**Changes made in the current experiment**

Codes were based on MRI\_faces 2017 experiment.

**Next subject feature**

* Added ‘whats\_the\_next\_sub.m’ and ‘GetSubjectID.m’ function.
  + The function reads and update subject counter in via dropbox directory

**Binary Ranking**

* Trial Duration was reduced from 2.5 s to 2 s
  + Changed instructions accordingly
* Demo function was removed. Demo is now integrated in the main script as an optional input. If input is missing user will be prompt to select either running the full task or demo
* Number of stimuli in folder is now 80
* Number of trials was increased to 400
* Added ‘skip sync test’ catch if cannot open screen.
* Fixation cross repositioned at the center of the y axis
  + *CenterText(w,'+', white,0,-60)* was replaced with *CenterText(w,'+', white,0,0)*

**Post valuation data organization**

* After initial preferences a new code generate the stimuli and order files for training and probe - organize\_CAT.m

**CAT**

* Visual cue.
* Ladder update is 0 (cue onset does not change)
* Now both demo / full task + behavioral / fmRI environment runs by the same code.
* it is are short and fixed in the behavioral setting. Onsets are read for each run for fMRI.
* Runs Design (you need to set in the code run\_start and Run\_end)
  + Behavioral + fMRI: 1-18 in the behavior room, 19-20 in two scans (current setting)
  + All Behavioral: 1-20 in behavior room
* Cue contingency: half of the Go item with normal 100% contingency, and half with 50% contingency.
  + Inside the scanner runs - all Go stimuli (100%/50% contingency) are presented with a cue (to be able to compare between both conditions).
* Breaks: in the behavioral version every 4 complete runs there is a break.
* Info about the task (stimuli order, cue contingency etc.) is read from the txt file created by the script *Organize\_CAT.m*

**Probe**

* 10 probe value categories, each with 6x6 choices: 5 value categories have 100% Go contingency versus NoGo, and 5 with 50% Go contingency versus NoGo.
* Info about the task (stimuli order, cue contingency etc.) is read from the txt file created by the script *Organize\_CAT.m*
* Choices are organized in 2 blocks, each with equal number of choices from each category.

**Onset list generator**

* + Generate 4 lists for CAT (80 trials) and Probe (64 trials) tasks in the MRI.
  + Interval unit size: 0.1 s
  + Min-max: 1 -10
  + Mean: 2 CAT, 3 Probe

**General changes**

* Onsets and stimuli presentation: stimuli should be now more accurately presented. The onset list variable is subtracted the time is take to flip the screen. E.g. A stimulus to be presented at time 4.00 s will get a flip command at 3.984 (16 ms before desired time). As a result, stimuli will be presented approximately ±10ms from the desired time.
* 4 orders based on subjects’ code (e.g. code: 101, 102, 103, 104, 105, 106 🡺 order: 1, 2, 3, 4, 1, 2). Orders are used to randomize the onset list
* Inputs are optional. If not provided, experimenter will get a dialog box to ask for each required input.