ACTUAL CAUSATION AND NORMS

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Actual Causation

☐ Relations of *actual causation* are reported in statements like:

"Sparks cast by a locomotive caused the fire that destroyed Jacob Anderson's house"

Actual Causation

- Typically, statements of actual causation:
  - describe particular events, particular individuals, times, and places
  - are retrospective, being made after the effect occurs

Actual Causation

☐ Attributions of actual causation are influenced by *norms*

Knobe and Fraser (2008)

The receptionist in the philosophy department keeps her desk stocked with pens. The administrative assistants are allowed to take pens, but faculty members are supposed to buy their own…

On Monday morning, one of the administrative assistants encounters Professor Smith walking past the receptionist's desk. Both take pens. Later, that day, the receptionist needs to take an important message…but she has a problem. There are no pens left on her desk.

Knobe and Fraser (2008)

Subjects are then asked to rate the extent to which they agree or disagree with *one* of the the following statements:

☐ Professor Smith caused the problem

☐ The admistrative assistant caused the problem

Subjects give a much higher rating to Professor Smith

Normality

Normal

- Frequent, expected, (stereo-)typical,
- Default
- Conforms with a norm
- Social, moral, legal, policy
- Proper functioning – organism, machine, social institution

Abnormal

- Rare, surprising, atypical
- Exception
- Violates a norm

Normality

- All of these affect causal judgment
- They do so regardless of whether the outcome is good, bad, or neutral
- They do so regardless of whether human actors are involved
- Subjects are not merely substituting moral judgments for causal judgments

Reaction

- How can causation depend upon social rules, people's values and expectations?
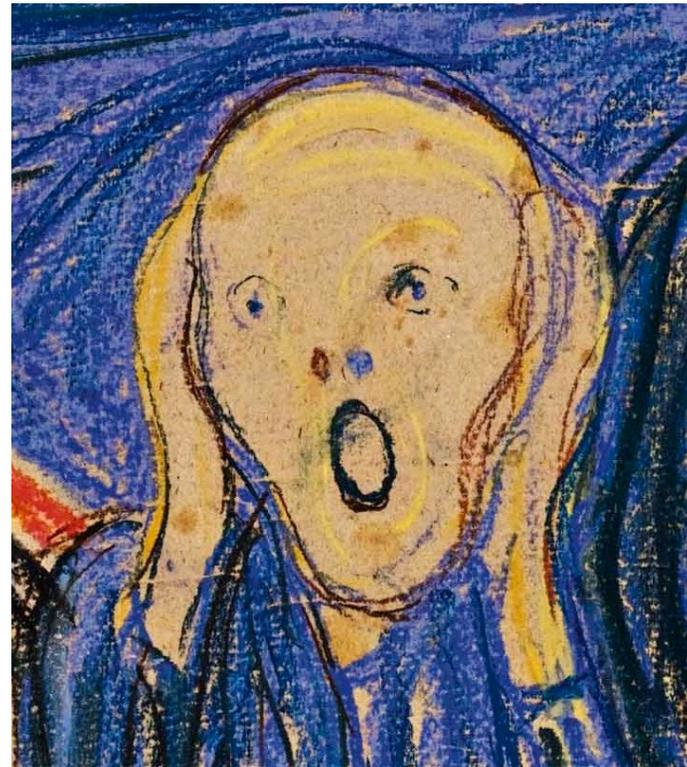
Reaction

- Causal relations are *objective* features of the world
- We investigate them using scientific methods
- Randomized controlled trials
- Causal discovery algorithms
- There is no room for *norms*

A Philosophical Mistake

- Actual causation = causation (tout court)
- Our language is misleading
   - Sparks cast by a locomotive <u>caused</u> the fire that destroyed Jacob Anderson's house

A Philosophical Mistake

☐ Actual causation is a specific causal concept

☐ It involves an overly of norms on an underlying objective structure

Inflation

□ As an analogy, consider the concept of *inflation*

□ In a given time period:

■ The price of beef increases 20%

■ The price of pork decreases 20%
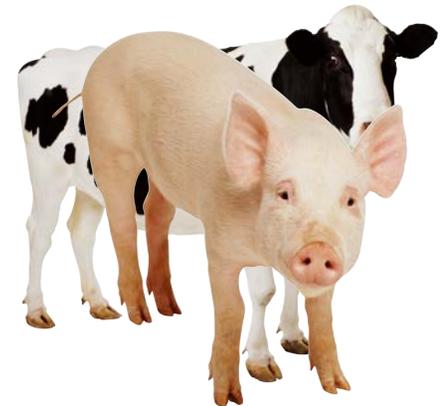
Inflation

- This will have different effects on carnivores and vegetarians

- On Hindus and Muslims

- On those who value a varied diet, vs. those who are happy to eat what's cheapest

Inflation

- Measures like the Consumer Price Index are based on a "basket of goods"

- This incorporates assumptions about what people will buy

- About their willingness to make substitutions as prices change
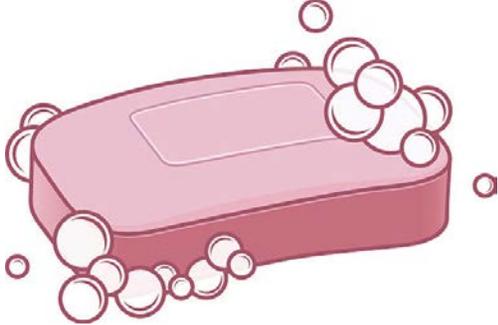
- Preferences and values

Inflation

- Does this mean inflation is purely subjective, that it is not real?

- Of course not

Inflation

- If you want a *purely* objective representation of inflation, it would have to be an enormously complex vector

Inflation

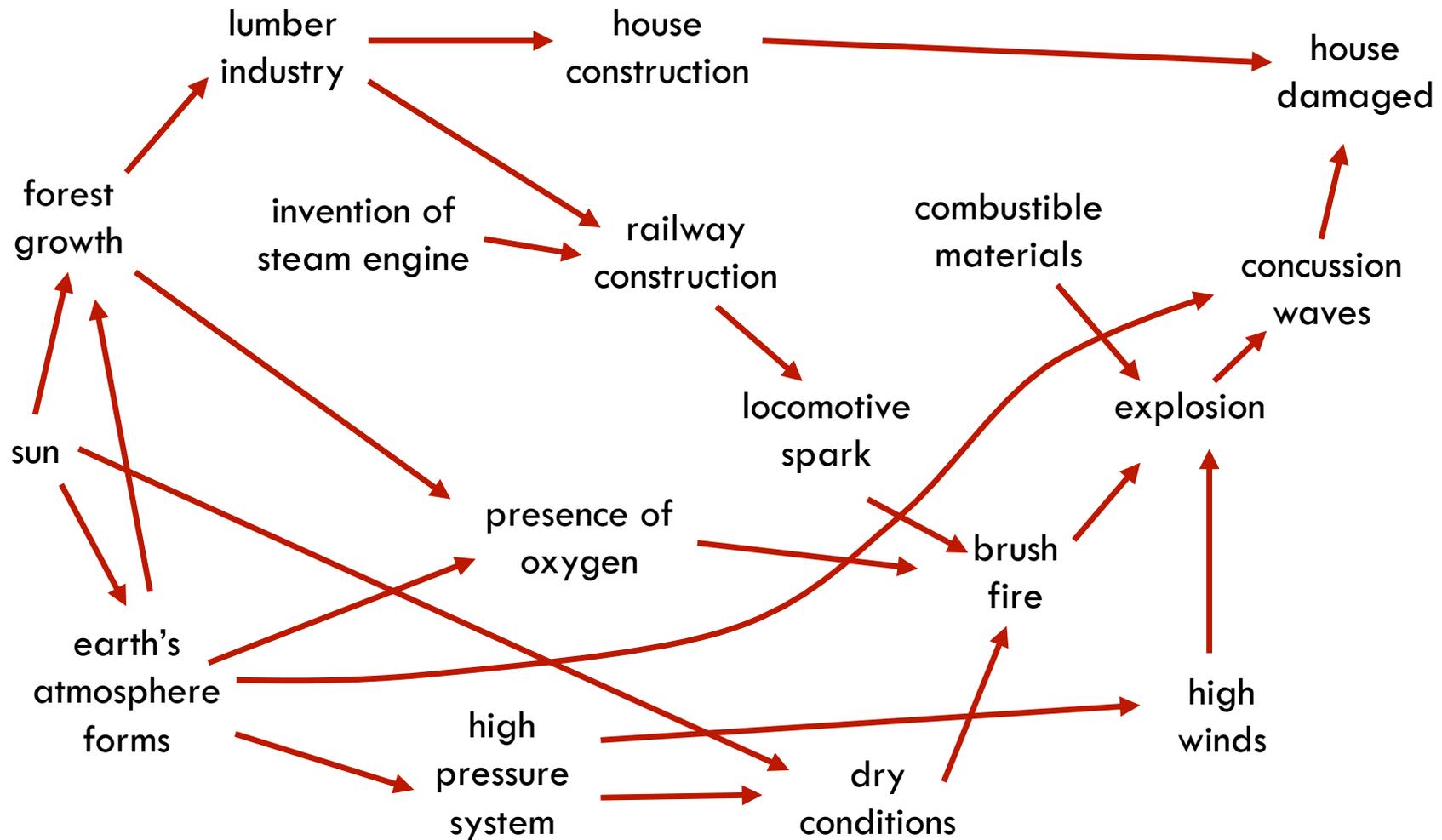+20%

−20%

+8%

−3%

+27%

+4%

Inflation

- It is useful to distill this information into a single number

- *This* is what requires additional assumptions about preferences and values

Actual Causation

- The world has an objective causal structure
- It is very complex

Actual Causation

Actual Causation

- It is often useful to have a simple take-home message

- Norms play a role in distilling complex structure into a simple executive summary

Actual Causation

- A standard view among philosophers is that what is distinctive about relations of actual causation is that they involve *particular* events

- Particular sparks cast by a particular locomotive caused a particular fire, etc.

Actual Causation

- This is contrasted with causal *generalizations*, which relate *types* of events
- Sparks cause fires

Actual Causation

- But this is not really what is distinctive about actual causation

- The complex, underlying structure also involves particular people, places, events

Actual Causation

- I think that another characteristic feature of actual causation is that it is *backward-looking* as opposed to *forward-looking*

- Questions of actual causation tend to arise when some event has occurred, and we retrospectively ask why it occurred

Causal Selection

- A second, critical reaction
- Norms may play a role in the *pragmatics* of causal talk
- Among all the events that are, in fact, causes…
- norms influence which causes we *select* to talk about
- This doesn't tell us anything about the *metaphysics* of causation

Replies

- The objective, underlying causal structure needn't parse neatly into relations of the form C causes E

- There can be instances where one variable causally depends on several others, but it is unclear whether to say that C causes E

Replies

- Philosophers have thought that distinguishing cases of preemption and overdetermination (where we attribute causation) from cases of switching and short circuits (where we don't) *is* a matter of metaphysics

- But a parallel appeal to the role of norms can help explain these distinctions

Patterns of Dependence

- Kominsky, Phillips, Gerstenberg, Lagnado, and Knobe (2015)

- Icard, Kominsky, and Knobe (2017)

- Morris, Phillips, Icard, Knobe, Gerstenberg, and Cushman (MS)

Patterns of Dependence

- If C and D are individually necessary for E, but only jointly sufficient (perhaps when conjoined with other causes):

- C is judged to be more of a cause when it is abnormal

- C is judged to be less of a cause when D is abnormal

- Changing whether professors can takes pens influences our causal judgment about the administrative assistant

Patterns of Dependence

- If C and D are individually sufficient for E
- Symmetric overdetermination
- The effect is reversed!
- C is judged to be more of a cause when it is normal
- C is judged to be less of a cause when D is normal
- Duality

Patterns of Dependence

- Judgments of actual causation are partly comparative

- Our willingness to call C a cause depends upon whether there are better candidates available

Patterns of Dependence

- Attributions of actual causation favor factors that are *difference-makers* in *normal* conditions

- Necessary causes are difference-makers when their complements *occur*

- Sufficient causes are difference-makers when their complements *don't occur*

Patterns of Dependence

☐ Attributions of actual causation point to *effective* interventions

☐ There are different ways of making this precise, none perfectly satisfactory

☐ E.g., Morris et al.:

☐ P(doing C would result in E | ~E)

Portability

- Another sense in which actual causation is not just causation among particular events

- Judgments of actual causation favor causal relationships that are *portable*

- Apply more widely

Direction of Influence

- Morris et al raise an interesting question
- Do we assess effectiveness of interventions, and use these to form our judgments of actual causation?
- Or vice versa?

Direction of Influence

- Perhaps we have an intuitive notion of actual causation

- But when we aggregate over many instances, the result gives an estimate of effectiveness

- We have evolved a concept that helps us solve a computational problem

Sampling

- This picture works best with statistical notions of normality

- Frequencies in observed samples will estimate probabilities

Sampling

- Can causal judgments be influenced by distorting these frequencies?

- Media coverage may make uncommon events seem more common (winning the lottery, being killed by terrorism)

- Policy debates may focus on salient instances – anecdotes rather than statistics

- Each side in a debate will cherry pick examples