

Experimental instructions for “Democracy for Polarized Committees: The Tale of Blotto’s Lieutenants”

April 29, 2016

1 Selection of the experimental subjects

All sessions were run at the Columbia Experimental Laboratory for the Social Sciences (CELSS) in April and May 2015, with students recruited from the whole campus through the laboratory’s Orsee site.

All subjects are students either at Columbia University or at Barnard College. Out of a total of 1679 subjects, 63% are women, 19% are graduate students, 19% are economics majors, 14% study Political Science and 11% are in the school of engineering.

2 Experimental instructions (treatments 12D/12C)

Make yourself comfortable, and then please turn off phones and don’t talk or use the computer. Thank you for agreeing to participate in this experiment.

You will be paid for your participation in cash, at the end of the experiment. Different participants may earn different amounts. What you earn depends partly on your decisions and partly on the decisions of others. Everyone will be paid in private and you are under no obligation to tell others how much you earned. Your earnings during the experiment are

denominated in POINTS. For this experiment every 200 POINTS earn you 1 DOLLAR.

If you have any questions during the instructions, raise your hand and your question will be answered.

At the start of this experiment, you will be assigned a color either Blue or Orange. You will then be divided into 4 groups of 3 members each. The division will be random, but each group will be composed of 2 Blue members and 1 Orange member. The three groups are independent, and the choices made in one group have no effect on the others. You will keep the same color for the whole experiment.

The experiment will be in two parts. I will now read the instructions for Part 1. When Part 1 is completed, I will read the instructions for Part 2.

2.1 Part 1 (treatment 12D)

Part 1 will last 10 rounds. Each round will be identical and develop as follows.

At the start of the round, each of you will have at his/her disposal 4 balls to distribute in any way you wish among 4 urns. The balls will have the color attributed to you: Blue if your color is Blue; Orange if it is Orange. You will cast all balls in the 4 urns in any way you wish. You earn points for each urn in which the majority of balls are of your color.

The first screen you will see will look like this: [SCREEN 1]. The screen reminds you of which round you are playing; of your color, of the composition of the group, and of the number of balls at your disposal.

The second screen will be the allocation screen, asking you how you want to cast your balls. It will look like this: [SCREEN 2]. At the top, on the left, is a reminder of your color and group composition. On the right you will see the value of an urn. In the center, the screen tells you how many balls you have yet to cast. You cast balls by clicking the ADD button under the urn you have chosen. When you add one ball to an urn, it will appear in the urn, and the screen will look like this: [SCREEN 3]. If you change your mind, you can remove balls by clicking on the REMOVE button under

an urn.

You must cast all the 4 balls at your disposal. When you have done so, the CONTINUE button will appear at the lower right of your screen. [SCREEN 4]. Click on it to continue to the next screen.

When everyone in the group has cast all 4 balls, the computer counts the number of Blue and Orange balls in each urn. The urn is won by the group whose balls are the majority in the urn: if there are more Blue than Orange balls in urn 1, for example, then urn 1 is won by the Blue members. If the number of balls of each color in the urn is equal, the computer breaks the tie with a coin flip (that is: each color wins with 50 percent probability). You will receive 100 points for each urn won by your color in your group, and 0 points for each urn won by the other color. This is your only source of earnings in the experiment.

The number of balls in each urn and your payoff are reported to you in a screen that will look like this (although of course the numbers here are an example only): [SCREEN 5]. The screen says that in urn 1, for example, 4 balls were cast by Blue members and 1 by Orange. Hence urn 1 was won by Blue. In urn 4, on the other hand, Blue members cast 0 balls and Orange cast 1 ball. Hence urn 4 was won by Orange.

Once the outcome of each urn and the payoffs for the round are announced, the round is completed. The experiment then proceeds to the second round. In the second round, as in each successive round, you will keep the same color and each group will continue to have 2 Blue members and 1 Orange member, but the groups will be reshuffled randomly by the computer. In general, the identity of the other members of your group will change.

Again, each Blue member will be given 4 Blue balls to distribute among the 4 urns; and each Orange member will be given 4 Orange balls. A new screen will remind you of the round number, your color and the composition of the group. [SCREEN 6]. The experiment then continues as in the first round.

Since one round has passed, before choosing how many votes to cast in each urn, you now have the option of checking how your group distributed

the balls in the past. At the bottom left of the allocation screen, you will see a History button [SCREEN 7].

If you click on the History button, you will see a table summarizing the decisions of the previous rounds. [SCREEN 8]. Each row of the table corresponds to a past round; and each cell to a specific urn in that round. The cell is colored Orange if in that round the urn was won by the Orange team and Blue if won by the Blue team. The first number in the cell is the number of Blue balls in the urn; the second number not in parenthesis is the number of Orange balls. In parenthesis is the number of balls you personally cast in that urn. This slide refers to the Orange member in the round we just saw. He cast 1 ball in each urn. The Blue members cast 4 balls in urn 1, and 4 balls in urn 2. Thus Blue won urns 1 and 2, and Orange won urns 3 and 4.

You can move back to the Allocation screen by clicking the Allocation button at the bottom of the History screen. [SCREEN 9]. In fact, you can go back and forth between the two screens by clicking the buttons. The History screen is available to you for all rounds from 2 onward.

Everything else remains identical to round 1. When the second round is concluded, you will move to round 3, where again you will maintain the same color, although the groups will be reshuffled. The experiment continues in this fashion for 10 rounds. After those 10 rounds, I will read you instructions for Part 2.

Are there any questions?

We will begin with two practice rounds. You will not be paid for these two rounds, whose purpose is only to familiarize yourself with the computer interface and the rules of the experiment.

Please double-click on the icon marked Leaf16 on your desktop. If asked, click RUN. If you have any questions from now on, raise your hand, and an experimenter will come and assist you.

We have now concluded the practice rounds. Are there any questions? Remember that you will not be paid for these two rounds.

Please click Alt F4. Then double-click on the icon marked Leaf16 and is asked click RUN

We will now begin the experiment. The first part will last 10 rounds.

2.2 Part 2 (treatment 12C)

We will now move to the second part of the experiment. Part 2 will be identical to Part 1 but Blue members will be able to chat with the other Blue member in their group before deciding how to distribute the 4 balls.

You will keep the same color you had in Part I, and each group will continue to have 2 Blue members and 1 Orange member. As in Part I, in each round the groups will be reshuffled randomly by the computer.

At the start of each round, you will again be assigned 4 balls of your color to distribute as you wish among 4 urns. As before, you will earn 100 points for each urn in which the majority of balls are of your color. Before making your decision however, as I said, Blue members will now have the option of exchanging messages with the other Blue member.

Before deciding how to allocate the balls you are given, you will see a screen like this: SCREEN 10. The upper part of the screen reminds you of your color, the composition of your group, and the payoff from winning an urn. In addition, it shows you the 4 urns. In the lower part of the screen is the Chat window, and at the bottom of the window is the Chat line. You can type a message on this line. [SCREEN 11] When you click Enter the message will be broadcast to the other member of your group who has your same color. It will appear in their Chat window, together with your computer assigned id. [SCREEN 12]. (Your computer id is fixed across all rounds.) You cannot send a message to members of a different color, and you will not see the messages they are exchanging. In this experiment, then, only Blue members have the option of chatting. If you are an Orange member, please write down your thoughts about how you are allocating the balls and how these thoughts change as the game proceeds. Do remember to click Enter and record your thoughts even if you are Orange.

By clicking Continue, you move on to the Allocation screen, where you will be asked to cast the 4 balls. Note that once you are in the Allocation screen, you cannot move back to the Chat screen. (Please be careful to click

Enter when you want to send a message, and not Continue).

You have two minutes to exchange messages. A timer at the top of your screen alerts you to how much time you have left.

The round will then continue as in Part 1.

After the first round, you will be able to look at the History of past decisions. As in Part 1, a History button will take you to the History screen. You will have the option of consulting the History of your group decisions both in the Chat screen and in the Allocation screen, by clicking the History button. [SCREEN 13]. You can Chat from the History screen. Time will continue to run down while you are in the History screen and you will be able to see the timer.

Part 2 will last for 10 rounds.

Are there any questions?

2.3 End of the experiment

This is the end of the experiment. You should now see a popup window, which displays your total earnings in points. Please record this on your payment receipt sheet, and click Continue. Then divide the number of points by 200, and round up to the nearest dollar. Please also enter \$10.00 on the show-up fee row. Add your earnings and the show-up fee and enter the sum as the total. Finally, please record your Computer ID on the form.

We will pay each of you in private in the next room in the order of your computer numbers. Remember you are under no obligation to reveal your earnings to the other players. Please do not use the computer; be patient, and remain seated until we call you to be paid. Do not converse with the other participants. Thank you for your cooperation.