

Out of the armchair and into the lab:

How cognitive psychology can help
us answer philosophical questions

Tania Lombrozo

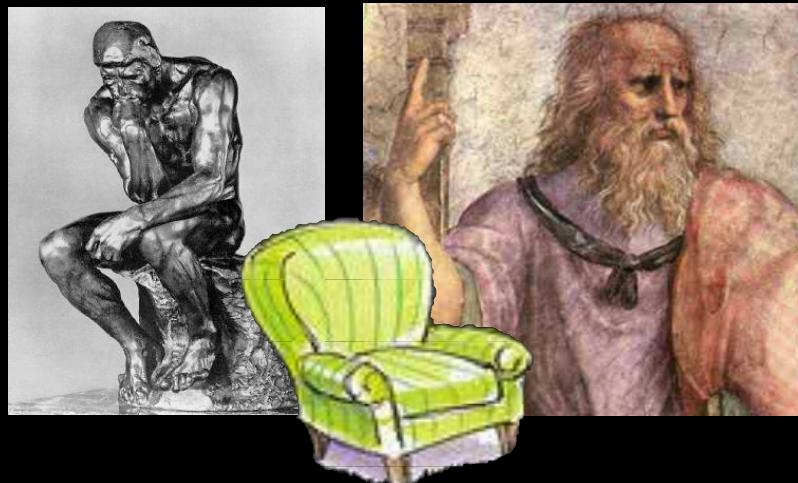
Department of Psychology

University of California, Berkeley

Science

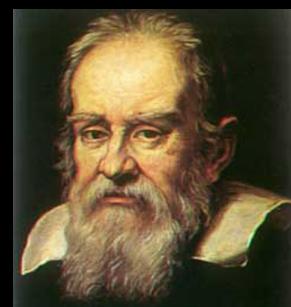


Philosophy



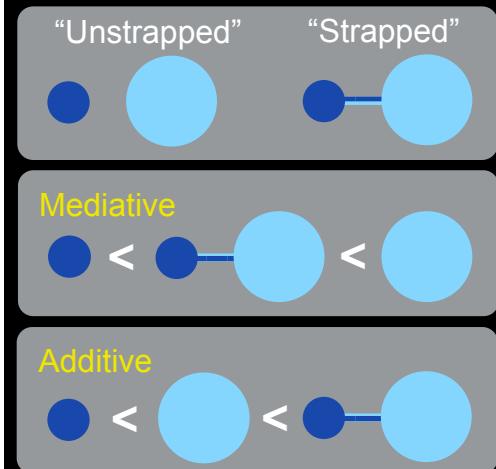
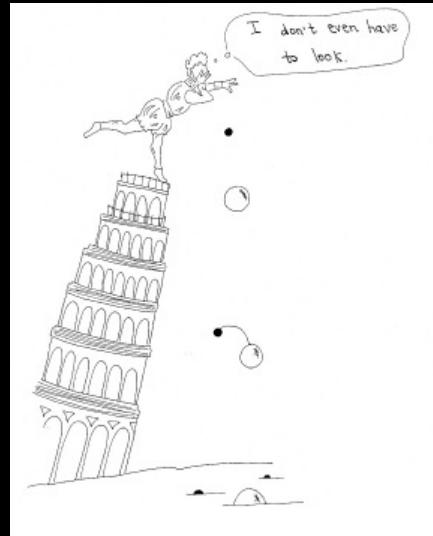
The laboratory of the mind

- Sometimes we learn a great deal without empirical data
 - Mathematics
 - Theoretical arguments
 - Thought experiments



Galileo

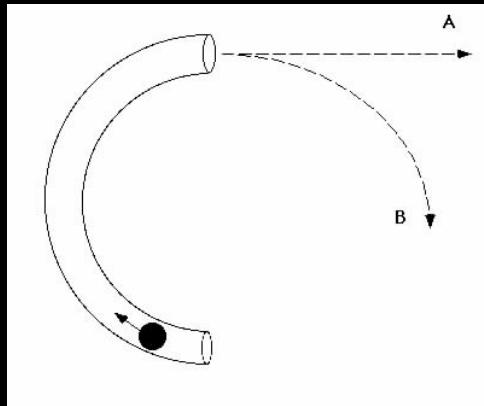
Thought experiments



The laboratory of the mind

- Sometimes we learn a great deal without empirical data
 - Mathematics
 - Theoretical arguments
 - Thought experiments
- But sometimes we are led astray...

Misconceptions about physics



(McCloskey)

The laboratory of the mind

- Sometimes we learn a great deal without empirical data
 - Mathematics
 - Theoretical arguments
 - Thought experiments
- But sometimes we are led astray...
 - Misconceptions about the natural world
 - Misconceptions about our own minds
 - Misconceptions about our own concepts

Philosophy + Science



Experimental Philosophy



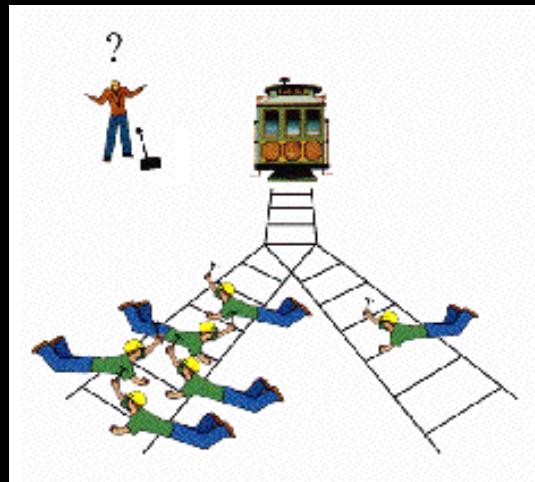
Overview

- Answering philosophical questions with the laboratory of the mind
- Answering philosophical questions with the laboratory of cognitive psychology
 - Moral philosophy: moral permissibility
 - Metaphysics: causation
 - Philosophy of action: intentional action

Overview

- Answering philosophical questions with the laboratory of the mind
- Answering philosophical questions with the laboratory of cognitive psychology
 - Moral philosophy: moral permissibility
 - Metaphysics: causation
 - Philosophy of action: intentional action

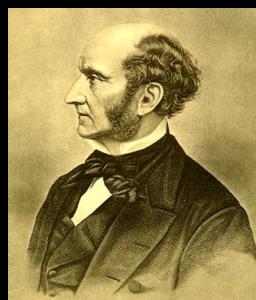
Trolley Car Problems



(Images from <http://www.wjh.harvard.edu/~jgreene/>)

Consequentialism

- The moral status of an action is determined by its *consequences*.

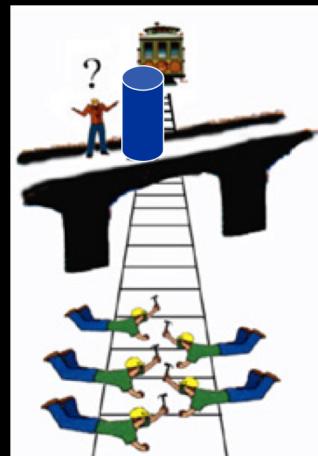


J.S. Mill



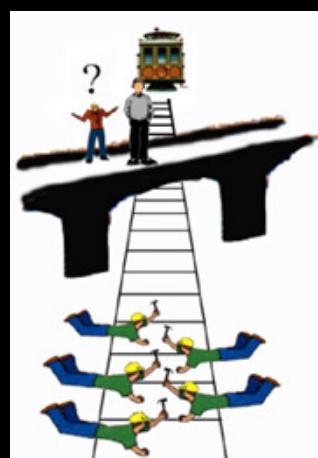
Peter Singer

The Footbridge Problem



(Images from <http://www.wjh.harvard.edu/~jgreene/>)

The Footbridge Problem



(Images from <http://www.wjh.harvard.edu/~jgreene/>)

Deontology

- The moral status of an action is determined by its relationship to rights, duties, and obligations.

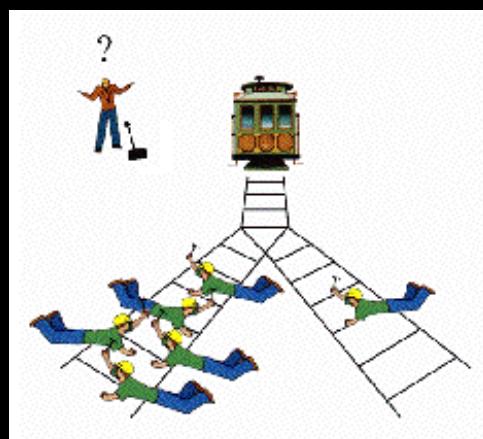


Immanuel Kant



J.J. Thomson

What's the difference?



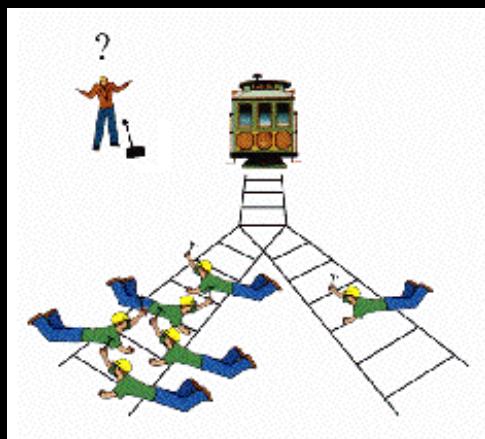
Moral dumbfounding

- People have strongly held moral intuitions that they cannot justify.



(Haidt, 2001)

What's the difference?



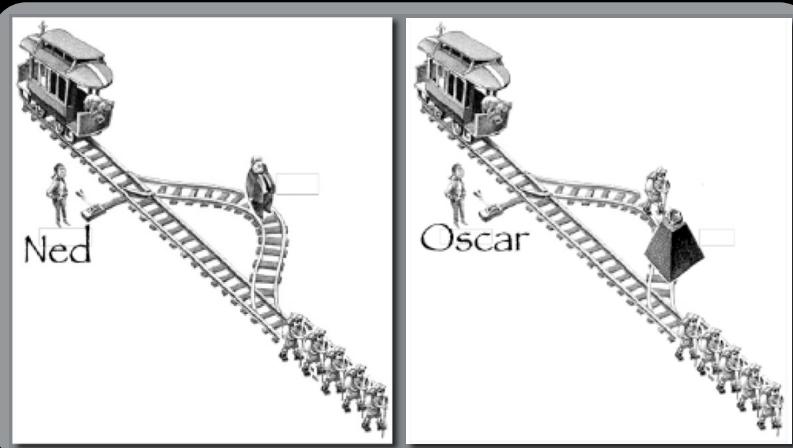
Doctrine of Double Effect

- It is permissible to bring about harm as a (foreseen) *side effect* of a greater good, but not as a *means* to bringing about the greater good.



Thomas Aquinas

Doctrine of Double Effect



(Hauser et al., 2007)

Real-world examples

- **Money:** A hospital might decide to allocate \$\$ for equipment that will save 5 people/year rather than 1 person/year, but would never sacrifice 1 person to harvest organs for 5
- **War:** causing civilians to die
- **Euthanasia:** administration of morphine
- **Murder:** plot versus self-defense
- **Suicide:** to end life versus to save others

The naturalistic fallacy

- The error of deriving “ought” from “is”
 - The DDE reflects our “natural” judgments.
 - Therefore, the DDE is a principle we ought to follow.
- Missing premise:
 - If something is natural, it is what we ought to do.
 - But this is often false!

How psychology *can* inform moral philosophy

- (1) Sometimes psychological facts are relevant for determining what will generate the best consequences or satisfy our obligations.
 - E.g. Maximizing well-being.
- (2) Psychological facts can serve as a corrective by informing us when moral intuitions are driven by properties we consider morally irrelevant.
 - E.g. Fact that “footbridge” problem involves contact.

Overview

- Answering philosophical questions with the laboratory of the mind
- Answering philosophical questions with the laboratory of cognitive psychology
 - Moral philosophy: moral permissibility
 - Metaphysics: causation
 - Philosophy of action: intentional action

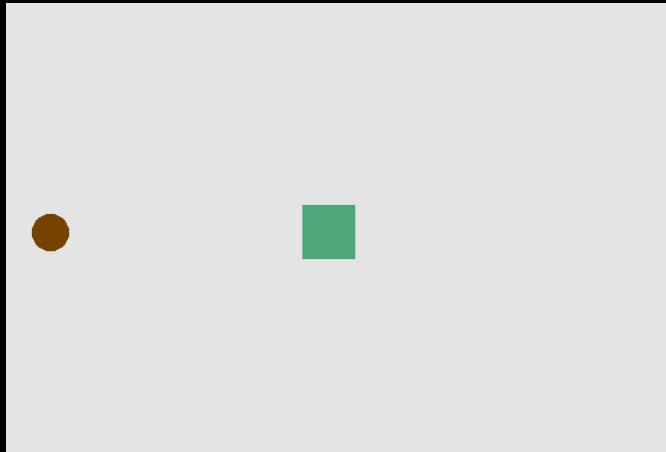
Overview

- Answering philosophical questions with the laboratory of the mind
- Answering philosophical questions with the laboratory of cognitive psychology
 - Moral philosophy: moral permissibility
 - Metaphysics: causation
 - Philosophy of action: intentional action

Key questions about causation

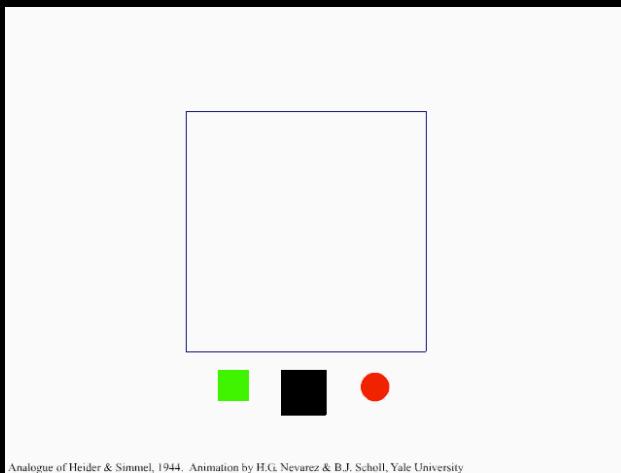
- What relationship must hold between two events, A and B, such that it's appropriate to claim that A caused B?
- Are there multiple kinds of causation? In particular, is there something special about psychological causation?

Physical Causation



“The brown circle **caused** the green square to break.”

Psychological Causation



Analogue of Heider & Simmel, 1944. Animation by H.G. Nevarez & B.J. Scholl, Yale University

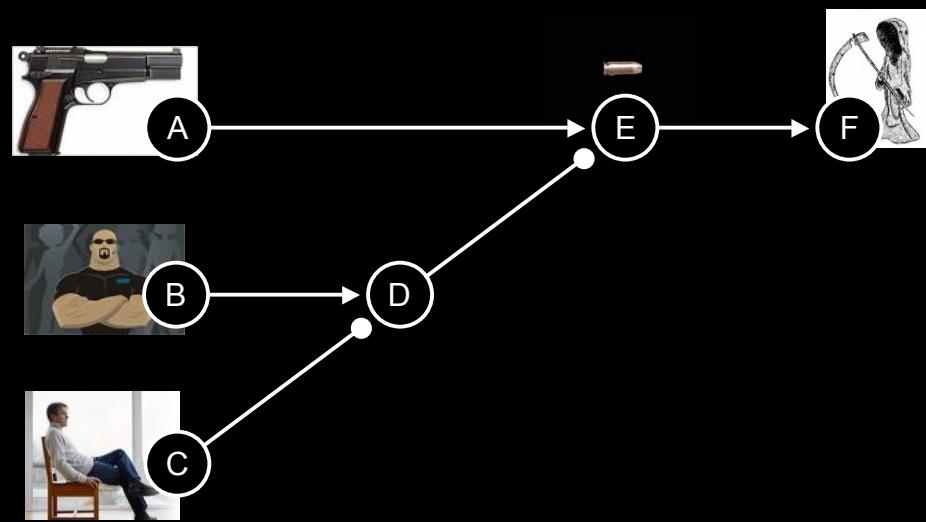
“The black square **caused** the red circle to flee.”

Physical contact vs dependence

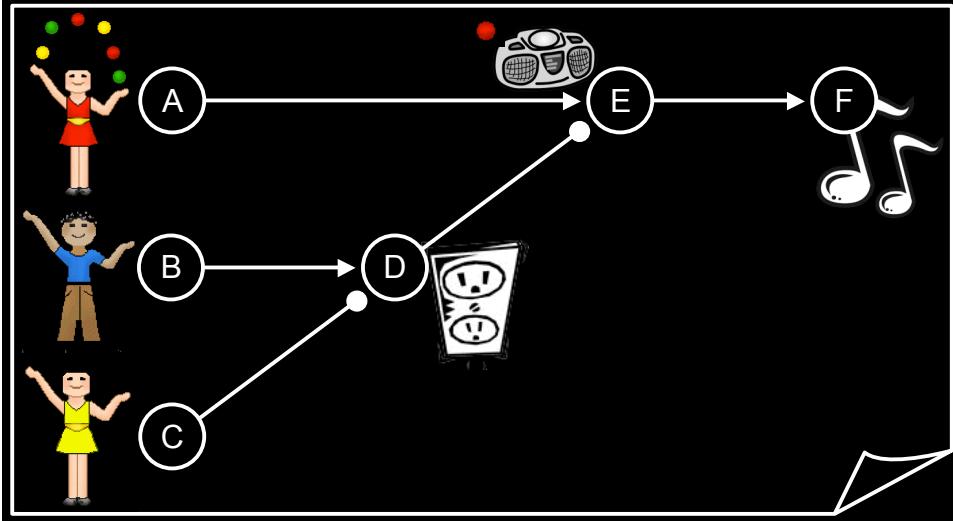
- Causation by omission
- Overdetermination



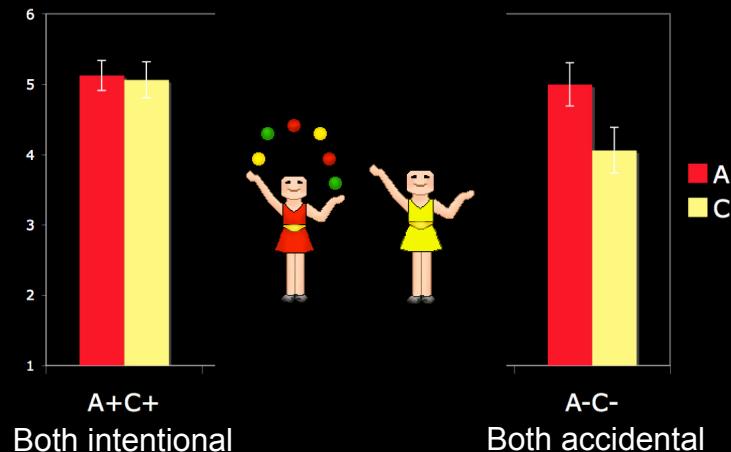
Double prevention



Double prevention



“Person caused outcome”?



Can psychology inform metaphysics?

- These data suggest that people evaluate causation differently depending on whether they construe an event *physically* or *psychologically*
- May help explain the difficulty of conceiving of the mind in scientific terms

Some lessons

- A role for philosophical reflection:
 - Thought experiments can be valuable tools
 - But they can also mislead us!
- Progress in philosophy:
 - From divergence to convergence
 - Outsourcing questions

Thank you!



Tania Lombrozo
Department of Psychology
University of California, Berkeley