

Rationality and bounded rationality

CS598HS

**What's so great about
Nash Equilibria?**

What's not so great?

**What do we assume
when we assume rational
behavior?**

**Bounded rationality: what is
the actual relationship between
rationality and equilibria?**

**Non-rational players
can reach equilibria**




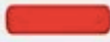



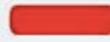
Evolutionary games



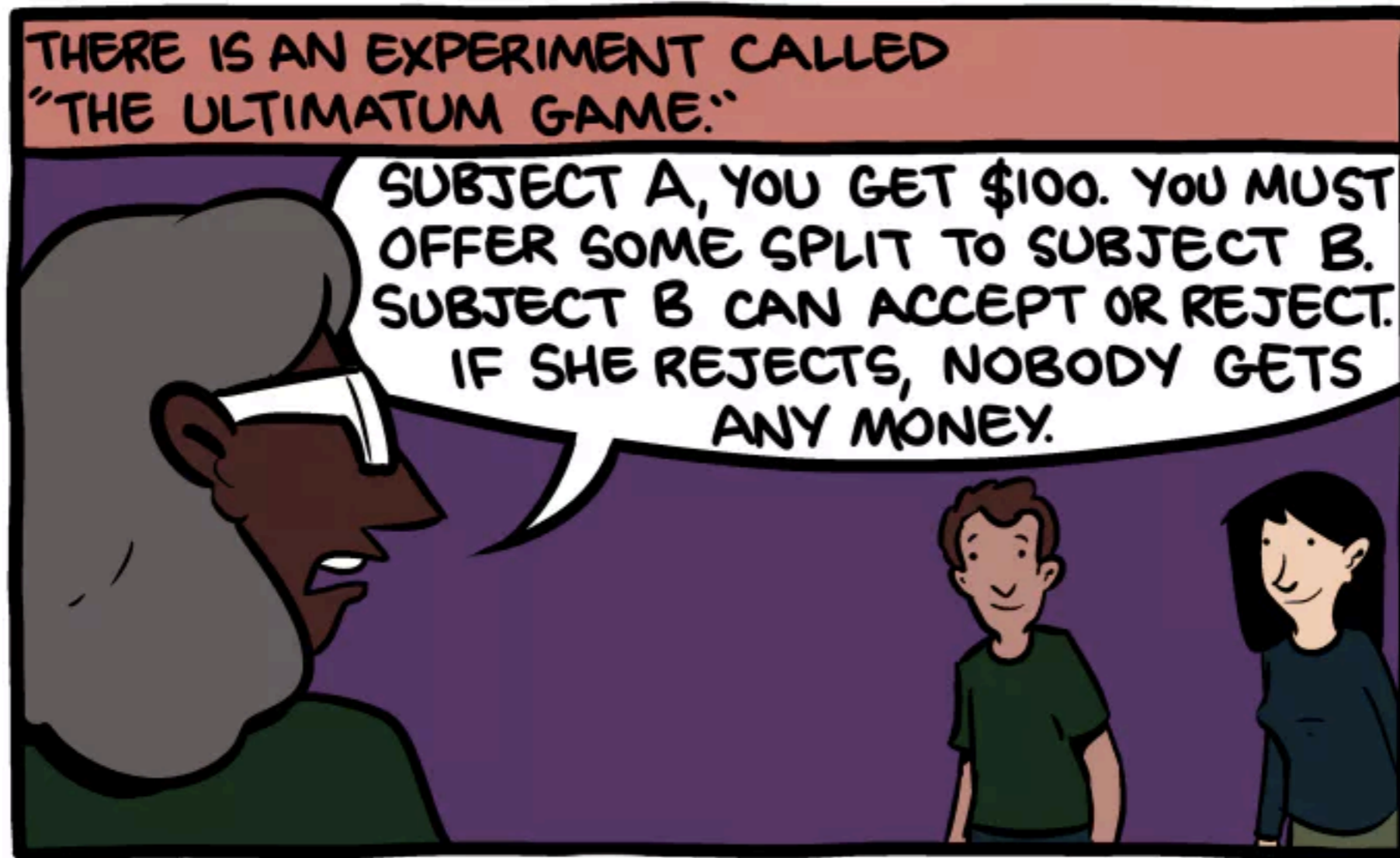
Recipient



Donor

 Altruism 	 Spite 
 Cooperation 	 Selfishness 

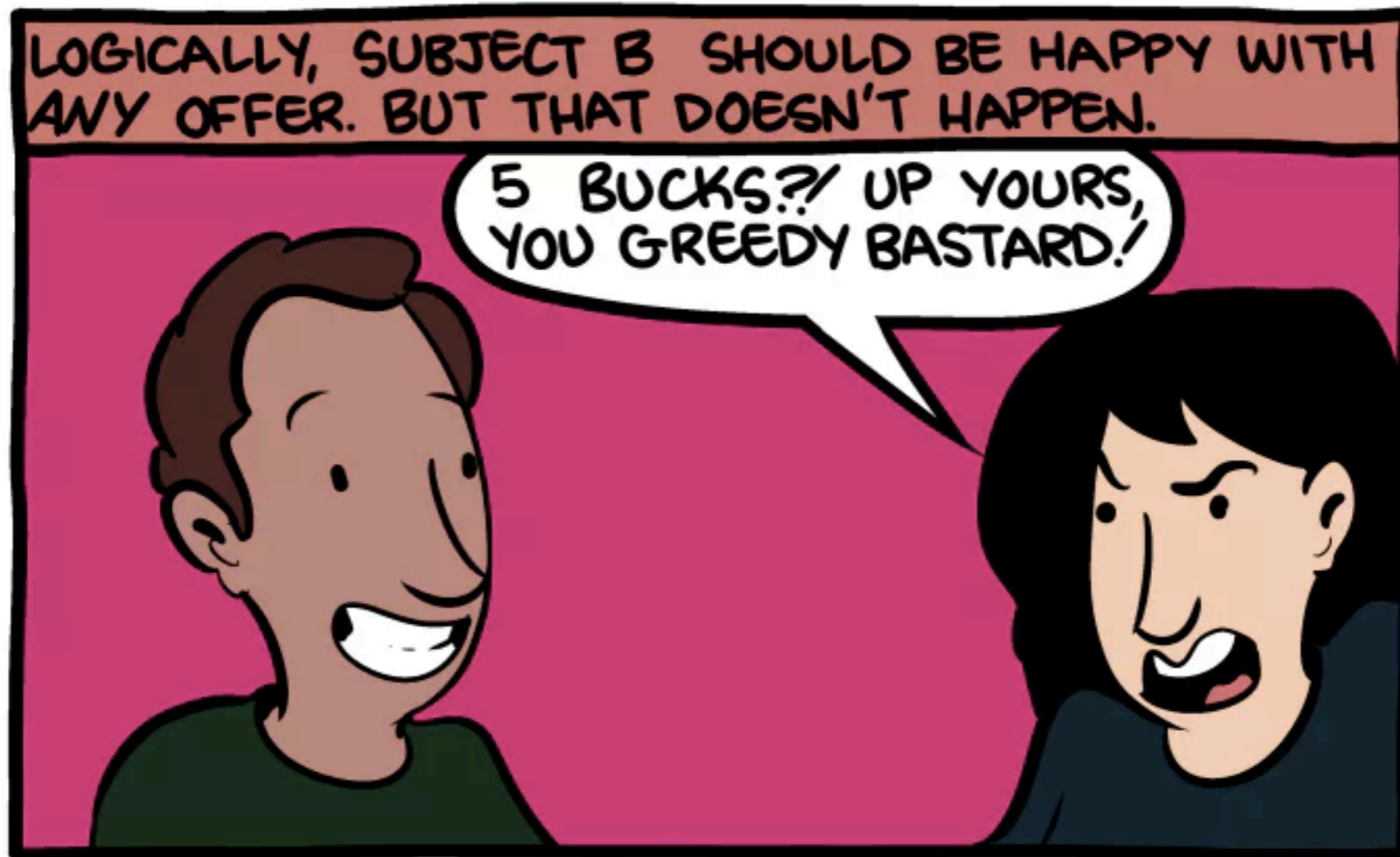
The ultimatum game



Source: SMBC

<https://www.smbc-comics.com/comic/2014-10-09>

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Rule rationality

**Beyond rationality: crazy
strategies & epsilon
equilibria**

Costly rationality and computation