

Supplementary Materials

Fink, L. K., Hurley, B. K., Geng, J. J. & Janata, P. (2018). A linear oscillator model predicts dynamic temporal attention and pupillary entrainment to rhythmic patterns. *Journal of Eye Movement Research*, 11(2):12. DOI: 10.16910/jemr.11.2.12

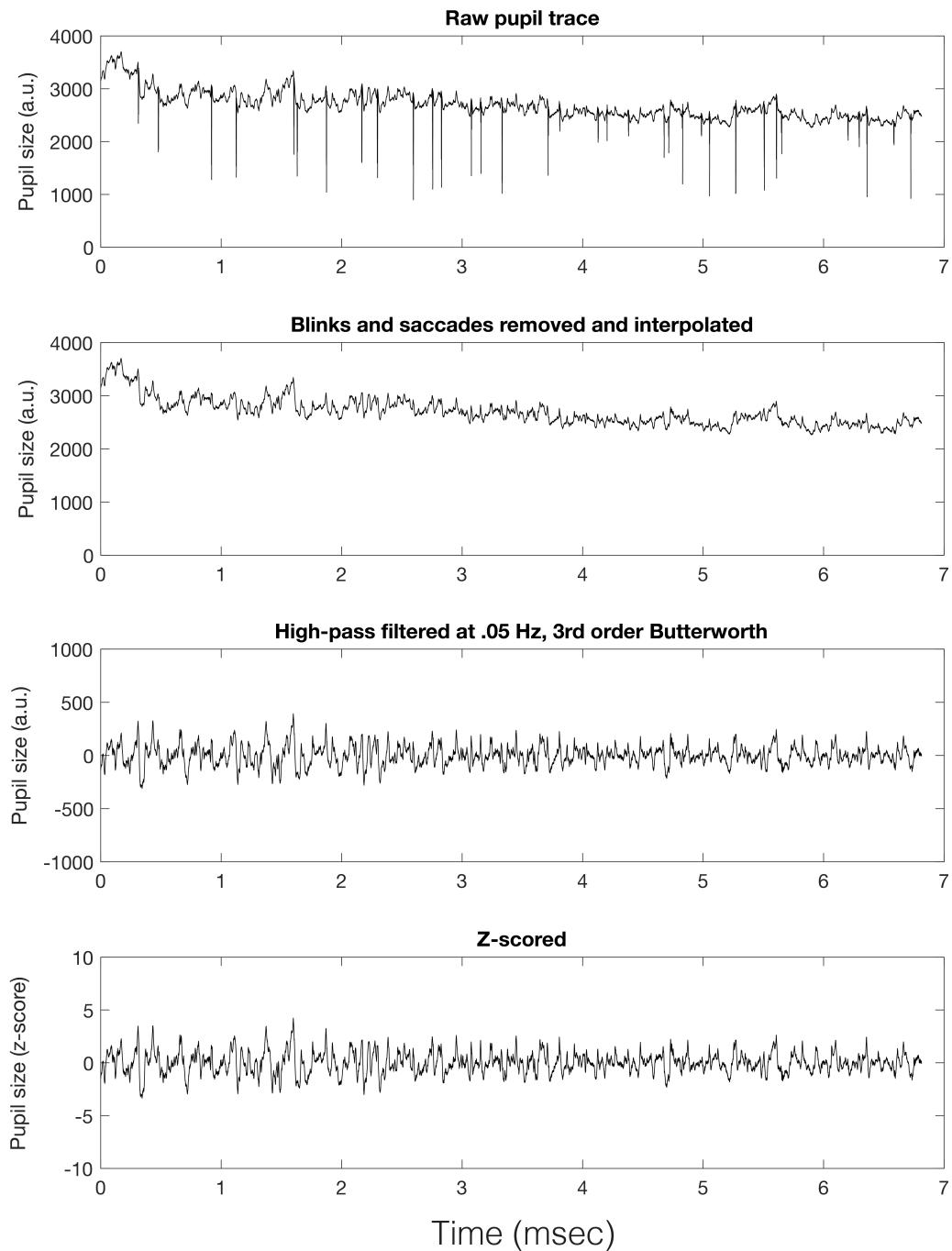


Figure S1. Pre-processing transformations for one example subject, one example run. Note that high-pass filtering removes the downward linear drift that is observable in panels 1 and 2.

Table S1. Average number of observations (and standard deviation) per probe position, per stimulus, per subject, used in calculating the data shown in Figure 4.

Stimulus	Probe	Hit	Miss
complex1	1	11.5 (2.5)	8.29 (2.5)
complex1	2	11.43 (2.1)	8.36 (2.3)
complex1	3	13 (2.6)	6.86 (2.5)
complex1	4	12.07 (2.3)	7.86 (2.3)
complex2	1	10.92 (3.3)	9 (3.4)
complex2	2	11.23 (2.0)	8.62 (2.0)
complex2	3	12 (3.0)	7.85 (2.9)
complex2	4	12.31 (3.6)	7.54 (3.5)
complex3	1	9.4 (3.8)	10.4 (3.8)
complex3	2	11.67 (2.9)	8.1 (3.0)
complex3	3	11.8 (2.8)	8 (2.7)
complex3	4	12.67 (2.5)	7.23 (2.5)
complex4	1	12.71 (2.5)	7.29 (2.5)
complex4	2	11.93 (2.1)	8 (2.2)
complex4	3	11.71 (2.2)	8.07 (2.4)
complex4	4	12.86 (2.5)	7.07 (2.7)
complex5	1	12 (2.1)	7.93 (2.2)
complex5	2	12.57 (3.4)	7.36 (3.3)
complex5	3	11.71 (2.0)	7.86 (2.1)
complex5	4	7.43 (4.0)	12.36 (3.9)

Note. For each subject, each stimulus, 102 ‘standard (no deviant)’ trials were used in calculating the black ‘No deviant occurred’ trace shown in Figure 4.

Table S2. Peak reson model periodicities used in the average true vs. null coherence analysis.

Stimulus	Peak Periodicities
complex1	.25, .49, .87, 1.32, 1.78, 2.23, 2.69
complex2	.25, .49, .94, 1.32, 1.78, 2.23, 2.69
complex3	.25, .51, .90, 2.69
complex4	.25, .90, 1.37, 1.78, 2.23, 2.69
complex5	.49, .90, 1.37, 1.78, 2.23, 2.69

Note. Because of the frequency response of the pupil, we only considered frequencies under 3 Hz to be relevant for this analysis. All peak periodicity predictions for each stimulus are plotted in the right column panels of Figure 1.