



# Argument – What is it?

## Argumentation

a form of instrumental communication relying on reasoning and proof to influence belief or behavior through the use of spoken or written messages.



# Argument – What is it?

## Argument vs. Persuasion

Persuasion is an attempt to move an audience to accept or identify with a particular point of view.

Argumentation is the reasoning component of persuasion.



# Argument – What is it?

## Argument vs. Persuasion

- Persuasion includes emotional as well as logical appeals
- Argument focuses on how proof and reasoning are used to appeal to the rational side of human nature.
- Argument is rule governed behavior



Argument – What is it?

How is rhetoric  
more than  
argumentation?

# Argument – What is it?

How do we reason?

3 Different approaches to reason:

Rhetorical

Dialectical

Logical

# Argument – What is it?

## Rhetorical

- How arguments are made: content and context are important
- An argument is good if it is effective

# Argument – What is it?

## Dialectical

- The structure of conversations in which people offer and analyze reasons
- A plan in which all sides of an issue are resolved through discussion; all views are discussed
- Promotes equality between audience and speaker
  
- An argument is good if the system for discussion produces the best possible discussions

# Argument – What is it?

## Logical

- A series of formal rules for distinguishing sound arguments from unsound ones
- Formal logic converts ideas into mathematical symbols
- Removes uncertainty by proving validity
- Sole emphasis is on content of the argument, not context
- An argument is good if it meets the standards of effective proof and reasoning



# Argument – What is it?

## Formal Argument

a group of at least two statements, one of which is the conclusion and the others of which are the premises, which are offered in support of the conclusion

# Argument

## Premises

stated assumptions used as reasons in an argument. A premise is a statement “set down” –assumed– before the argument is begun. The joining of two premises—two statements taken to be true– to produce a conclusion, a third statement, is called a syllogism

# Argument

Is this an argument?

If Abraham Lincoln had not been assassinated, then the Civil War would have ended earlier than it did.

# Argument

**Lincoln was not assassinated.**

**The Civil War ended earlier than  
it did.**

# Argument

## Syllogism

- The joining of two premises—two statements taken to be true— to produce a conclusion, a third statement
- There is a movement of logic

# Argument

## Inductive Reasoning

- The process of using a number of specific facts or observations to make a generalization
- The scientific method is inductive reasoning: uses information about observations to reach a conclusion about unobserved cases

## Deductive Reasoning

- The process of applying a generalization to a series of specific cases
- The mental process of moving from one statement through another to yet a further statement

# Argument

## Syllogism

All humans are mortal.

Socrates is a human;

Therefore, Socrates is mortal.

# Argument

Valid syllogism?

Major Premise: Women are wise.

Minor Premise: Katie is a woman.

Conclusion: Therefore, Katie is wise.

# Argument

A sound argument:

All the premises must be TRUE.

The syllogism must be VALID.

Truth: CONTENT (whether what the premise asserts corresponds with reality)

Validity: FORM (if the conclusion can follow from the premises (if it can't why would you accept the premises?))

# Argument

Valid but not true:

The whale is a large fish

All large fish have scales.

Therefore, whales have scales.

“The validity of the argument is a formal matter concerning the *relation* between premises and conclusion...the truth is beside the point”  
(Barnet and Bedau)



# Argument

Is the conclusion false?

All Americans prefer vanilla ice cream to other flavors.

Tiger Woods is an American.

Therefore, Tiger Woods prefers vanilla ice cream to other flavors.

If the conclusion is true, it's not because this argument proved it! How could we improve the argument?

Invalid!

## Argument

All terrorists seeks publicity for their violent acts

John Doe seeks publicity for his violent acts

Therefore, John Doe is a terrorist.

It is possible to assert both premises to be true and deny the conclusion without self-contradiction

# Argument

An assertion  
that is self-  
contradictory  
and thus can't  
be true

Quality in literature is subjective, but Shakespeare is the world's greatest writer.

The best way to find happiness is not to look for it.

Paradox

A seemingly  
contradictory statement  
that may contain  
profound truth

# Argument

◦ In summary:

If I takes a horse and carriage four hours to go from Westlake to Rocky River, does it follow that a carriage with two horses will get there in two hours?

Validity is matter of form or structure.

Syllogisms come in 256 flavors!

All valid deductive arguments pass this test:

If one accepts the premises, one must accept the conclusion. If it is possible to accept the premises but still reject the conclusion (w/o self-contradiction), the argument is invalid.

# Argument

• Create a syllogism:

You assert that our actions, even though peaceful, must be condemned because they precipitate violence.

# Argument

• Society must condemn actions (even if peaceful) that precipitate violence

← UNSTATED

This action will precipitate violence.

Our actions, even though peaceful, must be condemned.

# Argument

## Recognizing Enthymemes

1. Has something been put forward as a conclusion with reasons offered in support of it?
2. If so, are the reasons complete?
3. If not, can additional reasons be provided from the context by using the principle of charity (accept what is true and reject what is false) to extract information from the context?

If the answer to #1 is YES, and the answer to #2 is NO, you have an enthymeme! Fill out the argument by answering question #3.

# But do our arguments rely on formal logic?

- Do we think in syllogisms?
- Conclusion: Schools do not support the goals of a true education.
  - What are the premises?

# The Toulmin Model

- Philosopher who was frustrated on an overreliance on formal logic.
- He felt that formal logic “fails to account for the process of practical, informal reasoning that characterizes most real-world arguments” (Warren *English Journal*)
- Normally, we begin with the claim

# The Toulmin Model

All humans are mortal.

Socrates is a human;

Therefore, Socrates is mortal.

We start with the claim:  
Socrates is mortal.

If we accept that claim,  
we don't have to go  
further with our  
audience.

But what if our audience  
says, what do you have  
to go on? (Toulmin qtd.  
in Warren)

Examples and Information taken from:  
Barnet, Sylvan, and Hugo Bedau. From  
Critical Thinking to Argument. New York:  
Bedford/St. Martin's, 2005.

# The Toulmin Model

We start with the claim:  
Socrates is mortal.

If we accept that claim, we don't have to go further with our audience.

But what if our audience says, what do you have to go on? (Toulmin qtd. in Warren)

Then we respond with data,  
"Socrates is a human."

Claim + data =

Socrates is mortal because he is human.

We may accept that and are satisfied with the reasoning.

But...?

# The Toulmin Model

Then we respond with data,  
“Socrates is a human.”

What if our audience asks, as  
Toulmin states,

Claim + data =

“How do you get there?”

Socrates is mortal because he  
is human.

We must show **HOW** we move in  
the logic from premises to  
conclusion.

We may accept that and are  
satisfied with the  
reasoning.

But...?

# The Toulmin Model

What if our audience asks, as Toulmin states,

“How do you get there?”

We must show **HOW** we move in the logic from premises to conclusion.

We must “bring forth general hypothetical statements, which can act as bridges, and authorize the sort of step to which our argument commits us” (Toulmin qtd. in Warren) =

Warrant = the logical equivalent to the initial premise of a syllogism

# The Toulmin Model

- Here's a real world argument

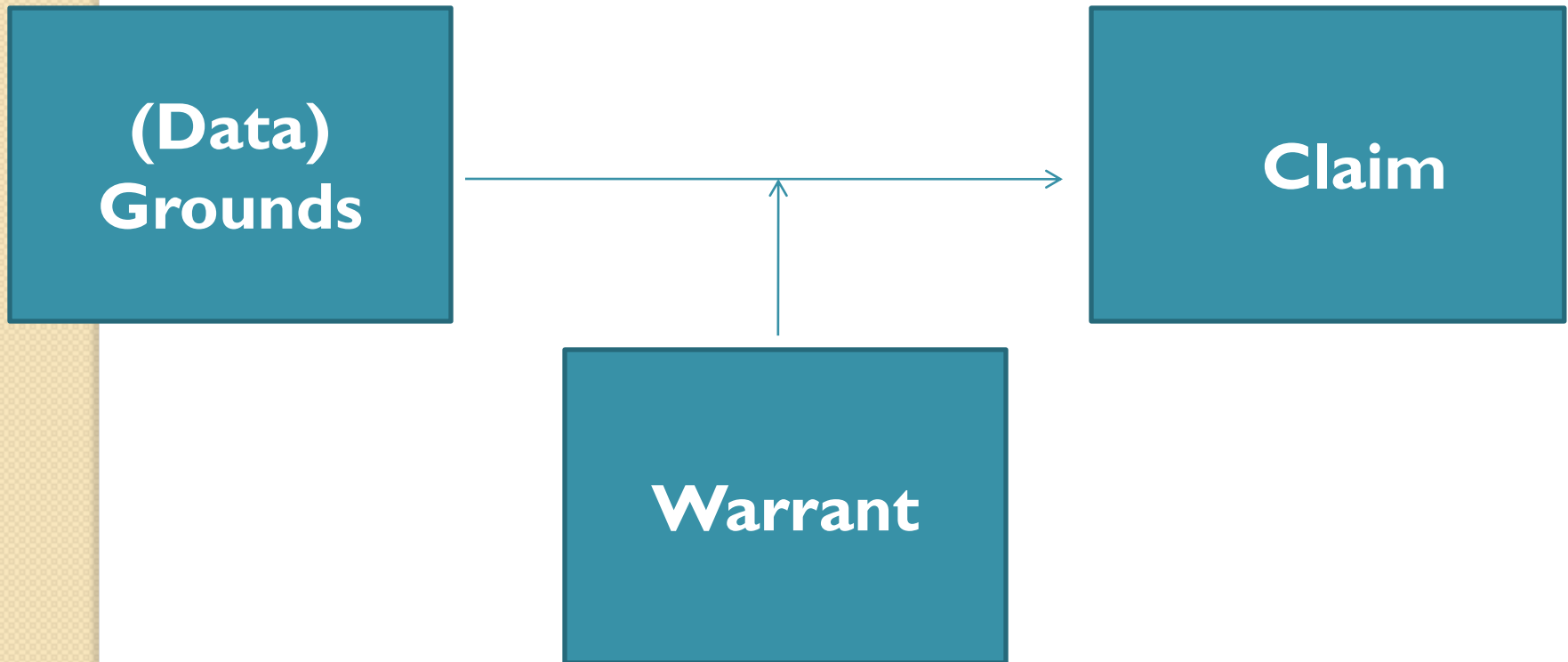
Jeanne: Phil really isn't a good student.

Kathy: Why?

Jeanne: Because he's on the football team.

What's the problem? Let's review Toulmin

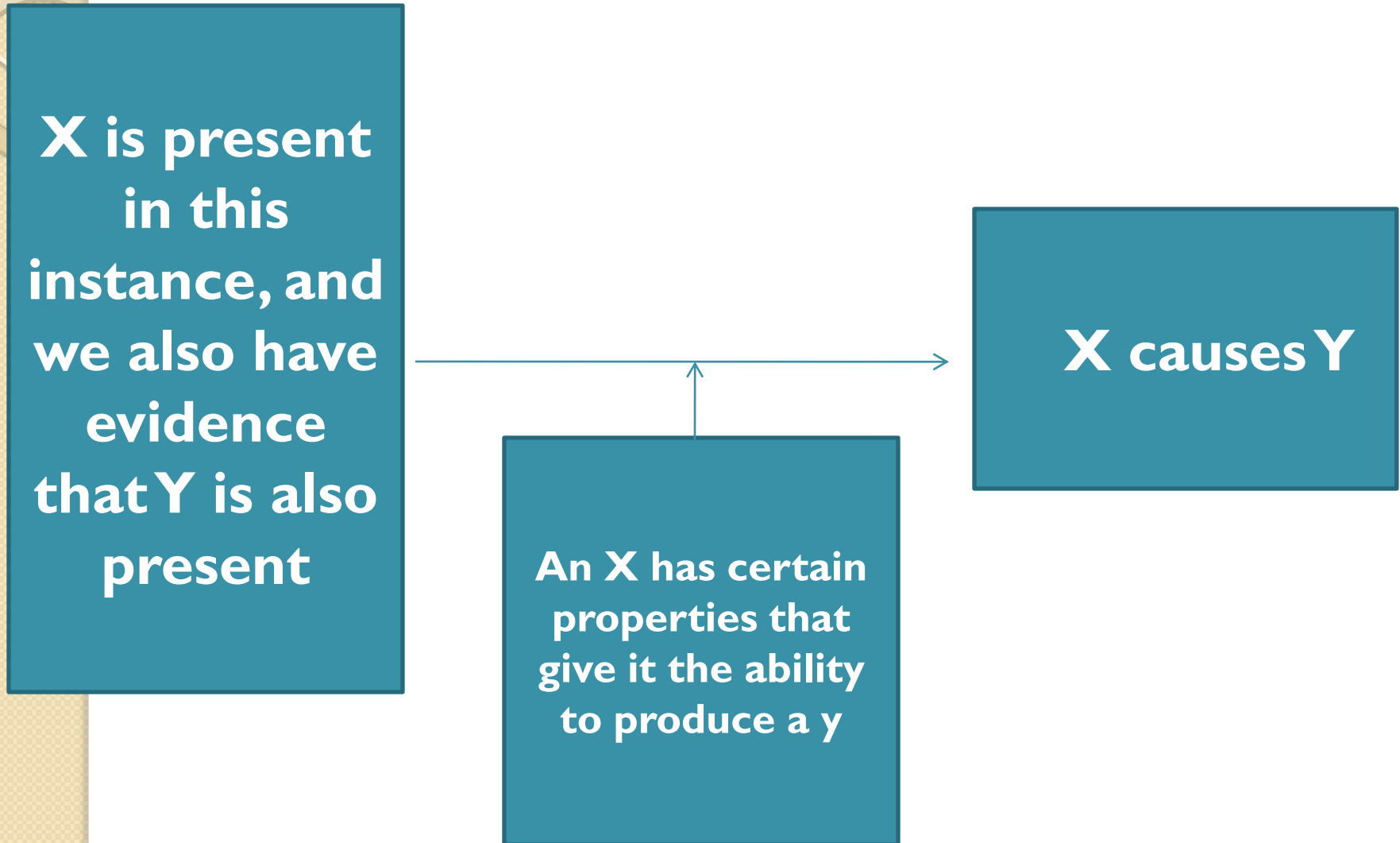
# The Toulmin Model



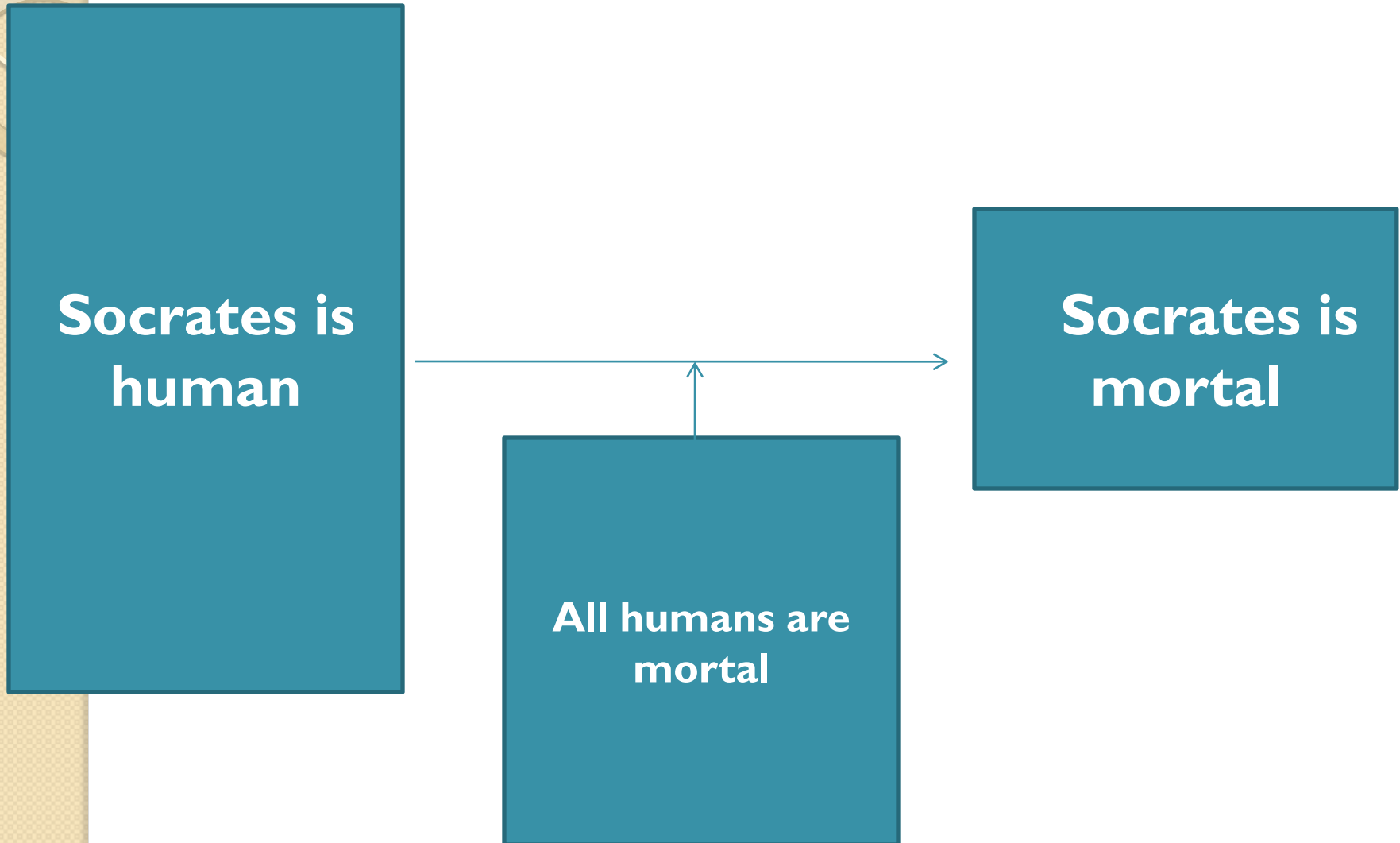
# The Toulmin Model

- A Unit of thought:
  - X is the cause of Y since Y happens every time we find an X present.
- But the audience doesn't see the connection between X and Y in the same way we do. The argument takes place

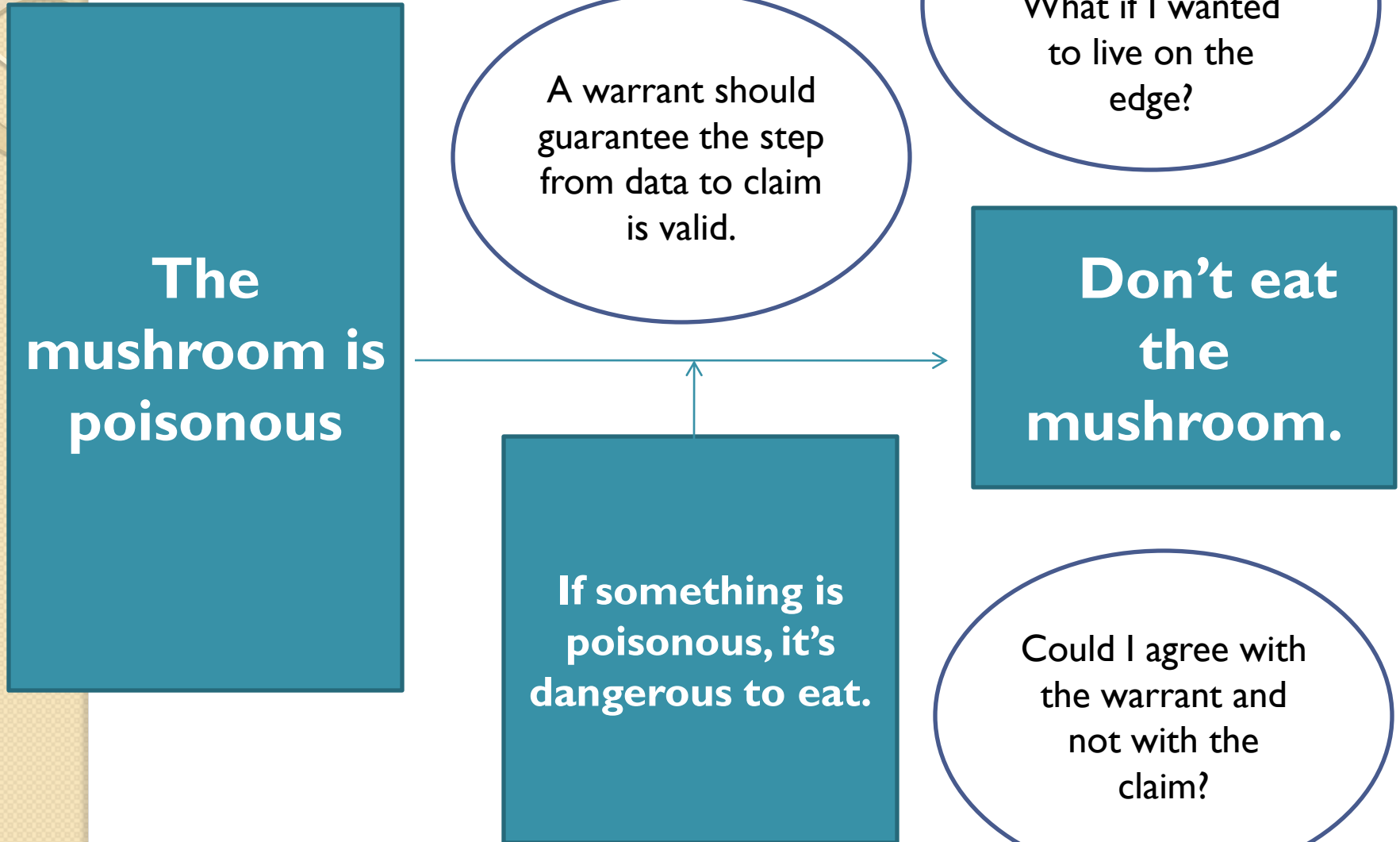
# The Toulmin Model



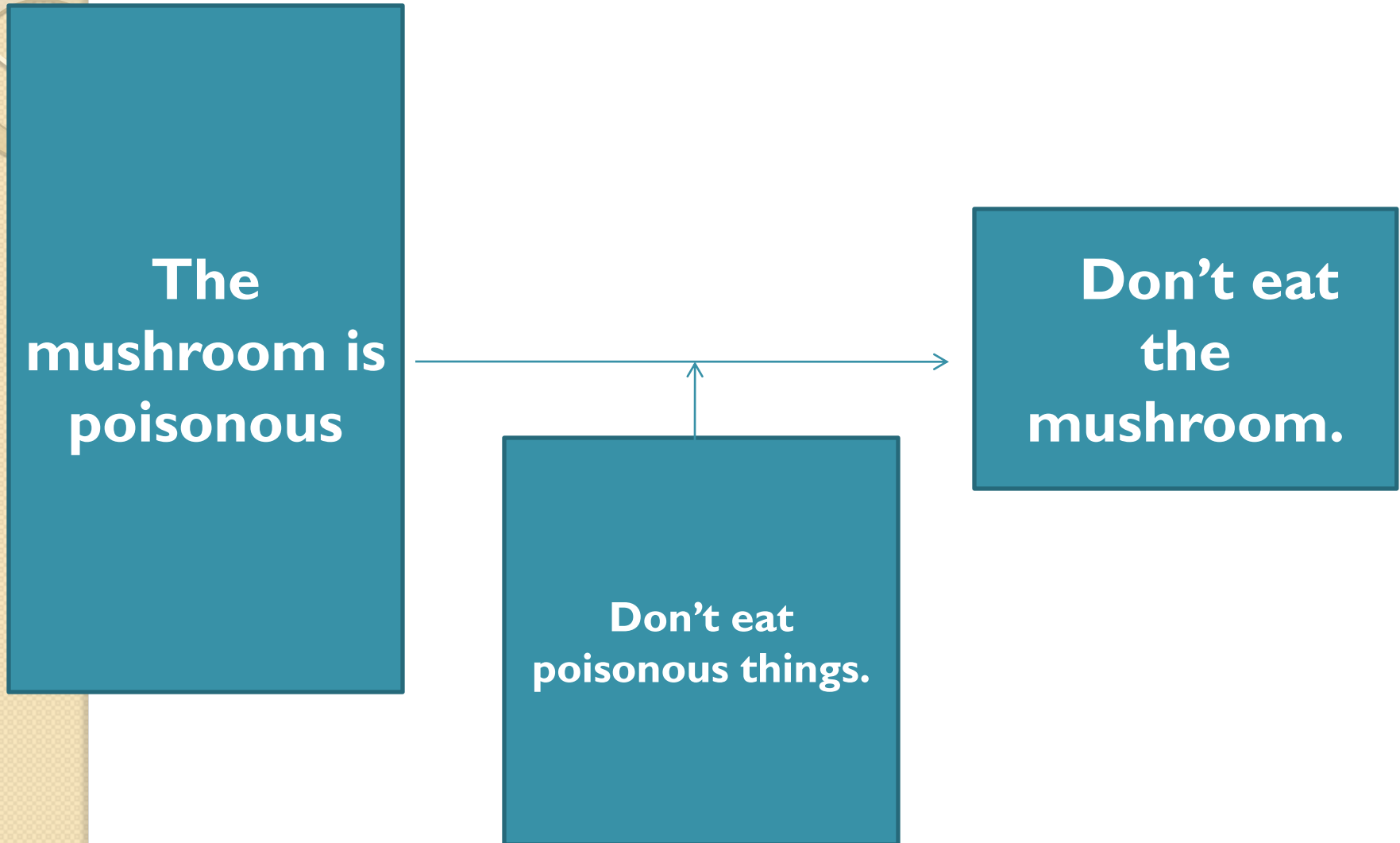
# The Toulmin Model



# The Toulmin Model



# The Toulmin Model



# The Toulmin Model

**Legalization  
would  
eliminate  
the black  
market in  
drugs.**

**Eliminating the  
black market in  
drugs is good!**

**Cocaine and  
heroin should  
be legalized**

Use the same logic  
with nuclear  
weapons, or child  
pornography

Sound argument?  
Do you agree with  
the movement in  
logic?

# The Toulmin Model



# The Toulmin Model

## Identifying warrants

If D {data}, then C {claim}

If \_\_\_\_\_ then \_\_\_\_\_  
because \_\_\_\_\_

# The Toulmin Model

Identifying warrants

If D {data}, then C {claim}

If Phil is on the football team then he's not a good student because ????

What's the warrant? Warrants are a vital part of argumentation.