# Online Appendix

### "Predicting and Understanding Initial Play"

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## 1 Experimental Instructions

The instructions provided to Mechanical Turk subjects in the experiment described in Section III are reproduced below. With a few exceptions, instructions that were repeated across these experiments are only presented once.

### 1.1 Initial Instructions

We are researchers interested in how people play a simple kind of game.

#### Rules of the game

There are two players. Each player is assigned to one of two roles: **orange** and **green**. Both players move only once, and they move at the same time. The orange player's move is to choose one of

A B C

and the green player's move is to choose one of

D E F

Depending on which moves are chosen, each player wins a certain number of points. These points are displayed in a table like this one:

D E F
A 10,20 30,40 50,50
B 70,60 90,10 20,30
C 40,50 60,70 80,90

To read this table, look at the row marked with the orange player's move, and the column marked with the green player's move. This determines a pair of numbers. For example, if the orange player moves A and the green player moves E, then you should look at 30,40.

Great! You answered both questions correctly. Now let's move on to your main task.

#### The challenge

Real people were asked to play games like the ones you just looked at. In each round of this HIT, we will show you the points table for one of these games, and ask you to guess which move was most frequently chosen by the **orange player**. There are fifteen total games.

The **first number** is the number of points that the orange player wins, and the **second number** is the number of points that the green player wins.

Easy? Let us ask you a few questions to make sure you got it.

#### Comprehension Question 1/2

	D	E	F
A	50,40	90,30	20,70
В	30,10	40,90	20,60
С	60.10	50,80	80,40

You are the orange player. If you choose  ${\bf A}$  and your partner chooses  ${\bf F}$ , how many points will you win?

#### Comprehension Question 2/2

	D	E	F
A	90,90	40,30	70,30
В	70,60	30,30	40,70
С	50,40	80,10	90,30

You are the **green player**. If you choose **D** and your partner chooses **B**, how many points will you win in this game?

Great! You answered both questions correctly. Now let's move on to your main task.

#### Your task

We will show you fifteen games like the one described above. You will be asked to play the **orange player** in each of these games.

#### How you are paid

You will be paid a base rate of \$0.35 for completing the HIT. In addition, one of the fifteen games you play will be chosen at random. We will match you with another subject who has been asked to play as the orange player, and we will use your joint moves to determine the number of points you win. You will then receive a bonus of:

#### \$0.01 x the number of points you won in that game

This bonus will range from \$0.10-\$0.90. Please allow up to a week to receive this.

#### We are almost ready to begin the exercise.

Please read through the following information and indicate your consent before continuing.  $\label{eq:please} 2$ 

### 1.2 Typical Question

Consider the following game.

	D	E	F
A	<b>50,80</b>	10,20	<del>50,5</del> 0
В	<b>50,50</b>	20,30	90,20
C	40,20	<del>5</del> 0,70	10,20

You are the orange player. What move do you choose?

- $\bigcirc$  A
- O B
- $\circ$

# 2 Explanation of Choices in Experiments

Subjects were asked to explain how they made their choices in a (free-form) text box. We show below selected answers from our experiments in which players were asked to choose an action:

- "I chose based on mutually beneficial numbers, followed by singular benificial [sic] numbers, and finished with whatever was left over."
- "Except the first question. I added the orange in each row(A,B,C) Then put it in order from highest to the least. I'm hoping I did this right :o)"
- "i count each value quickly. It is easy for me. Good game"
- "I assumed Green was aquisitive [sic] and non-sharing"
- "i tried to figure out if there is obvious worst of all, then eliminate it"