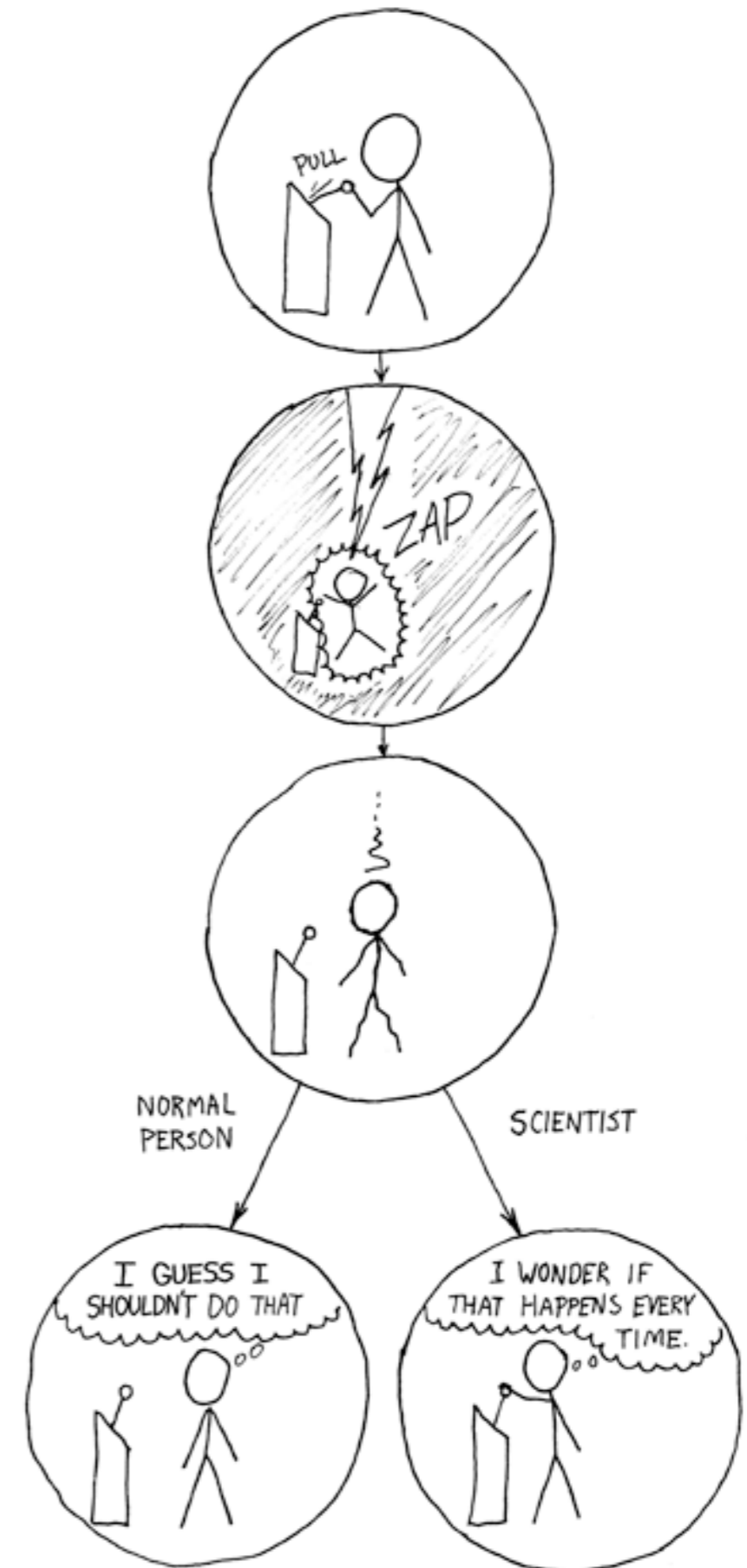


# Questions

“The best scientists and explorers have the attributes of kids! They ask questions and have a sense of wonder. They have curiosity. ‘Who, what, where, why, when, and how!’ They never stop asking questions, and I never stop asking questions, just like a five year old.”

—Sylvia Earle, marine biologist



# Three Questions

## About Marriage Equality

- Should gay and lesbian couples have the same opportunity to marry as straight couples?
- What percent of the public supports marriage equality for gay and lesbian couples?
- What explains the recent increase in support for marriage equality?

# Three Answers

## About Marriage Equality

- Gay and lesbian couples should have the same right to marry as straight couples.
- 68% of the public supports marriage equality in the U.S.
- Court decisions explain the recent increase in support for marriage equality.

# Three Questions

## About Income Inequality

- Should the government redistribute wealth?
- Is income inequality higher or lower in the U.S. than France?
- What are the consequences of income inequality?

# Three Answers

## About Income Inequality

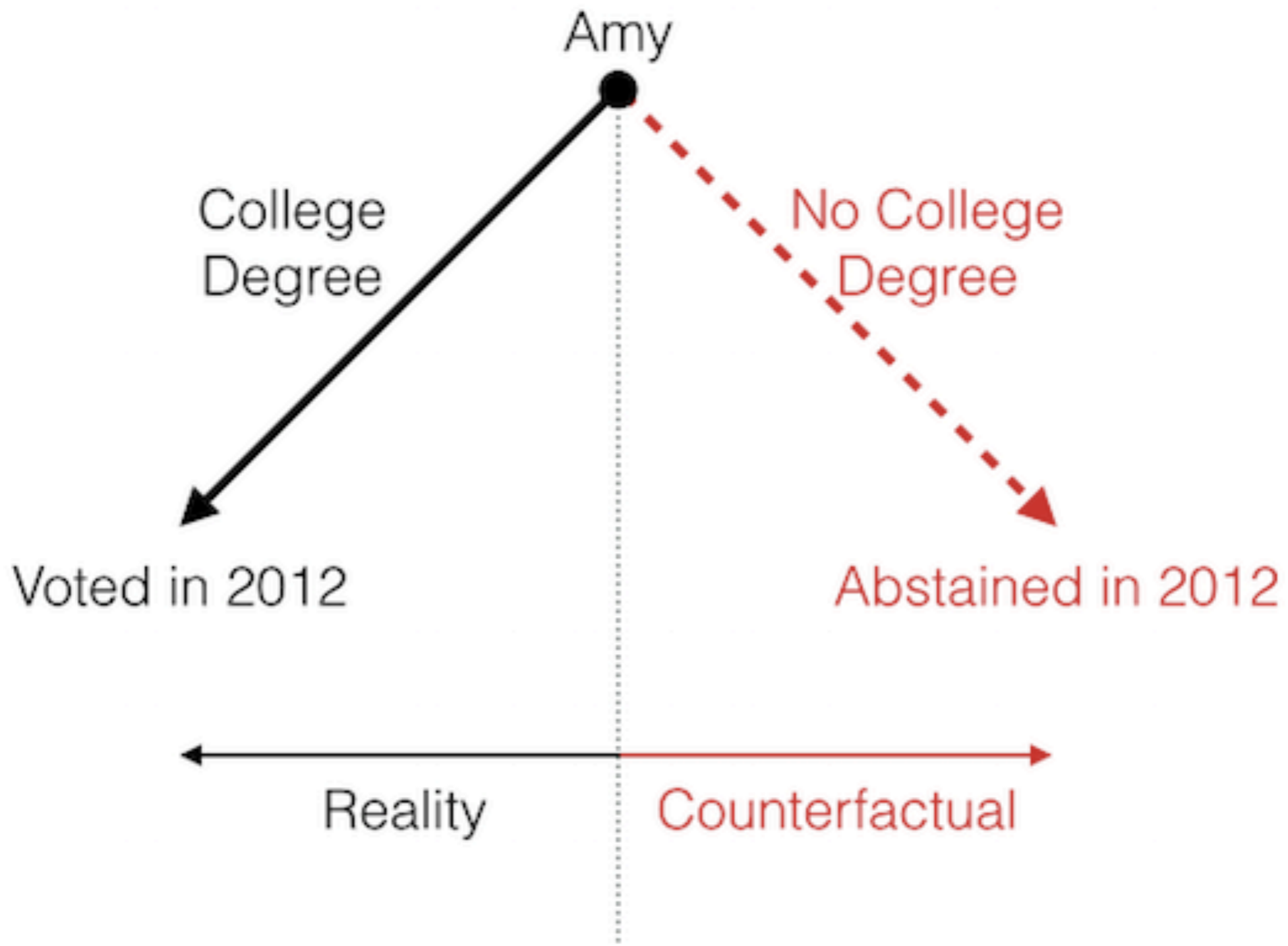
- The government should not redistribute wealth.
- Income inequality is higher in the U.S. than France.
- Income inequality causes a slower growth rate.

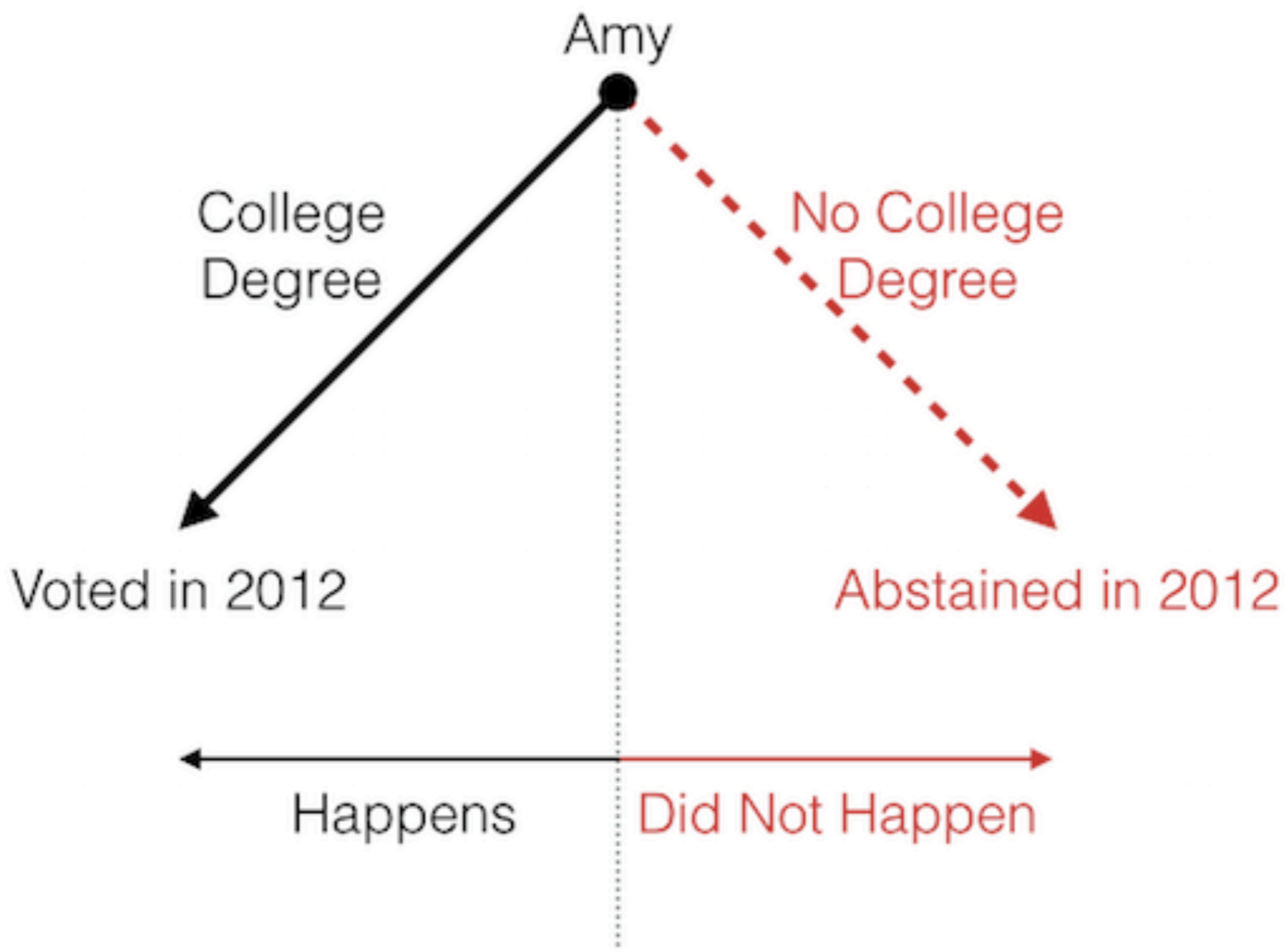
# **Three Types** of Questions

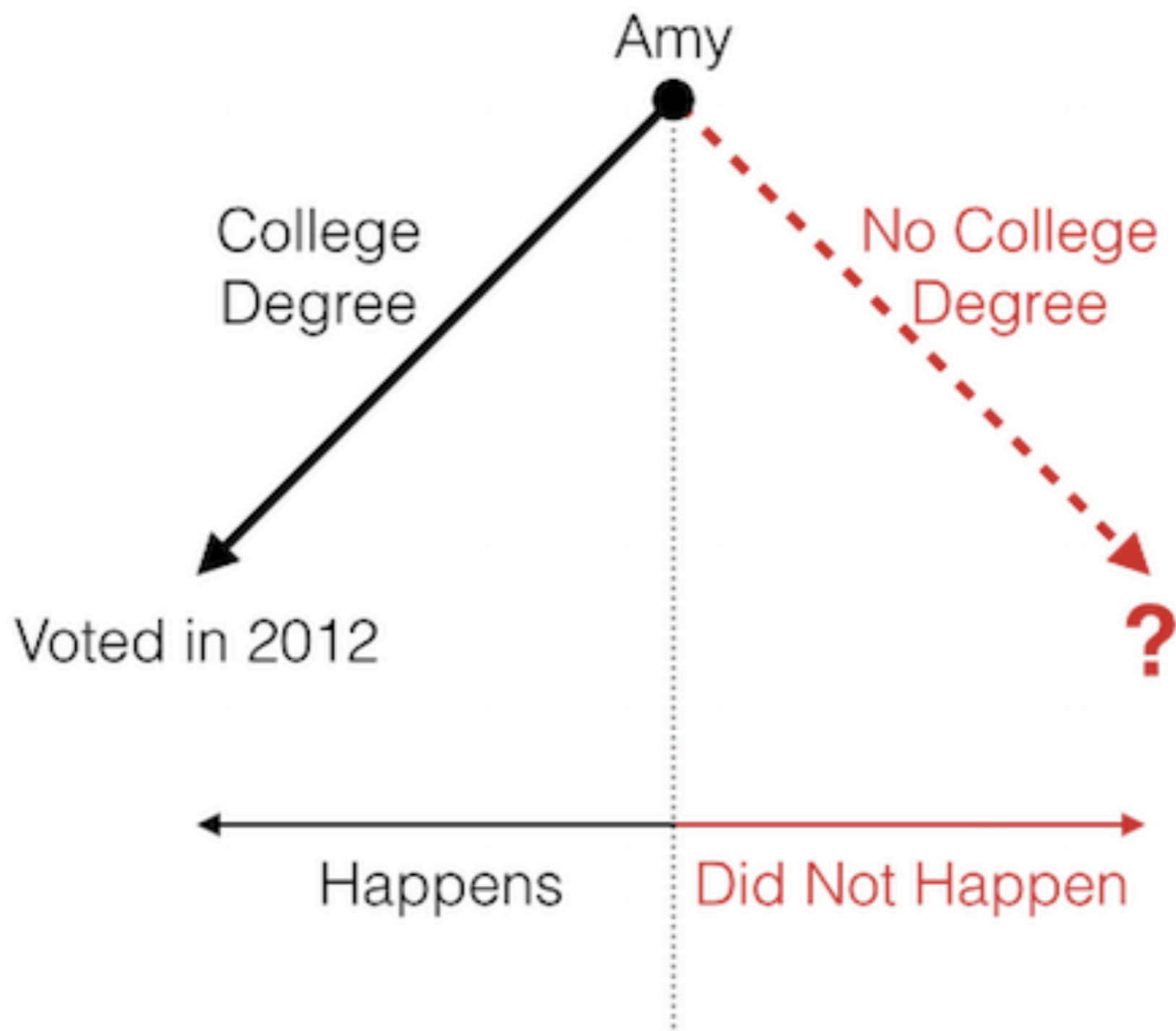
Type	Description	Marriage Example	Inequality Example	Approach
<b>normative</b>	How <i>should</i> the world look? Asks for a moral judgement.	Should gay and lesbian couples have the same right to marry as heterosexual couples?	Should the government redistribute wealth?	logic and reasoning
<b>descriptive</b>	How <i>does</i> the world look? Asks for an empirical observation.	What percent of the public supports marriage equality for gays and lesbians?	Is income inequality higher or lower in the U.S. than France?	observation and measurement
<b>causal</b>	Why does the world look the way it does? What <i>influences</i> X? Asks for a <i>cause-and-effect</i> relationship or an <i>explanation</i> .	What explains the recent increase in support for marriage equality?	What are the consequences of income inequality?	observation and measurement, plus clever design

What does it mean for something  
to “**cause**” something else?









# **Fundamental Problem of Causal Inference**

In order to establish causation, we must observe the factual and counterfactual world. We cannot observe the counterfactual world. Thus, we cannot establish causation.