

Data Availability Statement

Sample stimuli videos, experimental data, and the analysis code are available at:

<https://osf.io/b3g52/>

Supplemental Text

Below we present Bayesian mixed-model linear regressions for each condition of each experiment using the ‘brms’ package in R (using all defaults; Buerkner, 2017). The dependent variable for each regression is infants’ raw looking times, and the independent variables are the kind of change (shape and area or area alone), trial number (1, 2, 3, or 4), the direction of area change on the area-only change side (figures getting bigger or figures getting smaller relative to the figure shared between the sides), and sex (male or female). The regression equations also include a random effects intercept for each participant. Results of these analyses are presented in three ways (from left to right in each row). On the left are the model’s estimated coefficients and their 95% credible intervals. These coefficients are standardized effect sizes and are relative to the comparison level (in parentheses) of each variable. In the middle are the posterior probability distributions of the shape preference with the estimate indicated in blue, the 95% credible intervals indicated in pink, and zero indicated in black. On the right are the predicted raw looking times for each change type with the standard error. Every chart across experiments and conditions uses the same scale and the same axes for ease of comparison.

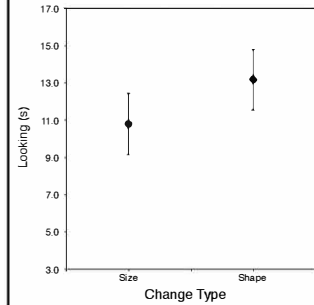
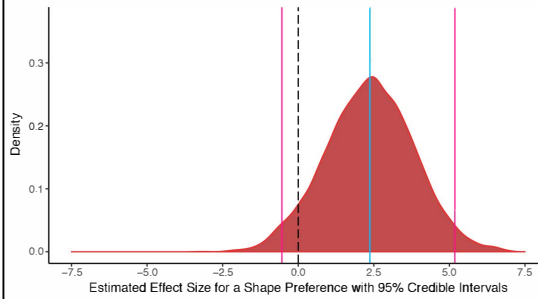
Bayesian Mixed Model Linear Regression Estimates

Posterior Probability Distributions for a Shape Preference

Raw Looking Time Estimates by Change Type

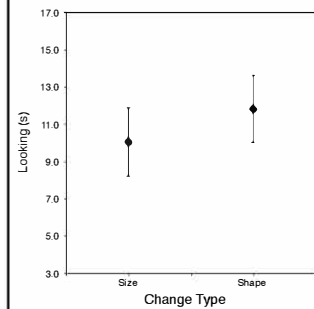
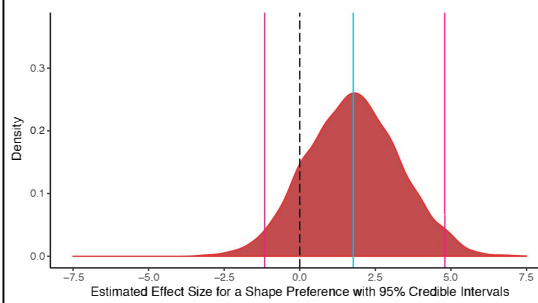
Experiment 1A: Triangles, +/- 30° Rotation

	Estimate	Lower 95% CI	Upper 95% CI
Change Type (Shape)	2.37	-0.54	5.18
Trial Number (1)	-1.94	-3.26	-0.64
Size Change (Smaller)	-0.34	-3.71	2.95
Sex (Male)	0.77	-2.43	4.02



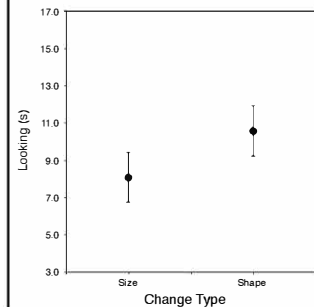
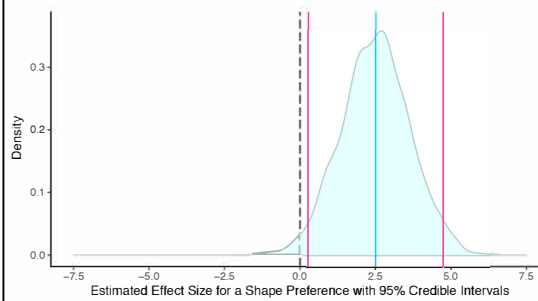
Experiment 1B: Triangles, 360° Rotation & Left/Right Flips

	Estimate	Lower 95% CI	Upper 95% CI
Change Type (Shape)	1.77	-1.16	4.80
Trial Number (1)	-1.28	-2.66	0.09
Size Change (Smaller)	0.04	-3.50	4.01
Sex (Male)	2.12	-1.67	5.92



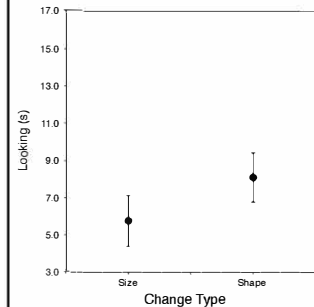
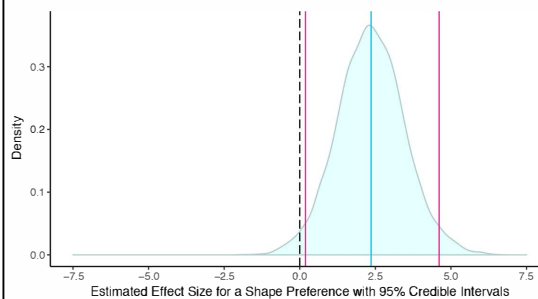
Experiment 2A: Relative Length, Obtuse, 1.5:3, 360° Rotation & Left/Right Flips

	Estimate	Lower 95% CI	Upper 95% CI
Change Type (Shape)	2.51	0.28	4.75
Trial Number (1)	-1.91	-2.67	-0.90
Size Change (Smaller)	1.04	-1.63	3.75
Sex (Male)	0.18	-2.60	2.85



Experiment 2B: Relative Length, Acute, 1.5:3, 360° Rotation & Left/Right Flips

	Estimate	Lower 95% CI	Upper 95% CI
Change Type (Shape)	2.36	0.19	4.61
Trial Number (1)	-1.64	-2.58	-0.69
Size Change (Smaller)	2.84	-0.09	5.71
Sex (Male)	1.62	-1.30	4.52



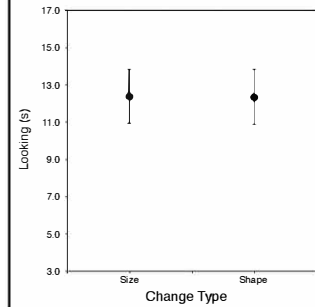
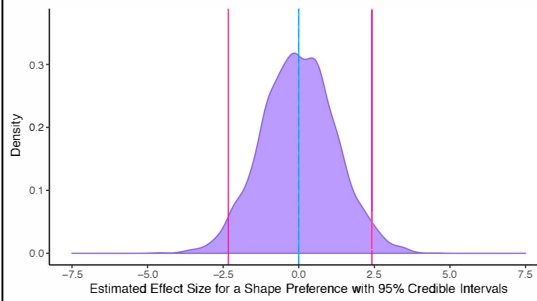
Bayesian Mixed Model Linear Regression Estimates

Posterior Probability Distributions for a Shape Preference

Raw Looking Time Estimates by Change Type

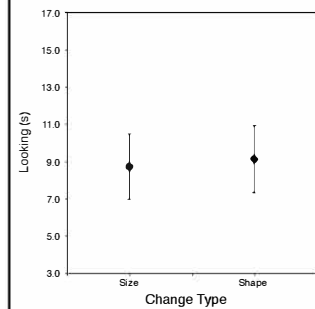
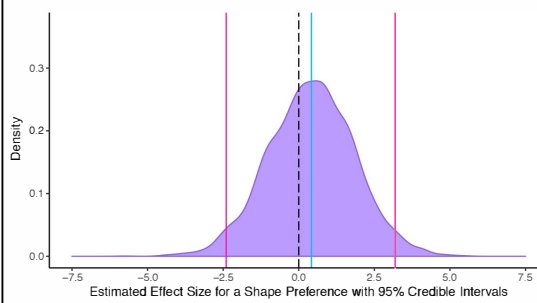
Experiment 3A: Angle, 75.5°:151°, 360° Rotation & Left/Right Flips

	Estimate	Lower 95% CI	Upper 95% CI
Change Type (Shape)	0.00	-2.33	2.42
Trial Number (1)	-1.78	-2.85	-0.72
Size Change (Smaller)	-4.27	-7.90	-0.75
Sex (Male)	0.24	-3.24	3.71



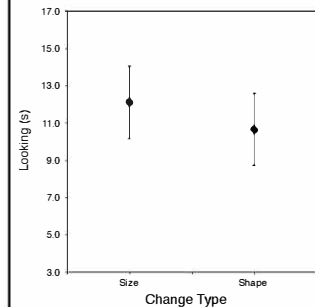
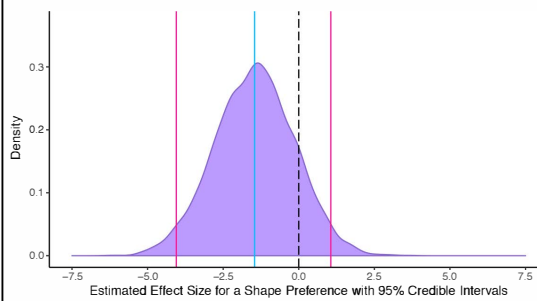
Experiment 3B: Angle, 26.57°:116.57°, 360° Rotation & Left/Right Flips

	Estimate	Lower 95% CI	Upper 95% CI
Change Type (Shape)	0.42	-2.40	3.19
Trial Number (1)	-1.79	-3.02	-0.54
Size Change (Smaller)	0.92	-2.70	4.62
Sex (Male)	1.67	-2.19	5.64



Experiment 3C: Angle, 20°:137.5°, 360° Rotation & Left/Right Flips

	Estimate	Lower 95% CI	Upper 95% CI
Change Type (Shape)	-1.46	-4.05	1.06
Trial Number (1)	-2.23	-3.40	-1.08
Size Change (Smaller)	-0.79	-5.35	3.55
Sex (Male)	1.27	-3.27	5.87



Experiment 3D: Angle, 75.5°:151°, +/- 30° Rotation

	Estimate	Lower 95% CI	Upper 95% CI
Change Type (Shape)	1.51	-0.89	3.90
Trial Number (1)	-1.93	-2.98	-0.92
Size Change (Smaller)	-2.82	-6.27	0.63
Sex (Male)	-2.38	-5.81	1.07

