

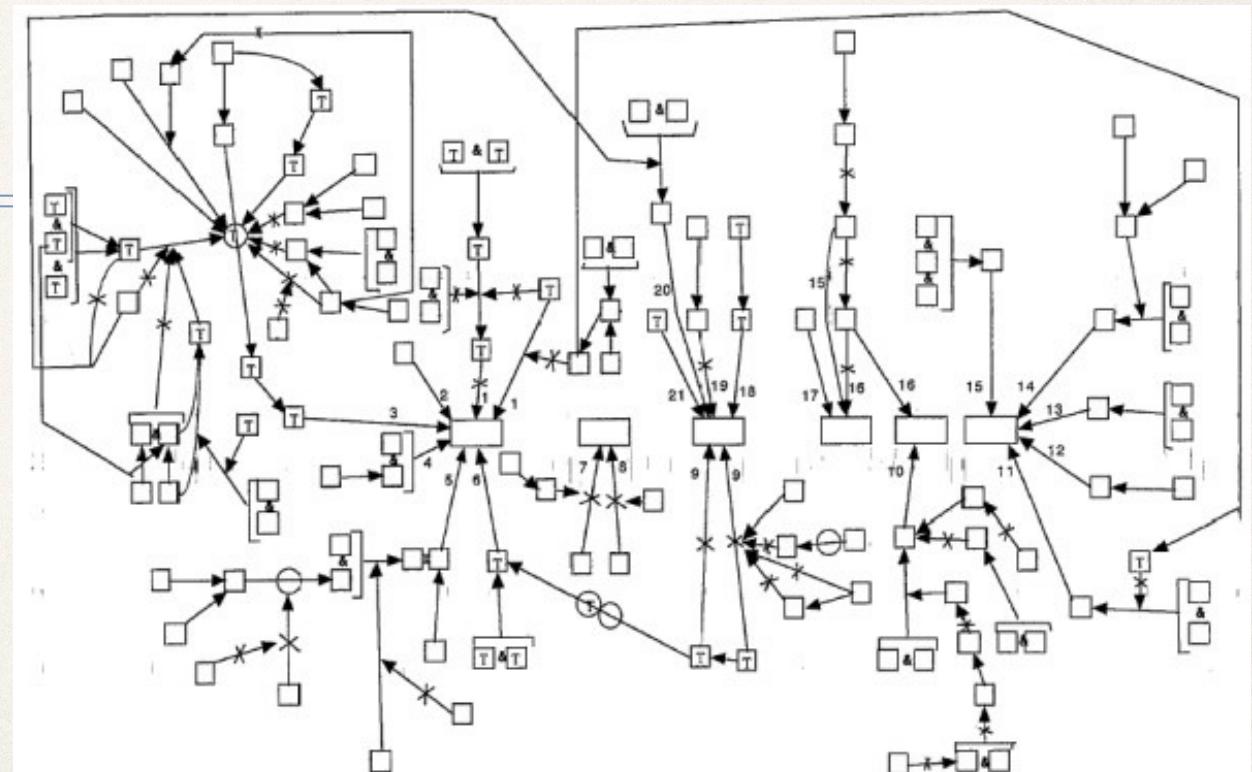
# *On the Structure of Arguments*

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*PHI 169 - Fall 2014*

# *Relevant Premises Missing Premises*



# Revised Version of Assignment #1

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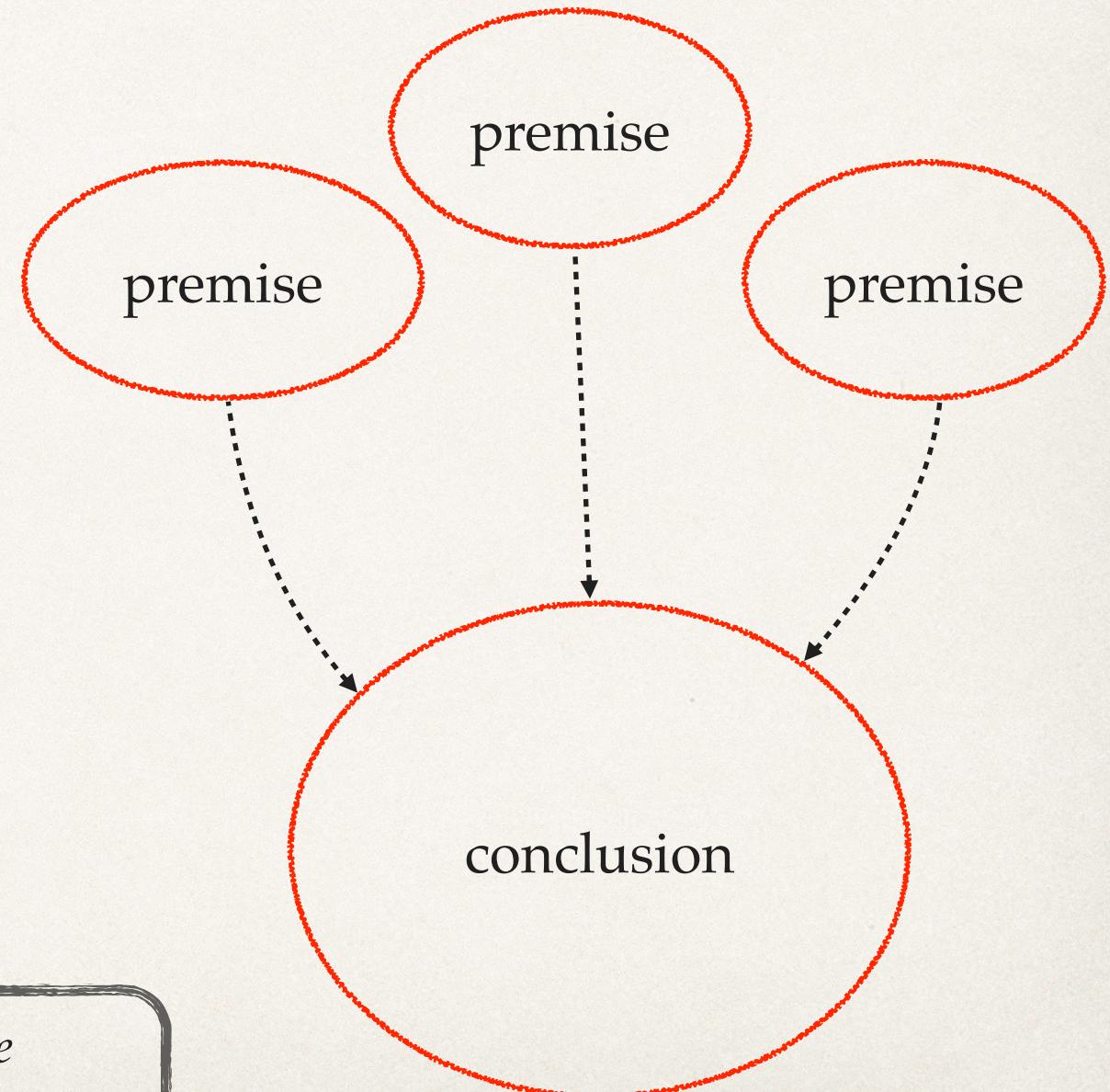
- ❖ There is a revised version of assignment #1 due next Monday September 22nd.
- ❖ The revised version replaces the old version of assignment #1 and will count toward 10% of your final grade.
- ❖ The old version of assignment #1 will not count toward your final grade.
- ❖ *If you want the old version of assignment #1 to count toward your final grade, please email or come talk to me.*

Today's Slides Will Prepare You for  
the Revised Version of Assignment #1

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What is an  
**argument**?

NB: *The directed arrow means that the premise offers some support to the conclusion*



# Working Backwards From Conclusion to Premises

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When you are reconstructing an argument **work backwards** from the conclusion to the premises.

Ask yourself: *If the author of this argument intended to establish this conclusion, what premises is she offering in support of the conclusion?*

Look for the premises that are **relevant** and set aside those that are irrelevant for the conclusion.

# Which Premise is Not Relevant for the Conclusion? (1)

**Premise (1):** If one kills another human being, he deserves to be killed.

**Premises (2):** Mark killed another human being.

**Premise (3):** The death penalty can prevent crime.

**Conclusion (C):** Mark deserves to be killed.

**Premise (3)  
is not relevant:**

*The conclusion talks about Mark's deserving to be killed. The conclusion does not talk about whether putting Mark to death can prevent crime.*

# Which Premise is Not Relevant for the Conclusion? (2)

Premise (1): If one kills another human being, he will kill again.

Premises (2): Mark killed another human being.

Premise (3): The death penalty can prevent crime.

Conclusion (C): Mark will kill again.

**Premise (3) is not relevant.**

*The conclusion talks about Mark killing again. The conclusion does not talk about whether putting Mark to death can prevent crime.*

# Which Premise is Not Relevant for the Conclusion? (3)

Premise (1): Health insurance is expensive.

Premises (2): Young people do not need health insurance.

Premise (3): Young people earn little money.

Conclusion (C): Young people cannot afford health insurance.

**Premise (2) is not relevant.**

*The conclusion talks about young people being able to afford health insurance. The conclusion does not talk about whether young people need it or not.*

# Questions to Keep in Mind When You Analyze an Argument

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What is the **conclusion**? What are the **premises**?

Which premises are **relevant** for the conclusion? Remove the irrelevant premises.

Besides Looking for Relevant Premises, You  
Should Also Look for Missing Premises

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*Example of argument:* The death penalty is just. The penalty causes less suffering than life imprisonment. The death penalty prevents crime. People should not be convicted if they are innocent.

**Premise (1):** The death penalty prevents crime.

**Premises (2):** The death penalty causes less suffering than life imprisonment.

**Premises (3):** People should not be convicted if they are innocent.

**Conclusion (C):** The death penalty is just.

*This loosely resembles Mill's argument for the death penalty.*

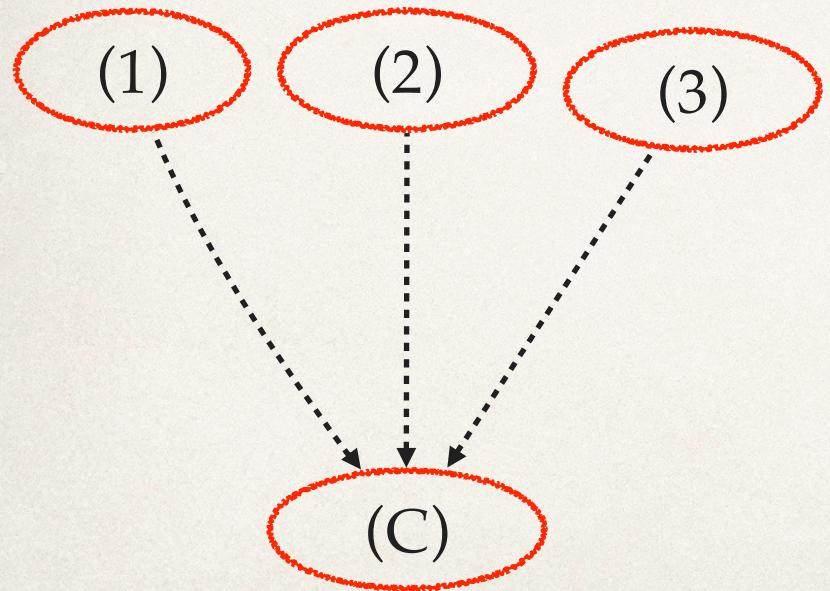
# Graphical Argument Analysis

**Premise (1):** The death penalty prevents crime.

**Premises (2):** The death penalty causes less suffering than life imprisonment.

**Premises (3):** People should not be convicted if they are innocent.

**Conclusion (C):** The death penalty is just.



This graphical analysis has two problems:

1. It is not clear how the conclusion follows. Do the premises describe when a punishment is just? Not at all. *There must be a missing or implicit premise.*
2. Are all the premises relevant?

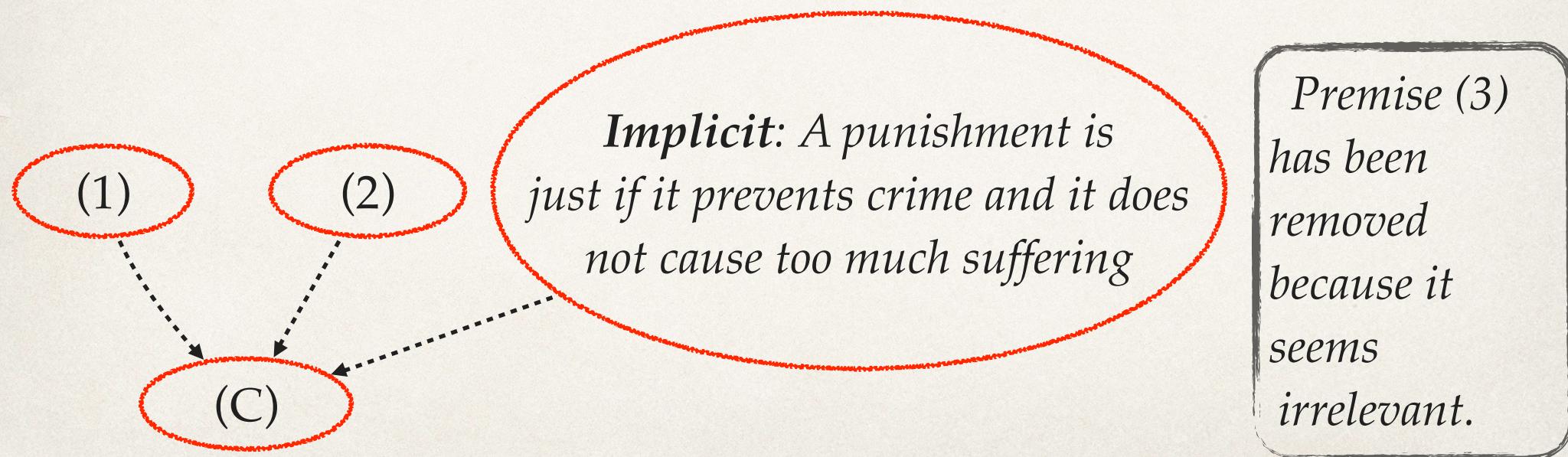
# Removing the Irrelevant Premise and Supplying the Missing Premise

**Premise (1):** The death penalty prevents crime.

**Premises (2):** The death penalty causes less suffering than life imprisonment.

**Premises (3):** People should not be convicted if they are innocent.

**Conclusion (C):** The death penalty is just.



# Questions to Keep in Mind When You Analyze an Argument

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What is the **conclusion**? What are the **premises**?

Are there be **missing** or **implicit** premises? If so, make them **explicit**.

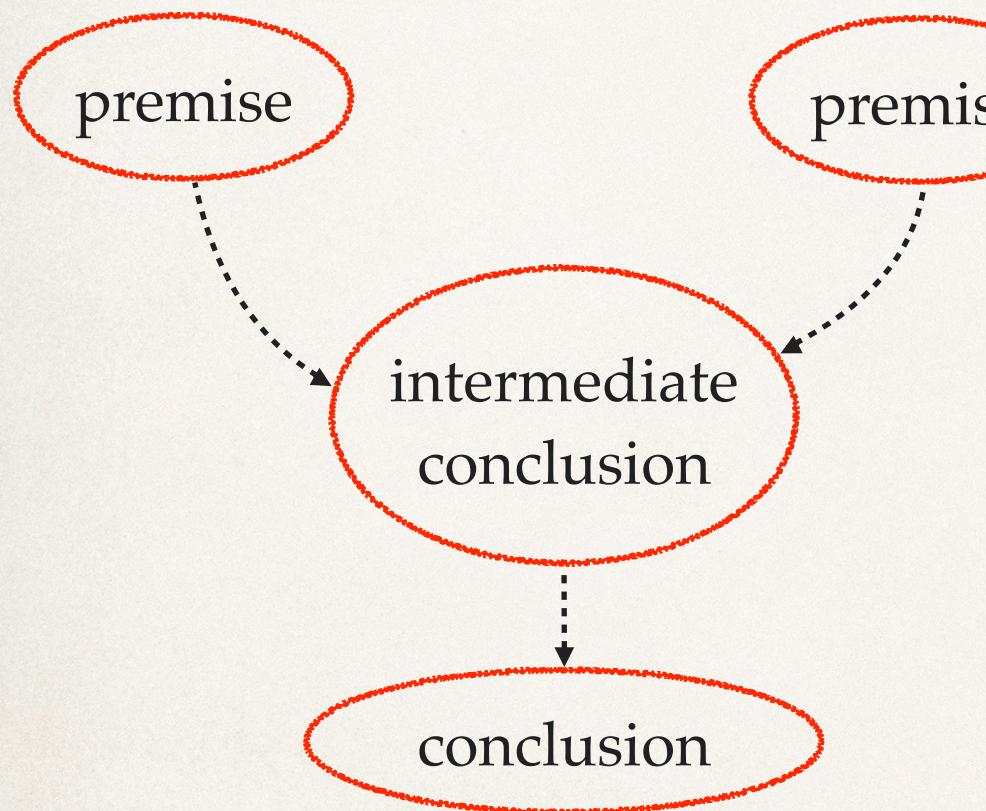
Which premises are **relevant** for the conclusion? Remove the irrelevant premises.

But Arguments Do Not Just Consist  
of Premises and a Conclusion.  
Arguments Have Structures

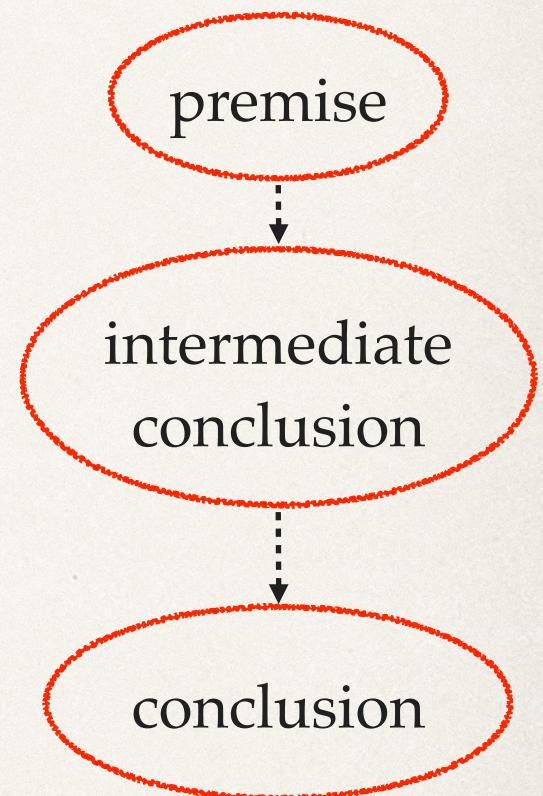
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# Examples of Argument Structures

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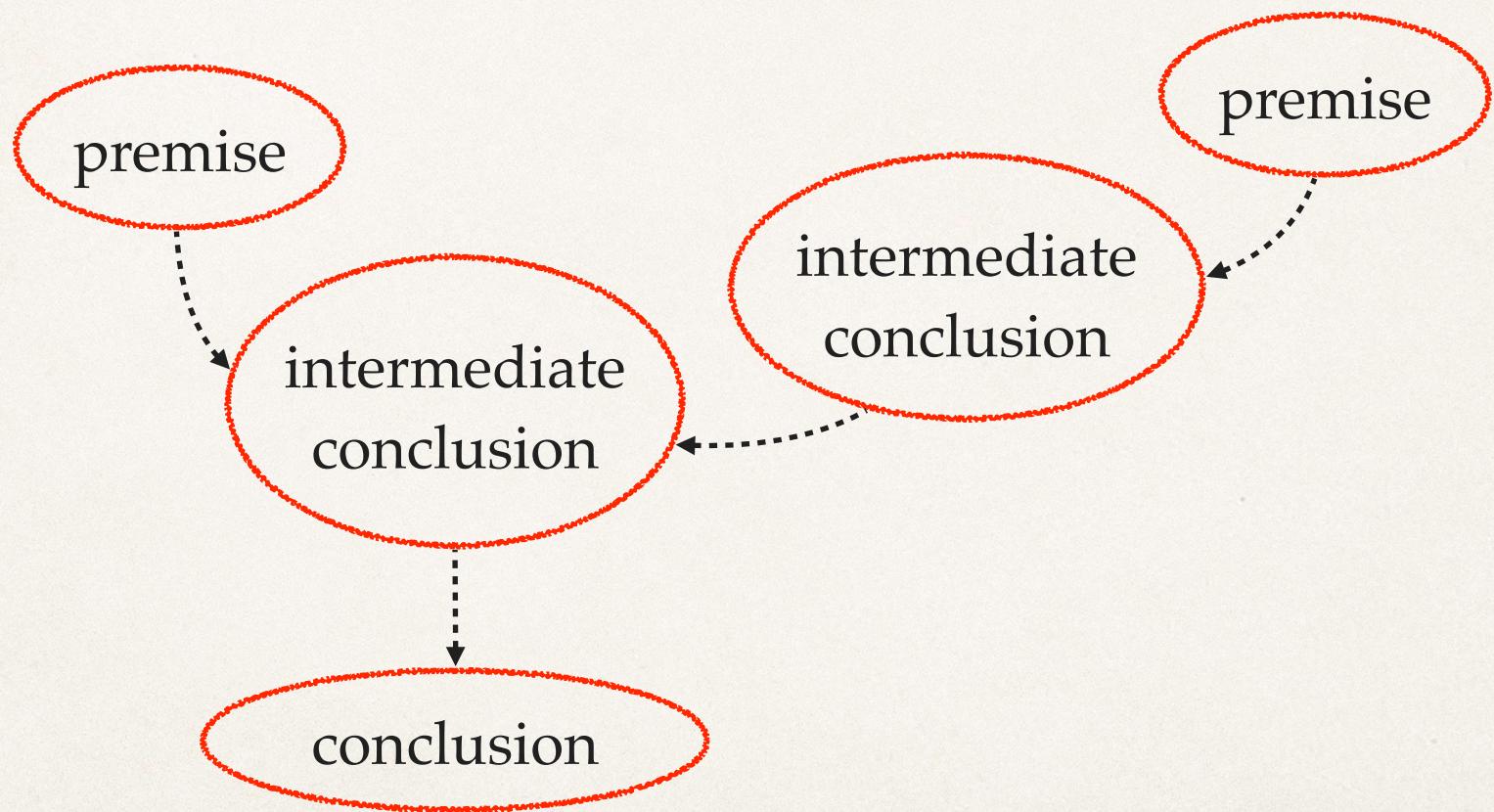
*Structure with  
converging premises*



*Linear structure*

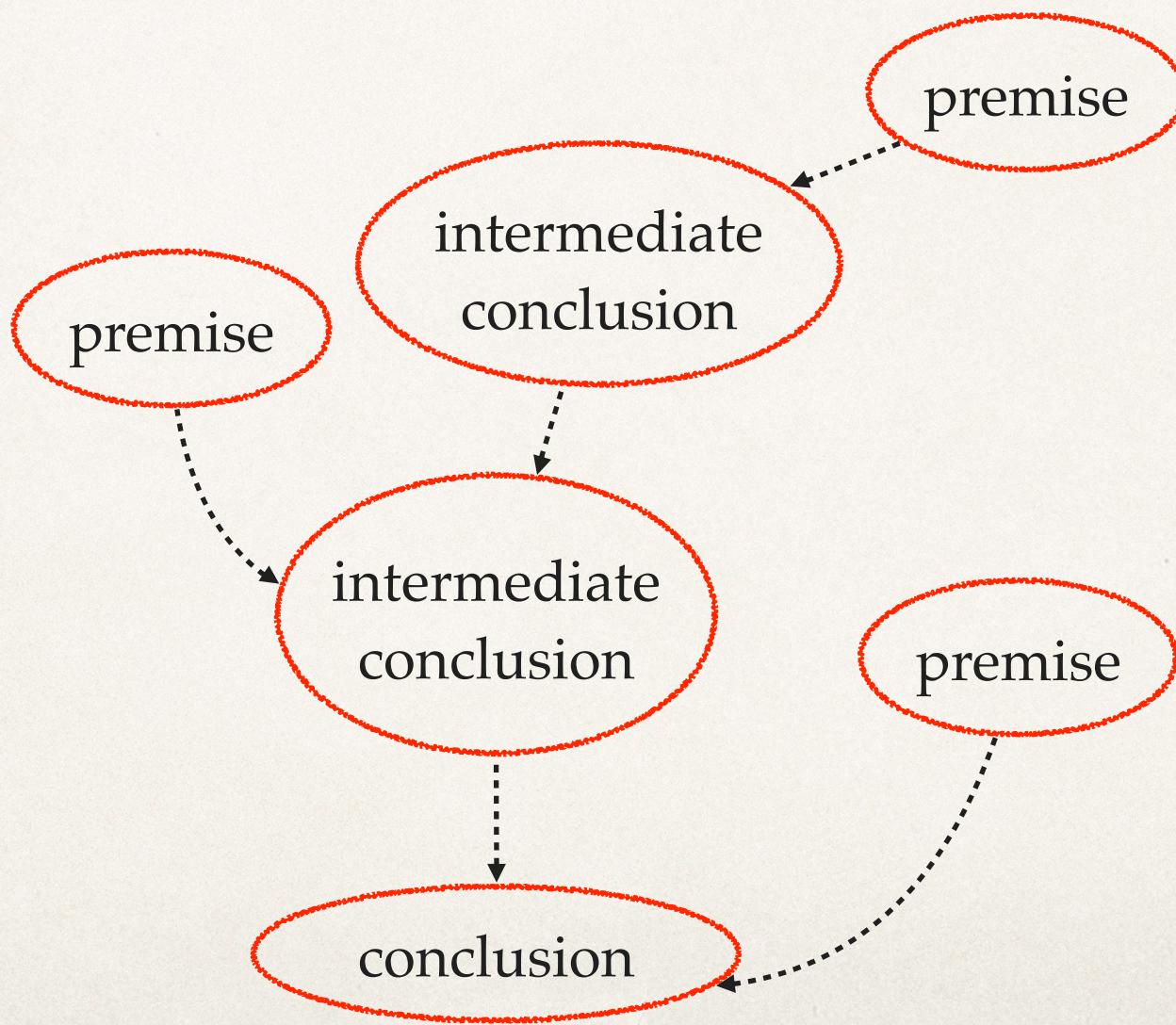
# Another Example

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# Yet Another Example

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# Many Argument Structures Exist...

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# Whenever you Reconstruct an Argument Graphically, You Should Understand Its Structure. It is not Enough to Simply Identify Premises and Conclusion

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Ask:

What is the conclusion?  
What are the premises?

**But also ask :**

What is the **structure** of the argument? How do the premises work together to support the conclusion?

# Keep Working Backwards from Conclusion to Premises

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When you are reconstructing an argument **work backwards** from the conclusion to the premises.

Ask yourself: If the author of this argument intended to establish this intermediate conclusion, what premises is she offering in support of that conclusion?

Sometimes a premise is an **intermediate conclusion** which, in turn, is supported by premises further back.  
*Keep working backwards from the intermediate conclusion toward its premises.*

# An Example

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## *Example of an argument:*

*You do not deserve more income than your neighbor. All differences in income between people are a consequence of luck. If you earn more income than your neighbor as a consequence of luck, you do not deserve it. You earn more than your neighbor.*

Ask :

What is the conclusion?  
What are the premises?

But also ask :

What is the **structure** of the argument? How do the premises work together to support the conclusion?

# First Step: Identify Premises and Conclusion

*Example of an argument:*

*You do not deserve more income than your neighbor. All differences in income between people are a consequence of luck. If you earn more income than your neighbor as a consequence of luck, you do not deserve it. You earn more than you neighbor.*

**Premise (1):** All differences in income between people are a consequence of luck.

**Premise (2):** If you earn more income than your neighbor as a consequence of luck, you do not deserve it.

**Premises (3):** You earn more than your neighbor.

**Conclusion (C):** You do not deserve more income than your neighbor.

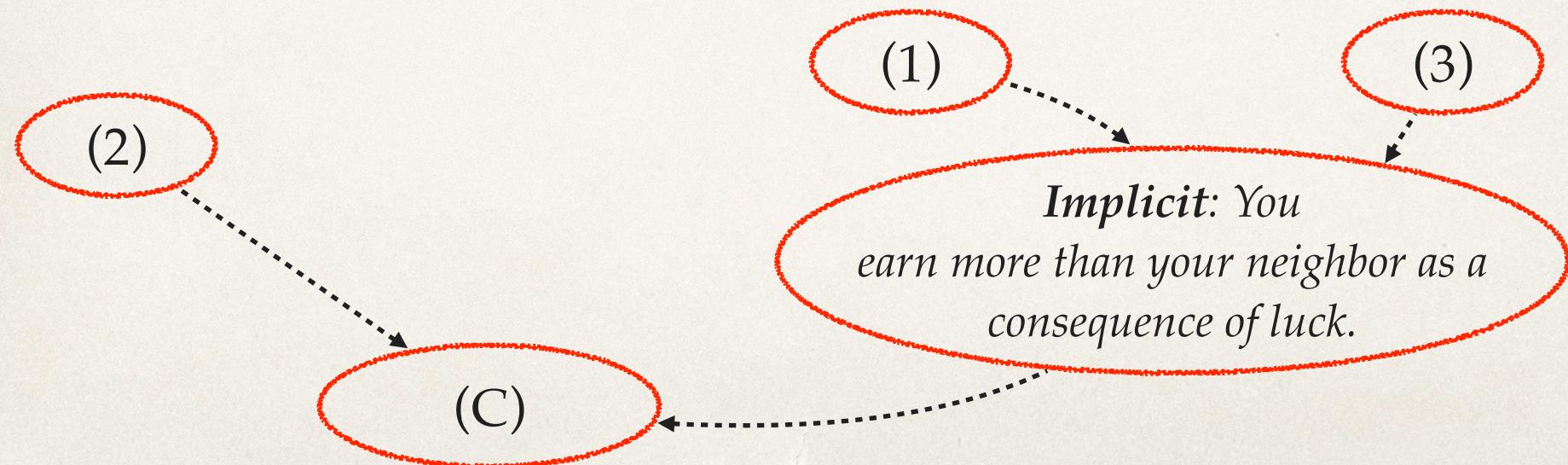
# Second Step: Identify the Argument's Structure

**Premise (1):** All differences in income between people are a consequence of luck.

**Premise (2):** If you earn more income than your neighbor as a consequence of luck, you do not deserve it.

**Premises (3):** You earn more than your neighbor.

**Conclusion (C):** You do not deserve more income than your neighbor.



# Another Example

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## *Example of an argument:*

*You are wasting your time. If you do not learn anything new, you are wasting your time. In college you only learn old things, not new things. You are going to college.*

Ask :

What is the conclusion?  
What are the premises?

**But also ask :**

What is the **structure** of the argument? How do the premises work together to support the conclusion?

# First Step: Identify Premises and Conclusion

*Example of an argument:*

*You are wasting your time. If you are not learning new things, you are wasting your time. In college you only learn old things, not new things. You are going to college.*

**Premise (1):** If you are not learning new things, you are wasting your time.

**Premise (2):** In college you only learn old things, not new things.

**Premises (3):** You are going to college.

**Conclusion (C):** You are wasting your time.

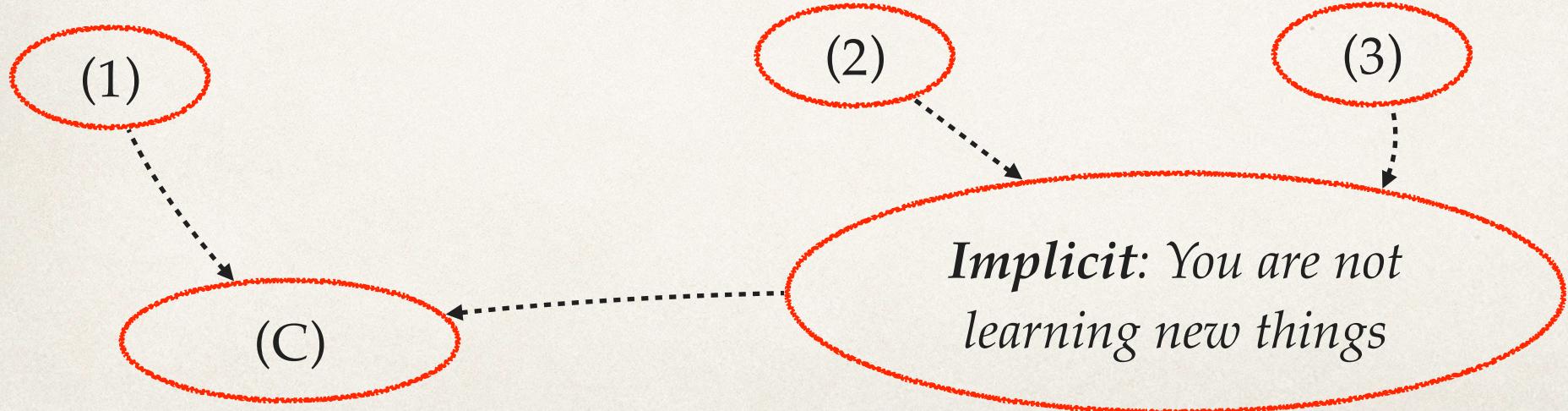
# Second Step: Identify the Argument's Structure

**Premise (1):** If you are not learning new things, you are wasting your time.

**Premise (2):** In college you only learn old things, not new things.

**Premises (3):** You are going to college.

**Conclusion (C):** You are wasting your time.



# And Now Hume's Argument From the Homework

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# First Step: Identify Premises and Conclusion

*Example of an argument: Nothing is demonstrable unless the contrary implies a contradiction. Nothing that is distinctively conceivable implies a contradiction. Whatever we conceive as existent, we can also conceive as non-existent. There is no being, therefore, whose non-existence implies a contradiction. Consequently, there is no being whose existence is demonstrable.*

**Premise (1):** Nothing is demonstrable unless the contrary implies a contradiction.

**Premise (2):** Nothing that is distinctively conceivable implies a contradiction.

**Premise (3):** Whatever we conceive as existent, we can also conceive as non-existent.

**Premises (4):** There is no (existent) being whose non-existence implies a contradiction.

**Conclusion (C):** There is no being whose existence is demonstrable.

# Second Step: Identify the Argument's Structure

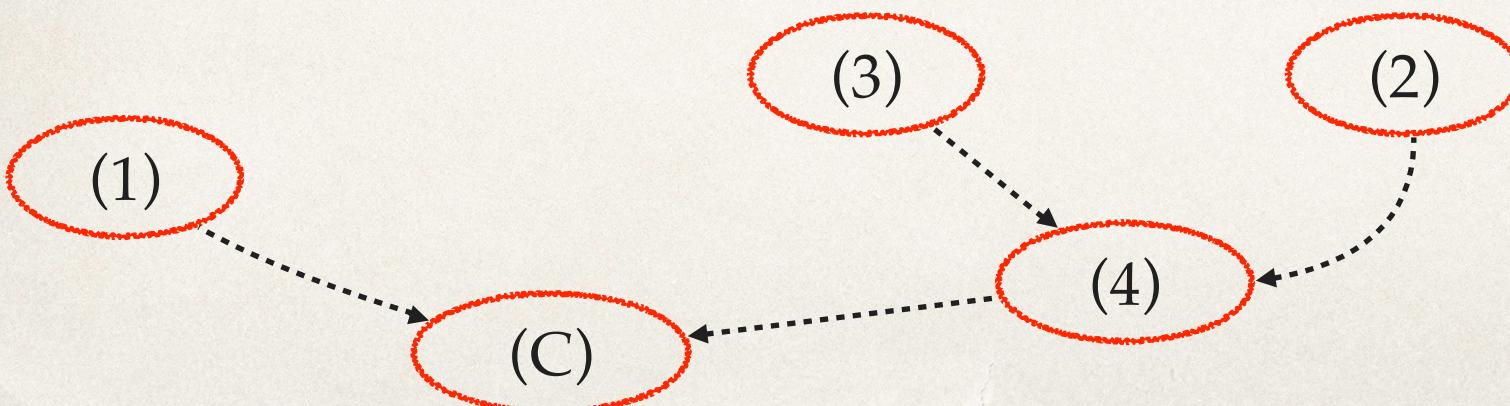
**Premise (1):** Nothing is demonstrable unless the contrary implies a contradiction.

**Premise (2):** Nothing that is distinctively conceivable implies a contradiction.

**Premise (3):** Whatever we conceive as existent, we can also conceive as non-existent.

**Premises (4):** There is no being whose non-existence implies a contradiction.

**Conclusion (C):** There is no being whose existence is demonstrable.



# Questions for Argument Analysis So Far

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What is the **conclusion**? What are the **premises**?

Are there be **missing** or **implicit** premises? If so, make them explicit.

Which premises are **relevant** for the conclusion? Remove the irrelevant premises.

What is the **structure** of the argument? How do the premises work together to support the conclusion?

# Recall: What Makes an Argument Good?

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- ✿ **Reality Check:**

the *premises* are *true*

- ✿ **Formal Validity:**

the conclusion *follows from* the premises,  
deductively or inductively

# Inductive or Deductive?

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**Premise:** If the money supply increases, prices go up.

**Premise:** The money supply in the US is increasing.

**Conclusion:** Prices in the US will go up.

*Deductive*

# Inductive or Deductive?

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**Premise:** If the money supply increases, prices go up.

**Premise:** The money supply in the US is not increasing.

**Conclusion:** Prices will not go up.

The argument is *not deductive*. Prices could still go up even if the money supply does not increase. Maybe the argument is inductive...

# Inductive or Deductive?

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**Premise:** If it is raining, the sidewalk gets wet.

**Premise:** It is not raining.

**Conclusion:** The sidewalk does not get wet.

The argument is *not deductive*. It could be inductive because a plausible reason why the floor is not getting wet is that it is not raining.

# Inductive or Deductive?

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**Premise:** Research by all social scientists tells us that the death penalty does not deter crime

**Conclusion:** The death penalty does not deter crime

*Inductive.* The conclusion follows only as a matter of probability. Research findings might be wrong.

# Questions for Argument Analysis So Far

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What is the **conclusion**? What are the **premises**?

Are there be **missing** or **implicit** premises? If so, make them explicit.

Does the conclusion follow the premises? **Deductively** or **inductively**?

Which premises are **relevant** for the conclusion? Remove the irrelevant premises.

What is the **structure** of the argument? How do the premises work together to support the conclusion?