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## S1 Experimental instructions (translated from German)

This appendix reports the instructions (originally in German) that we used for the three treatments where condition *I* was faced in Part 1. The instructions for the other treatments were adapted accordingly and are available upon request.

### INSTRUCTIONS

Welcome! You are about to participate in an experiment funded by the Max Planck Institute of Economics. Please remain silent and switch off your mobile. If you have any questions during the experiment please raise your hand. You will receive €4.00 for participating in this experiment. Beyond this you can earn more money, depending partly on the decisions that you take during the experiment and partly on chance. There are no right or wrong ways to complete the experiment, but what you do will have implications for what you are paid at the end of the experiment. Please read these written instructions carefully before you turn to the computer.

The experiment consists of two parts. The instructions for the first part follow on the next page. The instructions for the second part will be distributed after all participants have completed the first part.

After Part 2 is over, we will randomly invite one participant to draw one ball from a bag containing two balls labeled 1 and 2.

- If the ball labeled 1 is drawn, all of you will be paid your earnings in Part 1.
- If the ball labeled 2 is drawn, all of you will be paid your earnings in Part 2.

Thus, you will be paid your earnings in Part 1 OR your earnings in Part 2, and both parts will have an equal chance of being selected for payment.

The €4.00 participation fee and any additional amounts of money you may earn will be paid to you in cash at the end of the experiment. Payments are carried out privately, i.e., without the other participants knowing the extent of your earnings.

### Instructions for Part 1

The experimenter has two urns on his table: Urn A is clear while Urn B is opaque. Each urn contains exactly 40 balls. Specifically:

- Urn A contains 18 yellow balls and 22 balls of various colors (green, pink, red, blue, and brown); there is at least one ball of each of these non-yellow colors.
- Urn B contains 40 black and white balls in a proportion unknown to you. That is, any combination is possible for Urn B, from 1 black ball (that is, 39 white balls) to 39 black balls (that is, 1 white ball).

After completion of the experiment, you are invited to check the content of the two urns.

At the end of the experiment, a ball will be drawn from each urn. The ball drawn from an urn represents the *outcome* of that urn.

#### Your task

Your task is to select one urn and to bet on its outcome. There are three alternative options:

1. to bet on a yellow ball to be drawn from Urn A (“yellow ball from Urn A”),
2. to bet on a white ball to be drawn from Urn B (“white ball from Urn B”),  
and
3. to bet on a black ball to be drawn from Urn B (“black ball from Urn B”).

To express your preferences for the three possible bets, you will proceed as follows.

- (i) First, you will be asked whether you prefer “black ball from Urn B” OR “yellow ball from Urn A”.
- (ii) Then, you will be asked whether you prefer “white ball from Urn B” OR “yellow ball from Urn A”.
- (iii) Finally, you will be asked whether you prefer “black ball from Urn B” OR “white ball from Urn B”.

#### Determination of the bet relevant to you

After you have completed the task above, the computer software will check your preferences between “black ball from Urn B” and “white ball from Urn B”. If you preferred “black ball from Urn B”, the software will check your preferences between “black ball from Urn B” and “yellow ball from Urn A”.

- If you preferred “black ball from Urn B”, this becomes the bet relevant to you.

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- If you preferred “yellow ball from Urn A”, this becomes the bet relevant to you.

If you preferred “white ball from Urn B”, the software will check your preferences between “white ball from Urn B” and “yellow ball from Urn A”.

- If you preferred “white ball from Urn B”, this becomes the bet relevant to you.
- If you preferred “yellow ball from Urn A”, this becomes the bet relevant to you.

### **Your earnings**

As we have already noted, you are guaranteed a €4 participation fee. You may also win an additional €20. How this works is as follows. At the end of the experiment, if Part 1 is randomly selected for payment, we will ask a randomly selected participant to extract one ball from each urn. You are interested only in the outcome of the urn associated to your relevant bet.

- If your relevant bet is “**yellow ball from Urn A**” and the randomly selected participant draws a yellow ball from Urn A, you will earn the extra €20. If he/she draws a ball of a different color from Urn A, you will not earn the extra €20 and will be paid only the €4 participation fee.
- If your relevant bet is “**white ball from Urn B**” and the randomly selected participant draws a white ball from Urn B, you will earn the extra €20. If he/she draws a black ball, you will not earn the extra €20 and will be paid only the €4 participation fee.
- If your relevant bet is “**black ball from Urn B**” and the randomly selected participant draws a black ball from Urn B, you will earn the extra €20. If he/she draws a white ball, you will not earn the extra €20 and will be paid only the €4 participation fee.

*Instructions for Part 1 are over. We will now ask you to answer some questions to ensure that you understand the instructions completely. Please raise your hand if you have any questions. Click “OK” (on your computer screen) when you are finished with the instructions for this part of the experiment.*

### **Instructions for Part 2**

The second part of the experiment involves the same two urns as in Part 1: Urn A with 18 yellow balls and 22 balls of various colors (green, pink, red, blue, and brown), and Urn B with 40 black and white balls in a proportion unknown to you.

As before:

- there will be three possible bets (“yellow ball from Urn A”, “white ball from Urn B”, and “black ball from Urn B”);
- to express your preferences for these bets, you will be asked whether you prefer
  - (i) “black ball from Urn B” OR “yellow ball from Urn A”;
  - (ii) “white ball from Urn B” OR “yellow ball from Urn A”;
  - (iii) “black ball from Urn B” OR “white ball from Urn B”.

But now:

- your choices can affect the determination of the bet relevant to two other participants (and thus their earnings), and similarly the choices of two other participants can affect the determination of the bet relevant to you (and thus your earnings). Each *group* consists of three randomly selected individuals, and you will not know the identity of the two other members of your group.
- The relevant bet is dictated by [*participants in condition D1 read: one person*] [*participants in condition D2 read: two persons*] [*participants in condition MV read: majority*] in the group. How this works is described next.

### **Determination of the bet relevant to your group**

After you (and the two other members of your group) have completed your task, the computer software will

[*participants in condition D1 read: (i) randomly select one person in your group (call this person **member X**), and (ii) check his/her preferences between “black ball from Urn B” and “white ball from Urn B”.*

If the selected member X preferred “black ball from Urn B”, the software will check his/her preferences between “black ball from Urn B” and “yellow ball from Urn A”.

- If member X preferred “black ball from Urn B”, this becomes the bet relevant to your group.
- If member X preferred “yellow ball from Urn A”, this becomes the bet relevant to your group.

If the selected member X preferred “white ball from Urn B”, the software will check his/her preferences between “white ball from Urn B” and “yellow ball from Urn A”.

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- If member X preferred “white ball from Urn B”, this becomes the bet relevant to your group.
  - If member X preferred “yellow ball from Urn A”, this becomes the bet relevant to your group.

*Notice that each of you has an equal chance of being selected as member X and, thus, of determining the bet relevant to your group. ]*

[*participants in condition D2 read: (i) randomly select two persons in your group (call them **member X** and **member Y**), and (ii) check the preferences between “black ball from Urn B” and “white ball from Urn B” of member X. If member X preferred “black ball from Urn B”, the software will check the preferences between “black ball from Urn B” and “yellow ball from Urn A” of member Y.*

- If member Y preferred “black ball from Urn B”, this becomes the bet relevant to your group.
- If member Y preferred “yellow ball from Urn A”, this becomes the bet relevant to your group.

If member X preferred “white ball from Urn B”, the software will check the preferences between “white ball from Urn B” and “yellow ball from Urn A” of member Y.

- If member Y preferred “white ball from Urn B”, this becomes the bet relevant to your group.
- If member Y preferred “yellow ball from Urn A”, this becomes the bet relevant to your group.

*Notice that each of you has an equal chance of being selected as member X or as member Y and, thus, of influencing the determination of the bet relevant to your group. ]*

[*participants in condition MV read: check the preferences between “black ball from Urn B” and “white ball from Urn B” of all three group members.*

If the majority (i.e., at least two out of three members) preferred “black ball from Urn B”, the software will check the preferences between “black ball from Urn B” and “yellow ball from Urn A” of all three group members.

- If the majority preferred “black ball from Urn B”, this becomes the bet relevant to your group.
- If the majority preferred “yellow ball from Urn A”, this becomes the bet relevant to your group.

If the majority preferred “white ball from Urn B”, the software will check the preferences between “white ball from Urn B” and “yellow ball from Urn A” of all three group members.

- If the majority preferred “white ball from Urn B”, this becomes the bet relevant to your group.
- If the majority preferred “yellow ball from Urn A”, this becomes the bet relevant to your group.]

### **Your earnings**

If Part 2 is selected for payment, whether or not you receive the extra €20 will be determined like in the previous part. This time, however, your earnings will depend on the decisions made by [*participants in D1 read: member X*] [*participants in D2 read: members X and Y*] [*participants in MV read: the majority*] of your group. Specifically, we will ask a randomly selected participant to draw a ball from each urn. You are interested only in the outcome of the urn relevant to your group.

- If the bet relevant to your group is **“yellow ball from Urn A”** and the randomly selected participant draws a yellow ball from Urn A, you and the two other persons in your group will earn the extra €20. If he/she draws a ball of a different color from Urn A, no one in your group will earn the extra €20 and all three of you will be paid only the €4 participation fee.
- If the bet relevant to your group is **“white ball from Urn B”** and the randomly selected participant draws a white ball from Urn B, you and the two other persons in your group will earn the extra €20. If he/she draws a black ball, no one in your group will earn the extra €20 and all three of you will be paid only the €4 participation fee.
- If the bet relevant to your group is **“black ball from Urn B”** and the randomly selected participant draws a black ball from Urn B, you and the two other persons in your group will earn the extra €20. If he/she draws a white ball, no one in your group will earn the extra €20 and all three of you will be paid only the €4 participation fee.

*Instructions for Part 2 are over. We will now ask you to answer some questions to ensure that you understand the instructions completely. Please click “OK” if you have finished reading the instructions for the present part and have no questions.*