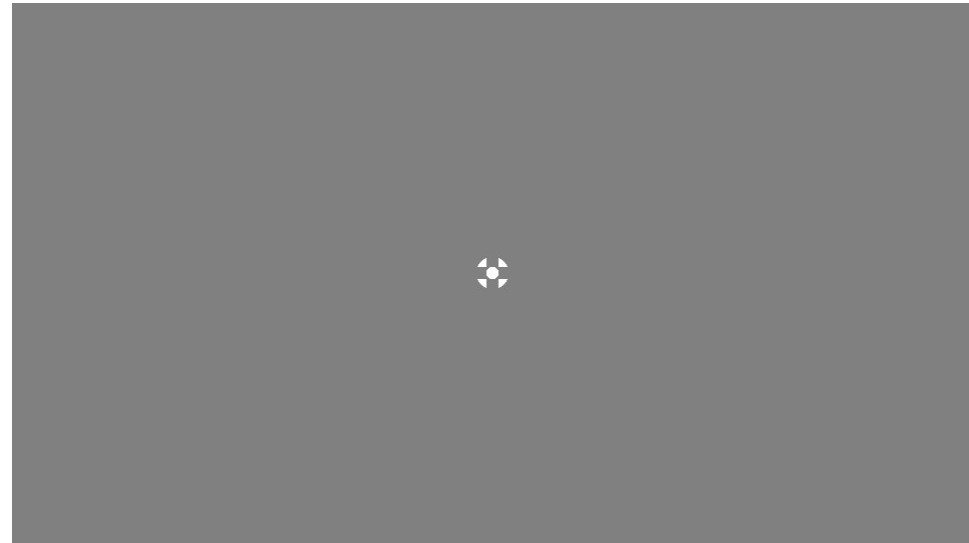


Overview: Passive

- You will repeatedly observe a computer choosing between two urns
- The urns contain balls that have a value written on them
- In each trial, the computer can first sample from the urns and see the drawn balls, which are then being returned to their urn
- At some point the computer will ask you to make a final choice between the urns
- In the final choice, you draw a ball and the value associated with it is being saved
- At the end of the task, there will be a random selection between all your saved values: The result of the random selection will be paid to you in Euros.

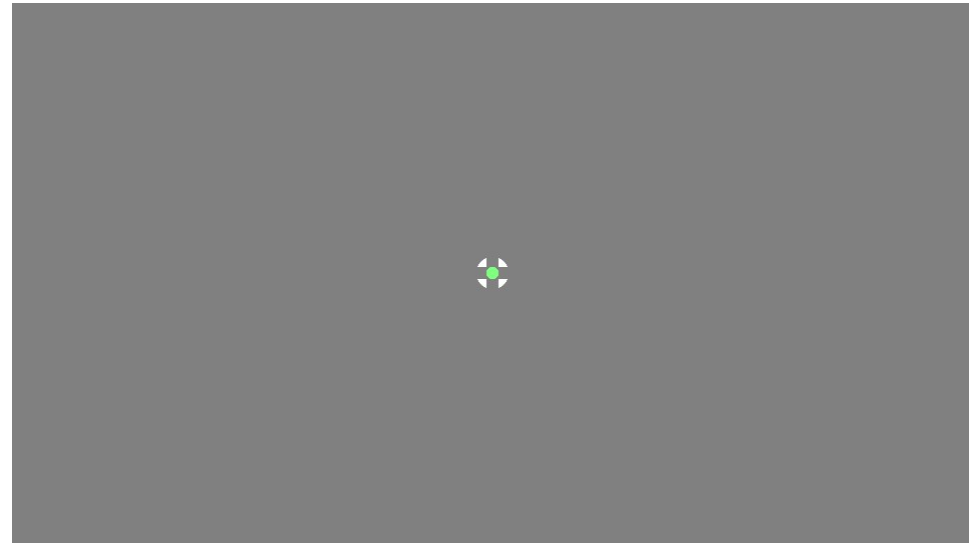
What does the screen look like

- A central fixation stimulus marks where you should fixate your gaze
- The urns are invisible to the left and right of the fixation stimulus



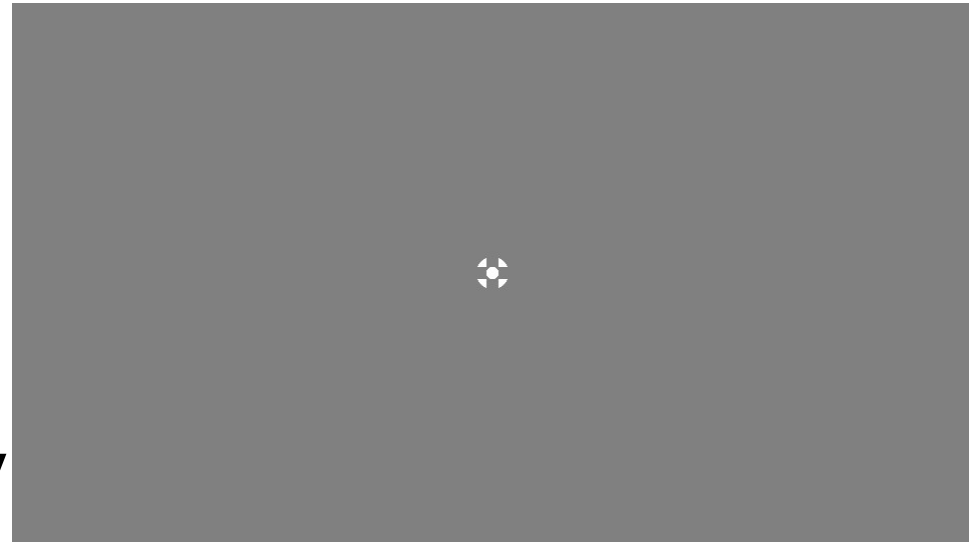
The fixation stimulus color: Green

- Each trial starts with a green fixation stimulus
- This tells you “there are new urns to be considered”

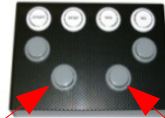


The fixation stimulus color: White

- A white fixation stimulus means that now either the computer - or in the final choice: you - can choose either the left or the right urn by pressing the left or the right button respectively



Which buttons to use?

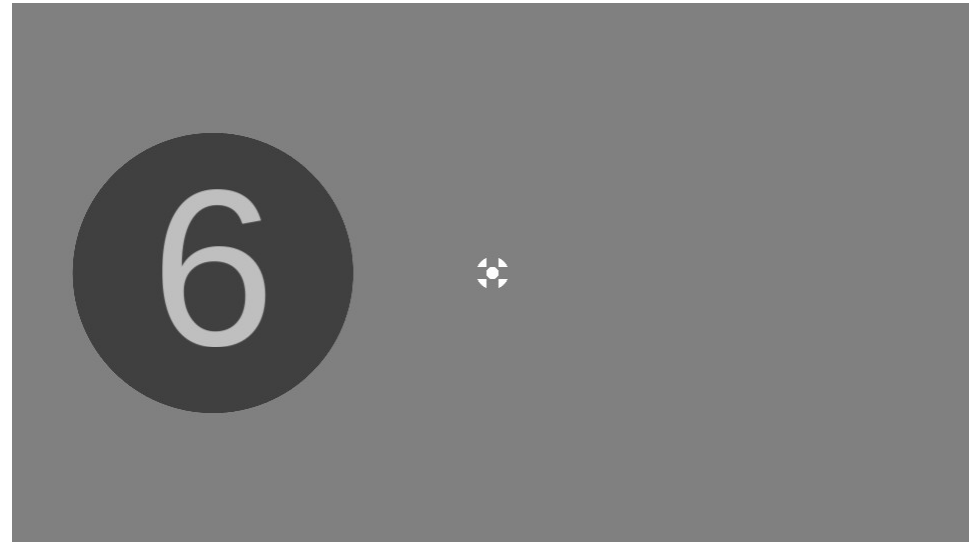


Button for
selection the left
urn

Button for
selection the right
urn

Drawing from the urns

- After the computer – or in the final choice: you - made a decision for one of the urns by pressing the left or the right button, a ball is drawn from the urn and shown
- The shown values help you to get an idea, which of the urns yields higher values
- Note, that the balls are being returned to their respective urn: You do not keep them

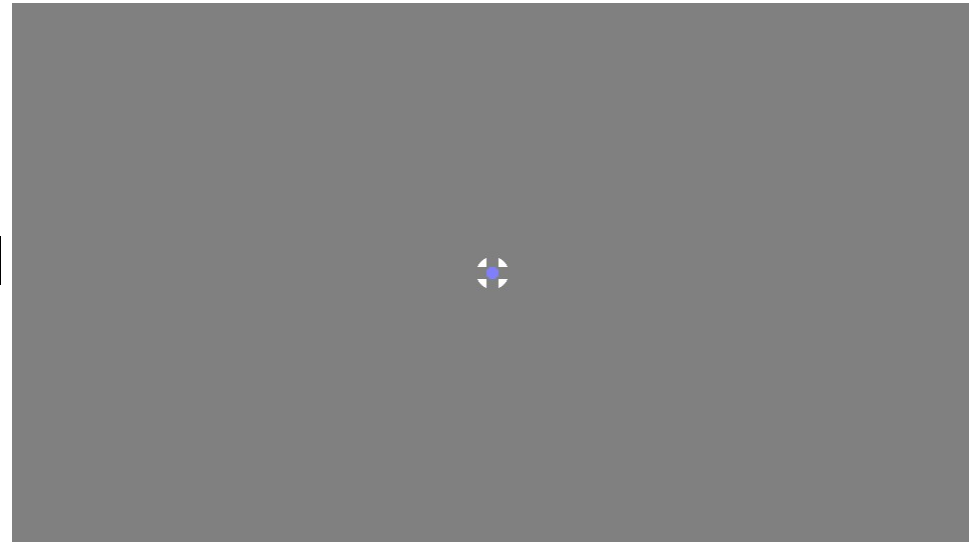


Making a final choice

- At some point the computer will ask you to make a final choice between the urns

The fixation stimulus color: Blue

- Once a final choice has been initiated, the fixation stimulus turns blue
- This means that the next action will be the final choice of this trial
- After a final choice, you keep the ball that was drawn and add it to your collection of values

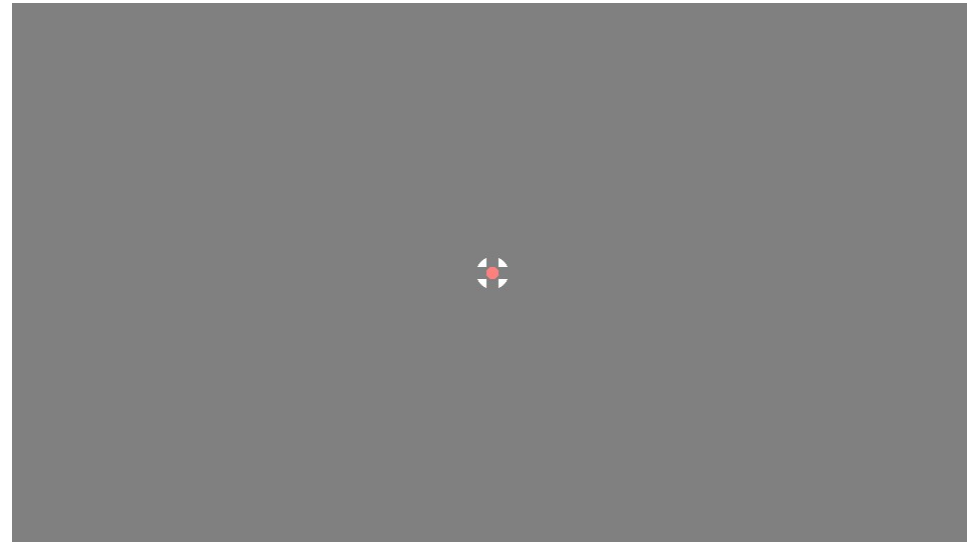


Goal of the task

- A final choice will let you keep the drawn ball with its associated value
- At the end of the task, we will make a random draw among all your collected values and you get the drawn value in Euros
- Overall, there will be 100 trials, each ending with a final choice
- Every 20 trials, you get some feedback about which value you have currently collected most often
- Of course, this value is most likely to be your final reward in Euros ... however it could be (with less probability) any other of your collected values

The fixation stimulus color: Red

- If the fixation stimulus is red, you made an error. This happens if:
 - You wait for too long before making an action in the final choice
 - If you do not fixate your gaze on the fixation stimulus
- After an error (red fixation stimulus), a new trial is started and the old one is discarded



Remember the meaning of the colors

- Green = New trial, there are new urns provided
- Blue = Next action will be a final choice
- Red = Error, you performed a forbidden behavior

Overview: Active

- After you have performed the passive task, as described above, there will be one more “active” task
- The active task is just as the passive task with the exception, that you do now select the left or right urn yourself before making a final choice
- Note, that you **have to** sample from the urns at least once before making a final choice, otherwise there will be an error and the trial is discarded

Making a final choice

- Once you have sampled from the urns for some time, you can make a final choice between the urns
- For that, press the third button above the “right” button



Button for
making a
final choice

Any questions?

- You are now starting with the passive task
- You are allowed to do some practice trials