This readme.txt file was created by Saumya Gupta

NOTE: This file includes information about all the primary data along with the R code that was used to report results, generate statistics and figures in the manuscript entitled “Treefrogs Exploit Temporal Coherence to Form Perceptual Objects of Communication Signals.”

## GENERAL INFORMATION ##

1. Title of Dataset:

Supporting Dataset for “Treefrogs Exploit Temporal Coherence to Form Perceptual Objects of Communication Signals.”

1. Author Information

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## DATA & FILE OVERVIEW ##

1. File List

1. Filename: Test1\_50vs25pps.csv

Short description: This dataset contains results obtained from Test 1 (a two-alternative choice test between temporally coherent stimulus with a pulse rate of 50 pulses/s vs a temporally coherent stimulus with a pulse rate of 25 pulses/s).

* First column is Frog\_ID. This corresponds to the unique id given to each frog that was tested. It was a repeated measures design so a given frog was tested multiple times up to 12 times, once for each factorial combination of absolute and relative signal levels.
* Second column is Leading. This corresponds to the stimulus (50 or 25 pulses/s) that was presented first out of the two alternating stimuli.
* Third column is Rel\_amp. This column has information about the relative amplitude at which the stimuli was presented.
* Fourth column is Amp. This column has information about the overall amplitude at which the stimuli was presented.
* Fifth column is Choice. This column is coded in binary. 1 refers to the trials in which the female chose coherent 50 pulses/s and 0 refers to choice of coherent 25 pulses/s. NR refers to no response.
* Sixth column is Latency. This column is time taken for the female to make choice in min:sec format. The empty cells either correspond to NR or the observer failed to record time for this trial.

1. Filename: Test2\_50vs100pps.csv

Short description: This dataset contains results obtained from Test 2 (a two-alternative choice test between temporally coherent stimulus with a pulse rate of 50 pulses/s vs a temporally coherent stimulus with a pulse rate of 100 pulses/s).

* First column is Frog\_ID. This corresponds to the unique id given to each frog that was tested. It was a repeated measures design so a given frog was tested multiple times up to 12 times, once for each factorial combination of absolute and relative signal levels.
* Second column is Leading. This corresponds to the stimulus (50 or 100 pulses/s) that was presented first out of the two alternating stimuli.
* Third column is Rel\_amp. This column has information about the relative amplitude at which the stimuli was presented.
* Fourth column is Amp. This column has information about the overall amplitude at which the stimuli was presented.
* Fifth column is Choice. This column is coded in binary. 1 refers to the trials in which the female chose coherent 50 pulses/s and 0 refers to choice of coherent 100 pulses/s. NR refers to no response.
* Sixth column is Latency. This column is time taken for the female to make choice in min:sec format. The empty cells either correspond to NR or the observer failed to record time for this trial.

1. Filename: Test3\_50vs100pps.csv

Short description: This dataset contains results obtained from Test 3 (a two-alternative choice test between a temporally incoherent stimulus with a composite pulse rate of 50 pulses/s vs a temporally incoherent stimulus with a composite pulse rate of 100 pulses/s).

* First column is Frog\_ID. This corresponds to the unique id given to each frog that was tested. It was a repeated measures design so a given frog was tested multiple times up to 12 times, once for each factorial combination of absolute and relative signal levels.
* Second column is Leading. This corresponds to the stimulus (50 or 100 pulses/s) that was presented first out of the two alternating stimuli.
* Third column is Rel\_amp. This column has information about the relative amplitude at which the stimuli was presented.
* Fourth column is Amp. This column has information about the overall amplitude at which the stimuli was presented.
* Fifth column is Choice. This column is coded in binary. 1 refers to the trials in which the female chose incoherent 50 pulses/s and 0 refers to choice of incoherent 100 pulses/s. NR refers to no response.
* Sixth column is Latency. This column is time taken for the female to make choice in min:sec format. The empty cells either correspond to NR or the observer failed to record time for this trial.

1. Filename: Test4\_50vs100pps.csv

Short description: This dataset contains results obtained from Test 4 (a two-alternative choice test between temporally coherent stimulus with a pulse rate of 50 pulses/s vs a temporally incoherent stimulus with a composite pulse rate of 100 pulses/s).

* First column is Frog\_ID. This corresponds to the unique id given to each frog that was tested. It was a repeated measures design so a given frog was tested multiple times up to 12 times, once for each factorial combination of absolute and relative signal levels.
* Second column is Leading. This corresponds to the stimulus (50 or 100 pulses/s) that was presented first out of the two alternating stimuli.
* Third column is Rel\_amp. This column has information about the relative amplitude at which the stimuli was presented.
* Fourth column is Amp. This column has information about the overall amplitude at which the stimuli was presented.
* Fifth column is Choice. This column is coded in binary. 1 refers to the trials in which the female chose coherent 50 pulses/s and 0 refers to choice of incoherent 100 pulses/s. NR refers to no response.
* Sixth column is Latency. This column is time taken for the female to make choice in min:sec format. The empty cells either correspond to NR or the observer failed to record time for this trial.

1. Filename: temporal coherence analysis.R

Short description: This is the analysis code that contains analysis for each of the four two-alternative choice tests (Tests 1-4). The code is divided in 4 sections in which each section lays out the code for figure and statistical analysis for each Test in a sequential order.