Multisensory Research

Audio-Visual Interference during Motion Discrimination in Starlings

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Supplementary material

Table S1.
Statistical numbers from the RM ANOVAs of experiment 1. Shown are the effect, the degrees of freedom (*Df*n, *Df*d), the *F*- and *p*-value, and the effect size partial eta squared (*partial eta2*). Direction: motion direction; Condition: test condition; Velocity: stimulus velocity; Duration: stimulus duration; Noise-elements: number of noise elements.

Experiment 1, performance

Effect	*Df*n	*Df*d	*F*	*p*	*partial eta2*
Direction	1	3	12.526	0.038	0.81
Condition	3	9	1.685	0.239	0.36
Velocity	1	3	1.835	0.269	0.38
Duration	2	6	11.969	0.008	0.80
Direction:Condition	3	9	0.386	0.766	0.11
Direction:Velocity	1	3	10.36	0.049	0.78
Condition:Velocity	3	9	4.185	0.041	0.58
Direction:Duration	2	6	1.309	0.338	0.30
Condition:Duration	6	18	1.848	0.146	0.38
Velocity:Duration	2	6	5.746	0.040	0.66
Direction:Condition:Velocity	3	9	2.829	0.099	0.49
Direction:Condition:Duration	6	18	2.029	0.114	0.40
Direction:Velocity:Duration	2	6	1.903	0.229	0.39
Condition:Velocity:Duration	6	18	2.149	0.097	0.42
Direction:Condition:Velocity:Duration	6	18	0.298	0.930	0.09

Experiment 1, accuracy

Effect	*Df*n	*Df*d	*F*	*p*	*partial eta2*
Direction	1	3	3.124	0.175	0.51
Condition	3	9	10.814	0.002	0.78
Velocity	1	3	4.084	0.137	0.58
Duration	2	6	2.045	0.210	0.41
Direction:Condition	3	9	2.877	0.096	0.49
Direction:Velocity	1	3	9.338	0.055	0.76
Condition:Velocity	3	9	2.087	0.172	0.41
Direction:Duration	2	6	1.238	0.355	0.29
Condition:Duration	6	18	4.149	0.009	0.58
Velocity:Duration	2	6	2.538	0.159	0.46
Direction:Condition:Velocity	3	9	0.628	0.615	0.17
Direction:Condition:Duration	6	18	3.473	0.019	0.54
Direction:Velocity:Duration	2	6	0.784	0.498	0.21
Condition:Velocity:Duration	6	18	0.986	0.463	0.25
Direction:Condition:Velocity:Duration	6	18	0.835	0.559	0.22

Table S2.
Statistical numbers from the RM ANOVAs of experiment 2. Shown are the effect, the degrees of freedom (*Df*n, *Df*d), the *F*- and *p*-value, and the effect size partial eta squared (*partial eta2*). Abbreviations of effects as in Table S1.

Experiment 2, performance

Effect	*Df*n	*Df*d	*F*	*p*	*partial eta2*
Noise-elements	5	15	4.958	0.007	0.62
Direction	1	3	0.538	0.516	0.15
Condition	3	9	4.467	0.035	0.60
Noise-elements:Direction	5	15	1.175	0.367	0.28
Noise-elements:Condition	15	45	1.216	0.296	0.29
Direction:Condition	3	9	0.959	0.453	0.24
Noise-elements:Direction:Condition	15	45	0.992	0.479	0.25

Experiment 2, accuracy

Effect	*Df*n	*Df*d	*F*	*p*	*partial eta2*
Noise-elements	5	15	8.773	0.0005	0.75
Direction	1	3	0.824	0.431	0.22
Condition	3	9	13.485	0.001	0.82
Noise-elements:Direction	5	15	1.684	0.199	0.36
Noise-elements:Condition	15	45	0.677	0.793	0.18
Direction:Condition	3	9	2.479	0.128	0.45
Noise-elements:Direction:Condition	15	45	1.189	0.315	0.28

Table S3.
Statistical numbers from the RM ANOVAs of experiment 3. Shown are the effect, the degrees of freedom (*Df*n, *Df*d), the *F*- and *p*-value, and the effect size partial eta squared (*partial eta2*). Abbreviations of effects as in Table S1.

Experiment 3, performance

Effect	*Df*n	*Df*d	*F*	*p*	*partial eta2*
Noise-elements	2	6	11.245	0.009	0.79
Direction	1	3	16.099	0.028	0.84
Condition	3	9	29.577	0.00005	0.91
Noise-elements:Direction	2	6	0.428	0.670	0.12
Noise-elements:Condition	6	18	3.835	0.012	0.56
Direction:Condition	3	9	1.564	0.265	0.34
Noise-elements:Direction:Condition	6	18	1.954	0.126	0.39

Experiment 3, accuracy

Effect	*Df*n	*Df*d	*F*	*p*	*partial eta2*
Noise-elements	2	6	17.73	0.003	0.86
Direction	1	3	7.69	0.069	0.72
Condition	3	9	22.201	0.00017	0.88
Noise-elements:Direction	2	6	0.267	0.775	0.08
Noise-elements:Condition	6	18	4.633	0.005	0.61
Direction:Condition	3	9	1.944	0.193	0.39
Noise-elements:Direction:Condition	6	18	1.266	0.321	0.30

Table S4.
Statistical numbers from the RM ANOVAs of experiment 4. Shown are the effect, the degrees of freedom (*Df*n, *Df*d), the *F*- and *p*-value, and the effect size partial eta squared (*partial eta2*). Abbreviations of effects as in Table S1.

Experiment 4, performance

Effect	*Df*n	*Df*d	*F*	*p*	*partial eta2*
Noise-elements	2	6	15.529	0.004	0.84
Direction	1	3	1.071	0.377	0.26
Condition (GG)	1.01	3.04	22.7	0.017	0.88
Duration	1	3	182.965	0.000874	0.98
Noise-elements:Direction	2	6	5.367	0.046	0.64
Noise-elements:Condition	6	18	5.515	0.002	0.65
Direction:Condition	3	9	1.449	0.292	0.33
Noise-elements:Duration	2	6	6.367	0.033	0.68
Direction:Duration	1	3	22.212	0.018	0.88
Condition:Duration	3	9	10.159	0.003	0.77
Noise-elements:Direction:Condition	6	18	2.456	0.065	0.45
Noise-elements:Direction:Duration	2	6	0.811	0.488	0.21
Noise-elements:Condition:Duration	6	18	1.054	0.424	0.26
Direction:Condition:Duration	3	9	0.717	0.566	0.19
Noise-elements:Direction:Condition:Duration	6	18	0.387	0.878	0.11

Experiment 4, accuracy

Effect	*Df*n	*Df*d	*F*	*p*	*partial eta2*
Noise-elements	2	6	57.41	0.000122	0.95
Direction	1	3	0.086	0.789	0.03
Condition (GG)	1.16	3.47	22.725	0.012	0.88
Duration	1	3	81.205	0.003	0.96
Noise-elements:Direction	2	6	2.301	0.181	0.43
Noise-elements:Condition	6	18	1.751	0.166	0.37
Direction:Condition	3	9	2.362	0.139	0.44
Noise-elements:Duration	2	6	0.92	0.448	0.23
Direction:Duration	1	3	15.639	0.029	0.84
Condition:Duration	3	9	5.548	0.020	0.65
Noise-elements:Direction:Condition	6	18	6.995	0.00058	0.70
Noise-elements:Direction:Duration	2	6	1.118	0.387	0.27
Noise-elements:Condition:Duration	6	18	1.643	0.193	0.35
Direction:Condition:Duration	3	9	1.613	0.254	0.35
Noise-elements:Direction:Condition:Duration	6	18	1.622	0.198	0.35

Table S5.
Statistical numbers from the RM ANOVAs of experiment 2. Shown are the effect, the degrees of freedom (*Df*n, *Df*d), the *F*- and *p*-value, and the effect size partial eta squared (*partial eta2*). SOA: stimulus-onset asynchrony; other abbreviations of effects as in Table S1.

Experiment 5, performance

Effect	*Df*n	*Df*d	*F*	*p*	*partial eta2*
Noise-elements	1	3	355.019	0.000326	0.99
Direction	1	3	5.306	0.105	0.64
Condition	3	9	9.395	0.004	0.76
SOA	1	3	0.272	0.638	0.08
Duration	1	3	1.383	0.324	0.32
Noise-elements:Direction	1	3	27.249	0.014	0.90
Noise-elements:Condition	3	9	2.357	0.140	0.44
Direction:Condition	3	9	2.879	0.095	0.49
Noise-elements:SOA	1	3	0.858	0.423	0.22
Direction:SOA	1	3	0.761	0.447	0.20
Condition:SOA	3	9	0.789	0.530	0.21
Noise-elements:Duration	1	3	0.021	0.893	0.00709
Direction:Duration	1	3	0.049	0.839	0.02
Condition:Duration	3	9	1.85	0.209	0.38
SOA:Duration	1	3	1.941	0.258	0.39
Noise-elements:Direction:Condition	3	9	1.961	0.191	0.40
Noise-elements:Direction:SOA	1	3	0.106	0.766	0.03
Noise-elements:Condition:SOA	3	9	1.367	0.314	0.31
Direction:Condition:SOA	3	9	0.265	0.849	0.08
Noise-elements:Direction:Duration	1	3	1.198	0.354	0.29
Noise-elements:Condition:Duration	3	9	0.394	0.761	0.12
Direction:Condition:Duration	3	9	1.048	0.418	0.26
Noise-elements:SOA:Duration	1	3	0.026	0.882	0.00857
Direction:SOA:Duration	1	3	0.218	0.672	0.07
Condition:SOA:Duration	3	9	3.709	0.055	0.55
Noise-elements:Direction:Condition:SOA	3	9	0.045	0.987	0.01
Noise-elements:Direction:Condition:Duration	3	9	1.42	0.300	0.32
Noise-elements:Direction:SOA:Duration	1	3	0.775	0.443	0.21
Noise-elements:Condition:SOA:Duration	3	9	0.212	0.886	0.07
Direction:Condition:SOA:Duration	3	9	0.378	0.771	0.11
Noise-elements:Direction:Condition:SOA:Duration	3	9	0.666	0.594	0.18

Table S5. (continued)

Experiment 5, accuracy

Effect	*Df*n	*Df*d	*F*	*p*	*partial eta2*
Noise-elements	1	3	168.654	0.000986	0.98
Direction	1	3	5.278	0.105	0.64
Condition	3	9	5.938	0.016	0.66
SOA	1	3	0.619	0.489	0.17
Duration	1	3	12.229	0.040	0.80
Noise-elements:Direction	1	3	13.38	0.035	0.82
Noise-elements:Condition	3	9	1.825	0.213	0.38
Direction:Condition	3	9	1.965	0.190	0.40
Noise-elements:SOA	1	3	1.436	0.317	0.32
Direction:SOA	1	3	2.197	0.235	0.42
Condition:SOA	3	9	1.145	0.382	0.28
Noise-elements:Duration	1	3	40.701	0.008	0.93
Direction:Duration	1	3	0.356	0.593	0.11
Condition:Duration	3	9	2.306	0.145	0.43
SOA:Duration	1	3	6.537	0.083	0.69
Noise-elements:Direction:Condition	3	9	1.018	0.429	0.25
Noise-elements:Direction:SOA	1	3	0.153	0.722	0.05
Noise-elements:Condition:SOA	3	9	1.25	0.348	0.29
Direction:Condition:SOA	3	9	0.427	0.738	0.12
Noise-elements:Direction:Duration	1	3	1.892	0.263	0.39
Noise-elements:Condition:Duration	3	9	0.246	0.862	0.08
Direction:Condition:Duration	3	9	4.063	0.044	0.58
Noise-elements:SOA:Duration	1	3	2.694	0.199	0.47
Direction:SOA:Duration	1	3	0.045	0.846	0.01
Condition:SOA:Duration	3	9	3.997	0.046	0.57
Noise-elements:Direction:Condition:SOA	3	9	0.423	0.741	0.12
Noise-elements:Direction:Condition:Duration	3	9	1.129	0.388	0.27
Noise-elements:Direction:SOA:Duration	1	3	2.002	0.252	0.40
Noise-elements:Condition:SOA:Duration	3	9	1.497	0.280	0.33
Direction:Condition:SOA:Duration	3	9	0.277	0.841	0.08
Noise-elements:Direction:Condition:SOA:Duration	3	9	0.348	0.791	0.10