

An adaptive cue combination model of human spatial reorientation (Supplementary Material)

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Parameter specification for Miller's associative model

Table S1. Structure for Miller's associative model for rectangular enclosure with corners *C, R, N, F* in case study 1 (adult group) of the main text. Beta values are set to be 2 – results were robust to variation of this choice of parameter value; alpha values are taken from Miller's simulation (2009) of Learmonth et al. (2002). Features (rows) follow the convention in Miller (2009).

	<i>C</i>	<i>R</i>	<i>N</i>	<i>F</i>	alpha(sm)	alpha(lg)
B	1	1	1	1	0.15	0.15
G	1	1	0	0	0.2	0.1
W	0	0	1	1	0.2	0.1
F1	1	0	0	0	0.1	0.2
F2	0	0	1	0	0.1	0.2
F3	0	1	0	1	0.1	0.2
F4	1	0	1	0	0.1	0.2

Table S2. Structure for Miller's associative model for octagonal enclosure with corners *C, EW, GF, EF, GW, EW, GW, EW* in case study 2 of the main text. Beta values are taken from Miller's simulation (2009) of work by Learmonth et al. (2002) for age groups 3 and 5; alpha values are set following the conventions used for the large-room condition as in Miller (2009). Features (rows) follow the convention in Miller (2009).

	<i>C</i>	<i>EW</i>	<i>GF</i>	<i>EF</i>	<i>GW</i>	<i>EW</i>	<i>GW</i>	<i>EW</i>	alpha
B	1	1	1	1	1	1	1	1	0.15
G	1	0	1	0	1	0	1	0	0.1
W	0	1	0	1	0	1	0	1	0.1
F1	1	0	0	0	0	0	0	0	0.2
F2	0	0	1	1	0	0	0	0	0.2
F3	1	0	0	0	0	0	0	1	0.2
F4	0	1	1	0	0	0	0	0	0.2
F5	0	0	0	1	1	0	0	0	0.2
F6	0	0	0	0	0	1	1	0	0.2