Experiment 1 variables in individual subjects data files

Variable	Definition
year	year the data were collected
month	month the data were collected
day	day of the month the data were collected
blockNum	block number within this testing sessions (1 block = 16 trials)
chosenRes	which key the subject pressed, out of the 8 possible ones. The fields reportedPresence and reportRating transform chosenRes into more meaningful variables
colorIncr	the saturation level of the red color targets, on a scale from 0 to 1, where 1 is the max possible
colrDistPres	true or false, whether the word on the side not asked about was a color target
colrTargPres	true or false, whether the word on the side asked about on this trial was a color target
colrTargTime	the time of the color target within the RSVP sequence, as an index 1-5
cueCond	the “cue” or “attention” condition on this trial: 0 = dual-task; 1=single-task left; 2=single-task right
fixBreak	true if there was a fixation break: the gaze position moved more than 1deg horizontally or 2deg vertically between pre-cue onset and post-mask offset
nResps	number of responses collected on this trial (1 in single-task, 2 in dual-task)
respCorrect	true if the response was correct on this trial, in terms of whether a target was present or absent
respOrder	Whether this is the 1st or 2nd response on this trial. Only dual-task trials have second responses, which means that each dual-task trial has 2 rows in the text file, and 2 entries in each matlab vector
targTime	the time of the target within the RSVP stream, as an index from 1-5
tFixBreak	the time of the fixation break, relative to trial start (tTrialStart)
tPostCue	the time of the post-cue, relative to trial start
tRes	the time of the subject’s keypress, relative to trial start. NOTE THAT THIS IS NOT ACCURATE FOR 1st DUAL-TASK RESPONSES, WHICH WERE OVERWRITTEN BY THE 2nd
targCategory	index of the target semantic category that the subject is looking for. Category names are in allDat.wordCategories
targSide	which side was asked about for this response; 1=left, 2=right
targTimeDistSideCatg	The index of the category of the word presented on the ‘distractor’ side, the side not asked about. From 1-12. Category names are in allDat.wordCategories
targTimeDistSideToken	The index of the word presented on the distractor side, within the target category. “Token” basically means the row of the word within the lexicon, which is a 35x12 matrix
targTimeTargSideCatg	The index of the category of the word presented on the ‘target’ side, the side that was asked about for this response. Ranges from 1-12. Category names are in allDat.wordCategories
targTimeTargSideToken	The index of the word presented on the target side, within the target category. “Token” basically means the row of the word within the lexicon, which is a 35x12 matrix
trial	Trial number.
trialDone	true if the trials was successfully completed; false if there was a fixation break or the experiment was aborted
trialFixX	estimated horizontal fixation position at the trial’s start, in pixels relative to screen center
trialFixY	estimated vertical fixation position at the trial’s start, in pixels relative to screen center
whichTask	which type of judgment the observer was performing. 1=semantic; 2=color
wordDistPres	Whether a word from the target semantic category was present on the distractor side, the side not asked about for this response
wordDur	Duration of the word in seconds. The RSVP rate was equal to 1/(wordDur*2)
wordTargPres	Whether a word from the target semantic category was present on the target side
wordTargTime	The time of the semantic target within the RSVP sequence, as an index 1-5
targPres	Whether a target was present on the side asked about for this response. That is a semantic target is whichTask=1, and a color target is which Task=2
distPres	Whether a target was present on the side NOT asked about for this response. That is a semantic target is whichTask=1, and a color target is which Task=2
subjectNum	Subject number
dateNum	An integer that indicates which testing session this block was run in, from 1 to however many different days the subject was tested
thisBlockAccuracy	Proportion correct within this block
tFixBreakFromRSVPStart	the time of the fixation break, relative to start of RSVP stream
congruent	true if the correct answer would be the same for both sides (both have targets or both don’t); false otherwise
RT	The time in seconds between the subject’s keypress and the post-cue onset. NOTE THAT THIS IS NOT ACCURATE FOR 1ST DUAL-TASK RESPONSES, for which tRes was overwritten by the 2nd response
reportedPresence	true if the subject reported that a target was present, regardless of the confidence level. That is, this variable is true if the subject pressed one of the higher two rating buttons
reportedRating	The subject’s report as a rating, where -2 = sure no target; -1 = guess no target; 1=guess target present; 2=sure target present
excludeBlock_BadDifficulty	true if this trial was in a block that should be excluded because for the whole run of 12 blocks the stimulus difficulty level (ISI or colorIncr) was set too high or too low, resulting in accuracy <70% or >90% correct in both single-task and dual-task conditions

Additional variables in the Matlab file “allDat”

Variable	Definition
subjectNum	Subject number
wordCategories	A 1x12 cell array of category names
screen	structure with more info about the screen, such as resolution, size, distance, pixels per degree (PPD)
nBlocksExcludedForAcc	Number of blocks to be excluded because accuracy was too low or too high
buttons	structure with more info about the buttons the subject could press, such as the confidence level they corresponded to