not much electricity is saved by limiting it.
4. **Hasty generalization:** Even if this proposal would significantly reduce energy used by phones, industry uses ~100 times as much energy than phones, so the claim it would affect the economy is just a **hasty generalization**.

Exercise 4: Which emotion?

Which emotions were used in the following claims?

- 
- | | |
|---|---------------|
| 1. If we don't keep global warming to less than 1.5 degrees we will responsible for destroying the future of our children. | A. Happiness |
| 2. If we keep global warming below 1.5 degrees we won't have to face nearly as many floods, storms and earthquakes. | B. Justice |
| 3. The sooner we achieve net-zero emissions, the sooner the rest of the world will accept China as the world leader in combating climate change. | C. Freedom |
| 4. In the light of the increasing cost of environmental restoration, our company will have to achieve net-zero emissions sooner rather than later to sustain our profit growth. | D. Belonging |
| | E. Patriotism |
| | F. Greed |
| | G. Fear |
| | H. Guilt |
| | I. Anger |

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 - B. Justice
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Summary

Start with deciding which **emotion** you are going to use to influence your audience, then build a **causal chain** that ends in a conclusion that supports your position and evokes feelings related to the emotion you chose.

Use the following principles to build persuasive arguments:

- Establish your **credibility** (*ethos*) by providing indisputable evidence.
- Use faultless **logic** (*logos*) by avoiding logical fallacies.
- Play on **feelings** (*pathos*) by providing emotional stories, anecdotes and conclusions that are relevant to the experience of the audience.