This file contains the oral and written instructions for the paper "Dark Side of the Future"

EXPERIMENT INSTRUCTIONS

Thank you for agreeing to participate in this research experiment on group decision making. During the experiment we require your complete, undistracted attention.

For your participation, you will be paid in cash, at the end of the experiment. Different participants may earn different amounts. What you earn depends partly on your decisions, partly on the decisions of others, and partly on chance.

The entire experiment will take place through computer terminals, and all interaction between you will take place through the computers. It is important that you not talk or in any way try to communicate with other participants during the experiment.

We will start with a brief instructional period where you will be given a complete description of the experiment and will be shown how to use the computers. If you have any questions during the instructional period, raise your hand and your question will be answered out loud so everyone can hear. If any difficulties arise after the experiment has begun, raise your hand, and an experimenter will come and assist you privately. We'll be displaying slides at the front of the room so please direct your attention to the projection screen.

This experiment will have several parts. In each part each subject in the room will be paired with each other subject once. There are 12 people in the room, so in each part you will be paired with the 11 other people once. We will let you know when each part is complete, and that we are about to begin a new repetition of the experiment.

You are not told the identity of the participant you are matched with. Each of you will make a series of decisions and will earn points that depend only on your

decision and the decision of the one participant you are currently matched with. What happens in the other pairs has no effect on your points and vice versa. The decisions you make are not revealed to participants in the other pairs, but they are revealed to the person you are currently paired with.

When you have been assigned to a new participant, you will be assigned a position, either position A or position B. If you are position A, the person you have been paired with will be position B, and vice versa. The role you are assigned is determined randomly, and there is a 50/50 chance you'll be assigned each role. You will keep this role so long as you are paired with the same person. You will be assigned a new role randomly when you are paired with a new person.

[screen 2]Once paired with another person you will engage in the following activity that is displayed in the diagram above. In every period there is a resource worth 1 experimental point. In the first period person A will propose an offer to Person B on how to divide the resource. Subject A will use the slider to select how much they will offer to subject B. [screen 3] The screen at the front of the room shows what this will look like. This offer will then be shown to person B. Person B can then choose to accept the offer or reject the offer. If subject B accepts the offer then subject B receives the amount offered and subject A receives 1 minus the amount offered. [screen 4]The screen at the front of the room displays what this screen looks like.

If subject B rejects the offer then the computer will randomly determine who gains the resource according to a probability that is displayed on the screen. This rule tells both subjects the probability that subject A will gain the resource if the offer is rejected. In the first period the probability subject A will get the resource is 30%. The subject that the computer determines gains the resource gets ownership of the entire resource and the other subject gains nothing. Both subjects must pay a

one time cost if the offer is rejected. This cost is the same for both subjects, and is equal to -.2 experimental points.

[screen 5]After subject A makes an offer and subject B decides whether or not to accept the offer, the computer will determine whether you will continue to be paired with same person for an additional period. Each time you and the person you are paired with finish a period there is a 70% chance that you will continue to be paired with them and a 30% chance that the current period is the final period and you will not be paired with them any longer. This probability does not change. After every period the computer decides whether the interaction will continue using the same rule.

[screen 6]In each new period there is a new resource. If subject A's offer has been accepted in every previous period, then subjects will make decisions in the exact same way. There is a new resource that will be divided between subjects and subject A chooses an offer. [screen 7]If a previous offer was rejected the person who won the resource gets the new resource. After an offer is rejected there is no division of the resource. The persons who got ownership automatically received the additional point. If subject A's offer ever gets rejected then subjects will no longer get to divide the resource. The subject who is selected by the computer as the owner of the resource will earn 1 point automatically for every period so long as the computer does not terminate interaction. Once an offer is rejected then the owner will get additional periods added to their earnings while the other subject will get nothing in every additional period. The computer tells you first which subject gains the resource. [screen8] A picture of what this looks like appears at the front of the room.

[screen9]In this experiment there is one difference between period 1 and period 2 of your pairing with another person. In the very first period, the probability that subject A gains the resource if their offer is rejected is 30%. In the

second period the probability subject A will get the resource is 70%. I.e., in the first period the probability subject A will obtain the resource if their offer is rejected is smaller than the probability they will gain the resource if their offer is rejected in the second period. As long as the computer determines that interaction will continue there will be no additional changes in the probability of subject A getting the resource after a rejected offer.

[screen10]At some point the computer will terminate the interaction between you and the person you are paired with. There is a 70% chance interaction will continue and a 30% chance it will be terminated.

After you have been paired with all other subjects once you will have completed one repetition of the experiment. We will repeat the experiment several times. We will let you know when we are going to repeat the experiment. After we have repeated the experiment several times we will have you complete a short survey.

[screen11]In every period of every pairing you are in you can earn points. In order to pay you we will randomly select one repetition of the experiment, and pay you for all the points you earned against everyone. We will take your total number of points from this repetition of the experiment and pay you $.75 for every point you've earned.

Prior to beginning the experiment we will walk you through how to use the computer interface. Please double-click on the icon that says "repeat". When prompted please enter your first and last name and click submit.

Please do exactly as you are asked so we can show you exactly how to use the computer interface. This is just practice and you will not be paid from these practice rounds.

You have now been paired with another person. One of you is assigned to position A and the other is assigned to position B. If you are assigned position A

please select an offer of .1 and hit submit. This means you are offering subject B .1 points and will keep .9 points for yourself. If you are subject B you now see the offer from subject A. Please select accept. At the bottom of the screen you can see a history screen of your interaction. The computer now determines whether interaction will continue. [*Pause*] If the computer determined that interaction will continue you are now in the second period. Please note that the probability that subject A gains the resource if an offer is rejected is now 70%. If you are subject A please select .9 as your offer and hit submit. If you are subject B, please select reject. The computer now determines which person gains the resource. Its decision is displayed on your screen. After displaying which person gains the resource the computer again determines whether the interaction will continue. Please look to the bottom of the screen, where your points from each additional period will be displayed.

At this point everyone has had their interaction terminated. You may have to wait a short period of time after your interaction is terminated, as others may still have an ongoing interaction. [*Hit next match] You have now been repaired with a different person. If you are assigned position A please select an offer of .1 and hit submit. This means you are offering subject B .1 points and will keep .9 points for yourself. If you are subject B you now see the offer from subject A. Please select reject. At the bottom of the screen you can see a history screen of your interaction. The computer now determines whether interaction will continue.

[screen 12] You will now take a short quiz to make sure that everyone understands the experiment completely. You must complete all questions correctly in order to move on.

Are there any questions?

[screen 12] We will now begin the paid portion of the experiment.

Experiment Instructions

-You will be randomly and anonymously paired with another subject.

-One person will be subject A, the other will be subject B.

-Assignment is done randomly by the computer and everyone has the same chance of becoming subject A or B.

-Subject A will propose a split of a resource worth 1 experimental point. Subject B will either accept the split or reject the split.

-If the split is rejected then both persons pay a cost of -.2 points and the computer determines who gains the resource.

-In the first period the probability that subject A gets the resource if an offer is rejected: 30%. This means the computer in a sense rolls a dice with 10 sides, 3 sides mean subject A gets the resource and 7 sides mean subject B gets it.

-In the second and all subsequent periods the probability that subject A gets the resource if an offer is rejected: 70%

-If an offer is ever rejected the person who gains control of the resource will earn an *additional* point in each additional period. The person who does not get the resource will earn nothing in each remaining periods.

-After every period the computer randomly determines whether interaction will continue. Interaction continues with probability 70%.

-The history of your interaction is displayed at the bottom of your screen

-Once the computer terminates your interaction you will be paired with someone you have not yet been paired with in the repetition of the experiment.

-After everyone has been paired with everyone else once we will start over and repeat the experiment.

-Because we repeat the experiment several times you will be paid based on one randomly chosen repetition of the experiment.

Additional information on what is meant by ‘probability’ is on the flip side.

Additional information on the use of probability in experiment:

In this experiment the computer makes decisions about who gains the resource if an offer is rejected and whether the interaction continues. To do this the computer uses a rule that we have told you in the instructions.

The probability subject A gains the resource in period 1 if the offer is rejected is 30%. You can think of this as the computer rolling a dice that has 10 sides. 3 of the sides correspond to the subject A winning and 7 of the sides correspond to subject B winning.

In the second and all subsequent periods this probability changes to 70%. The computer essentially uses a new dice that still has 10 total sides but the number of sides that corresponds to subject A winning is now 7.

After every period the computer continues the interaction with probability 70%. This means that after every period the computer rolls a 10 sided dye where 7 of the sides correspond to interaction continuing and 3 of the sides correspond to the interaction being terminated.

All of these instructions only tell you what is more likely to happen.