

Newcomb's Paradox

Consider the following thought-experiment, invented by physicist William Newcomb in 1961.

1. One day, Omega, a superbeing from outer space, landed on earth.
2. Omega had advanced equipment for studying human brains, and could predict with great accuracy how any person would choose between two alternatives. Because of this incredible predictive power, Omega became known as the *Great Predictor*.
3. Among other experiments, Omega tested many people using two large boxes. Box A was transparent and always held exactly one thousand dollars. Box B was opaque; either it was empty or it held one million dollars.
4. Omega instructed each subject as follows:

You have two choices:

- (a) *Choice One*: you can take both boxes and keep their contents.
[If I expected you to do this, however, I have left box B empty; you get only one thousand dollars.]
- (b) *Choice Two*: you can take box B only.
[If I expected you to do this, however, I've put a million dollars in box B. You get it all.]

5. Now one person, Georgette, decided to take box B only. She reasoned as follows: I've watched Omega make hundreds of tests; and each time the outcome was predicted correctly (each person who took both boxes got only one grand, and each person who took only box B got a cool million). So, I'll take box B only, and become a millionaire. [This reasoning presupposes a denial of free will--Omega can correctly *predict* what I will do before I've even *chosen* what I do.]
6. Another person, George, decided to take both boxes. He reasoned as follows: Omega has *already* made a prediction, so the contents of box B are not going to change: if the box is empty now, it'll remain empty; if full, it stays full. So, I'll take both boxes and get everything that's there. [This reasoning presupposes free choice--Omega can't have predicted, with probability = 1, what I will do before I've even made a choice.]
7. So, who made the best decision? Both arguments can't be correct, can they?
8. *Complementarity*: the act of observation *creates* the state of affairs--money there or not there--according to whichever you choose. Choosing both boxes creates box B empty; choosing only box B creates it one million dollars fuller. There's no fact of the matter (pun intended) waiting to be discovered. If it's lots of filthy lucre you want, abandon your freedom and choose box B only. If it's an affirmation of spontaneity you want, abandon your greed and choose both boxes. Until you choose--one way or the other--your being totally free *and* your being totally determined exist in a state of superposition.