MIT OpenCourseWare
http://ocw.mit.edu

24.222 Decisions, Games, and Rational Choice
Spring 2008

Two decision problems

Suppose you have a double, and you and she both know that the two of you think alike. Even when you are acting independently, you know that when faced with similar choices, with corresponding beliefs and values, you almost always choose the same way. You have never met her, and never will. On this assumption, consider the following two decision problems that you might face: one has the structure of a prisoners' dilemma, and the other is the problem that David Lewis considers at the end of his article on causal decision theory: the Hunter-Richter problem.

1.   You can choose either A or B, knowing that your double is also choosing either A or B. If you both choose A, you each get $500 given to your favorite charity, and if you both choose B you each get $100 given to your favorite charity. But if you choose A, and she chooses B, then you get nothing, but your double gets $900 (again for her favorite charity). And if you choose B and she chooses A, the situation is reversed: she gets nothing, and you get $900. Despite the fact that you think alike in your deliberations, you have very different favorite charities, and you are completely indifferent to the prospect of your double's charity getting anything, and she thinks similarly about yours. You have to make your choices independently, and you won't learn the outcome. What should you do, and why?

2.   In the second situation, both you and your double (if you both choose to play) must select either red, white or blue. If you both choose the same color, you each get $1000, while if you choose different colors, you each lose $1000. If either of you declines to play, then the game is off, and neither receives or loses anything. What should you do?

You will want to consider what role the knowledge that you are doubles who think alike plays in your deliberation. Some think that it should play a role in the second case, but not the first. If you think this is right, that needs an explanation.

State your answers, and reasons, in a couple of pages. There may be some arguments on both sides, and you might say what is wrong with reasons that have some prima facie plausibility, but that you think are wrong.

Please hand in your answers, either electronically or in hard copy, by Monday, March 17.