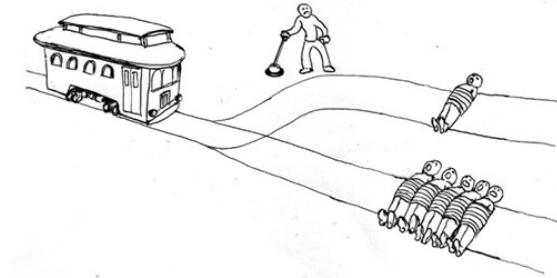


## Trolley dilemma



## Footbridge dilemma



## How do people decide what is the appropriate action?

- Ask subjects to respond to ethical dilemmas while undergoing functional magnetic resonance imaging (fMRI)

An fMRI Investigation of Emotional Engagement in Moral Judgment  
*Science* **293**, 2105 (2001)

## Results

- Moral personal dilemmas  
(e.g. footbridge)
  - Engage emotional processing regions
  - Do not engage working memory regions
- Moral impersonal dilemmas  
(e.g. keeping money from a lost wallet)
  - Do not engage emotional processing regions
  - Engage working memory regions

## Important result for ethicists

- It takes more time to judge a moral personal dilemma as appropriate (emotions must be overcome)
- *Emotions may be more important than logic in assessing ethical dilemmas.*