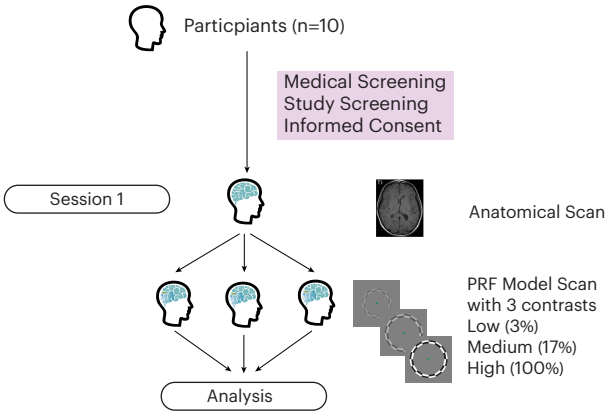
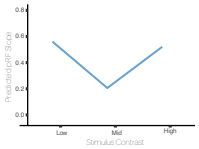
a Study Design



b Key Findings

Non-monotonic scaling



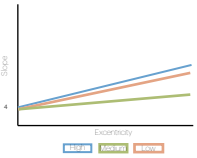
Contrast effects on spatial integration follow non-monotonic functions, with medium contrast producing maximal suppression for polar and average metrics while enhancing radial scaling.

Flexible Hierarchy

Low: V1 ≈ V2 < V3
MED: V1 < V2 < V3
High: V1 < V2 ≈ V3

These effects are not uniform across visual areas, with V2 showing differential responses to V1, particularly at high contrast.

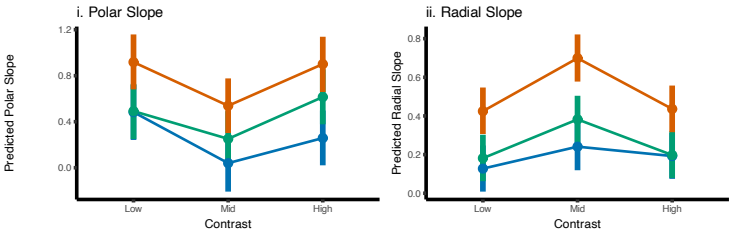
Foveal Changes



the underlying mechanism involves coordinate modulation of both foveal anchor points and peripheral scaling factors, rather than simple pivoting around stable foveal reference points.

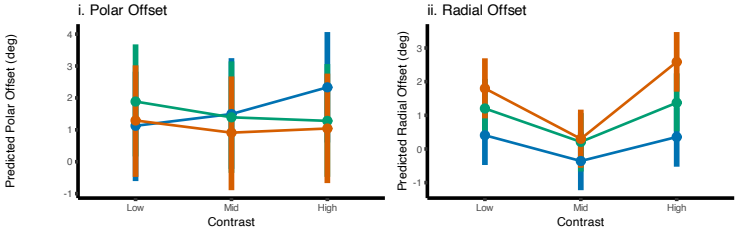
c Bayesian Analysis of pRF Slope

Interaction plots show model-predicted means and 95% CIs. Coefficient plot shows posterior distributions with 80% and 95% CIs.

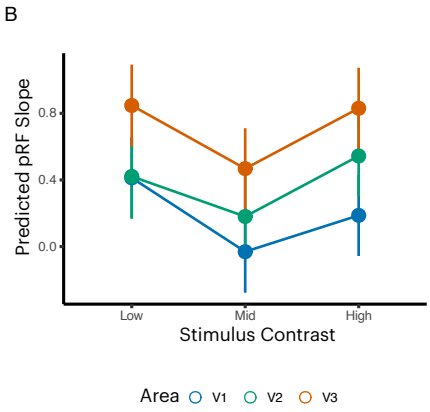


d Bayesian Analysis of pRF Offset (Foveal Size)

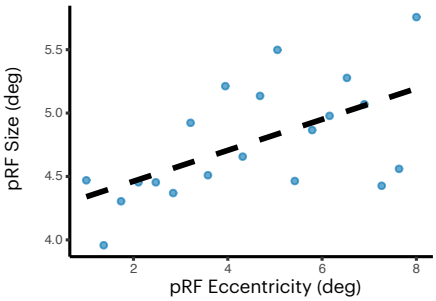
Interaction plots show model-predicted means and 95% CIs. Coefficient plot shows posterior distributions with 80% and 95% CIs.



e Contrast Modulates pRF Slope Across Areas



f pRF Size vs. Eccentricity



g Mechanism of pRF Modulation (Polar Metric)

Each line represents the model-estimated pRF Size (polar)-Eccentricity relationship for a given contrast level.