MarkRuleLearning

From KnightLab

Contact info: Mark Gorenstein / 201-755-5202 / markagorenstein@gmail.com

Contents

Overview

Subjects will learn rules through trial-and-error that allow them to categorize simple shapes. In each of six blocks, a new rule will determine whether or not each of the shapes is a 'wudsy' (made-up word for a cover task). One stimulus will appear on the screen at a time, and a subject will respond with a left button press if she believes it is a 'wudsy' or with a right button press if she believes it is not a 'wudsy'. Rules will vary from simple ones that cover a single stimulus dimension (color or shape) like 'wudsys are all the green stimuli' to more complicated ones that span both dimensions 'wudsys are green stimuli or square ones.'

Setup

OS	Software	Toolbox	Photodiode	Speakers	Microphone	Other peripheral(s)
Linux	Python	PsychoPy	X	-	X	button box

Procedure

Command to run the task: Run the `MarkConcepts` script in the launcher folder on DropBox.

If that isn't working, you can also manually entering the following in the command line:

```
source ~/anaconda3/etc/profile.d/conda.sh
conda activate python3_exp
cd ~/Dropbox/Mark/
python exp.py
```

If you do enter the commands manually, please deactivate conda after the experiment ends (otherwise future tasks would run on python3):

```
conda deactivate
```

Initialization: After running the launcher, a window will open prompting you to enter a `subject_id` and in a textbox to indicate whether you're using a `rt_box` (i.e. button box) with a checkbox. The experiment will work without the button box, but please use one if possible to maintain consistency across patients.

Key to exit the task: Q or ESC will exit the task gracefully and save current data.

Timing

Instructions	Practice	Blocks	TOTAL
4 min (on screen)	x min	3 min per block * 6 blocks	22 min

Here are the instructions that appear onscreen:

```
Thank you for agreeing to participate!
You will complete six rounds of a word learning game.
You will learn the meaning of the word 'wudsy' through trial-and-error.
In each round, you will see objects and decide whether each of them is a 'wudsy'.
'Wudsy' will have a new meaning in each of the six rounds.
On some rounds, 'wudsy' could have a simple meaning about one feature of the objects, like their color.
Or, 'wudsy' could have a more complex meaning that involves different features of the objects.
At first, you won't know what 'wudsy' means, so take a guess.
For each object, press the left button if you think it is a 'wudsy'.
Press the right button if you think it is not a 'wudsy.'
After each object, we'll let you know if you were correct.
```

Retrieved from "https://knightlab.berkeley.edu/wiki/index.php/MarkRuleLearning"
Categories: Experimental Task | Current Task