Table S1. Likelihood-ratio tests (LRT) comparing the effects of tempo and metre on each measure (IOI, duration, and latencies), compared to the null model. Each line corresponds to one individual bird (here, the three males that responded to a subset of stimulus sequences insufficient for the full analysis). For each column, the test statistic is indicated with the associated p-value in parentheses. Significant tests are indicated in bold.

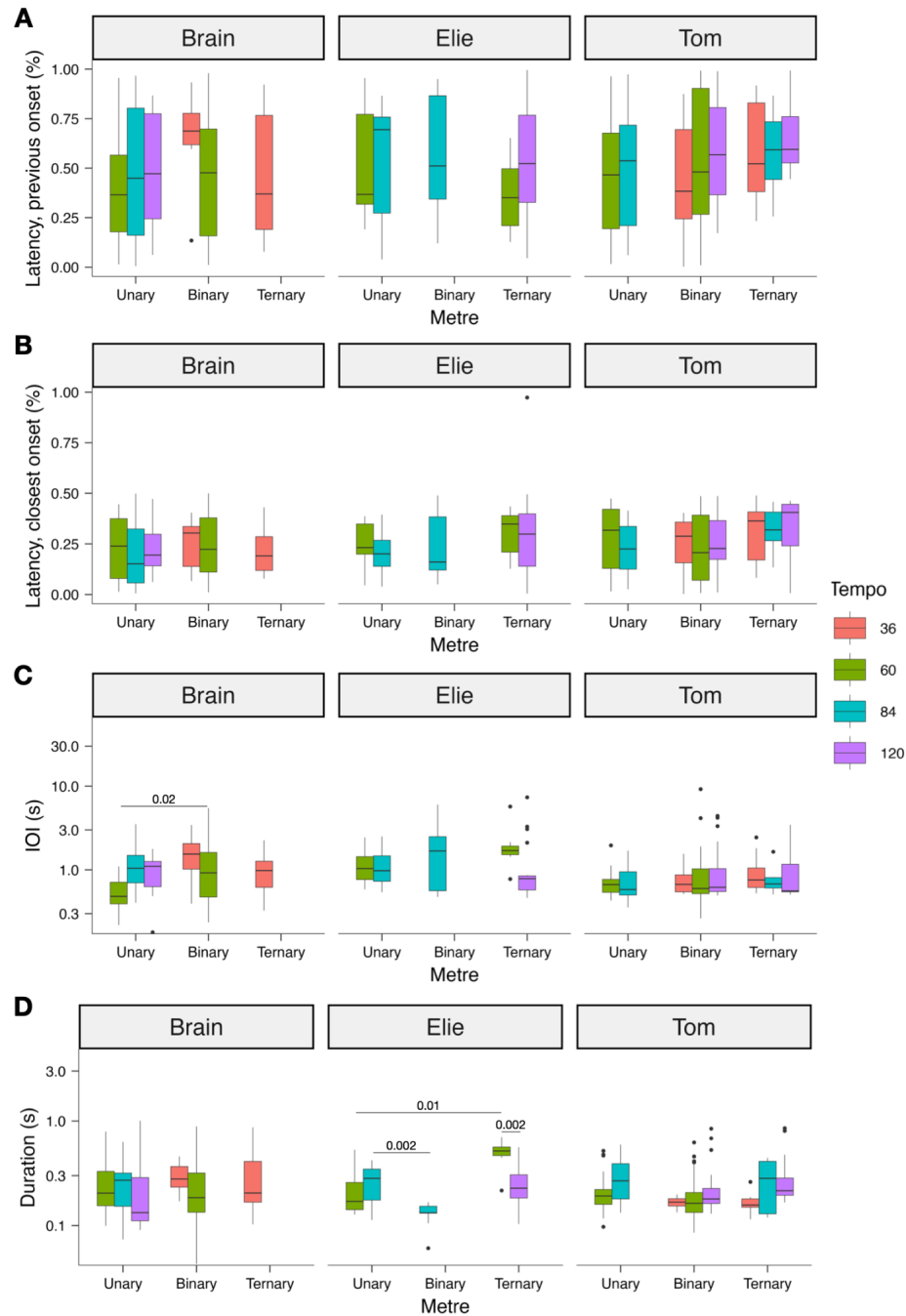| Source	Vocalisation IOI	Vocalisation duration	Latency (last onset)	Latency (closest onset)
Brain	14.0.1 (0.02)	1.1 (0.96)	0.8 (0.87)	1.4 (0.93)
Elie	6.0 (0.20)	**21.74 (< 0.001)**	2.0 (0.74)	2.2 (0.69)
Tom	7.7 (0.36)	9.6 (0.21)	3.4 (0.84)	3.7 (0.81)

Figure S1. Distribution of all four acoustic measures for the three males that responded to a subset of the possible stimulus sequences, per combination of tempo and metre. (A) Latency between the onset of each vocalisation and the onset of the last preceding noise token. (B) Latency between the onset of each vocalisation and the onset of the closest preceding noise token. (C) Vocalisation IOI. (D) Vocalisation duration. Each panel corresponds to one of the individuals included in the analysis. Horizontal bars correspond to statistical tests, with the corresponding p-value above the bar. Only significant differences are shown. Note that the graph uses the log-scale on the y-axis for legibility.