

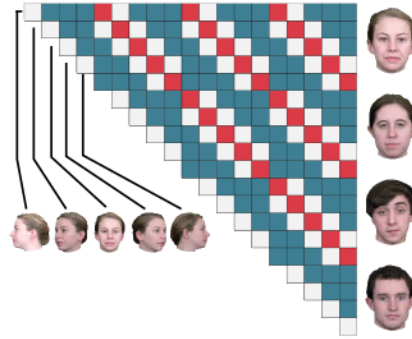
Supplementary Materials

Supplementary Figures

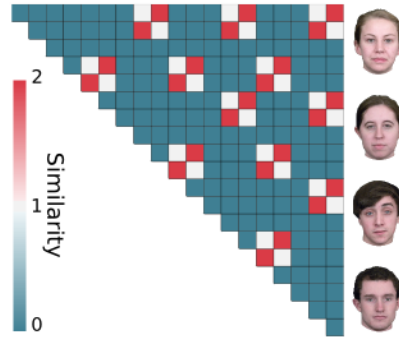


Supplementary Figure S1. Face stimuli used in the main experiment. Faces images of four individuals (2 males, 2 females) taken in five head views were used as stimuli in our experiment.

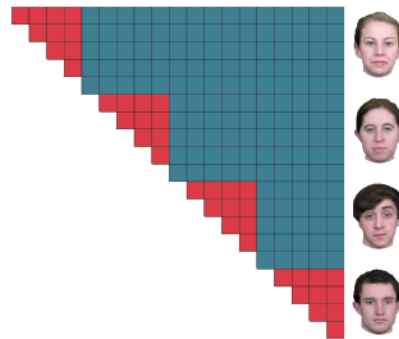
Viewpoint invariant face identity representation
Head view model



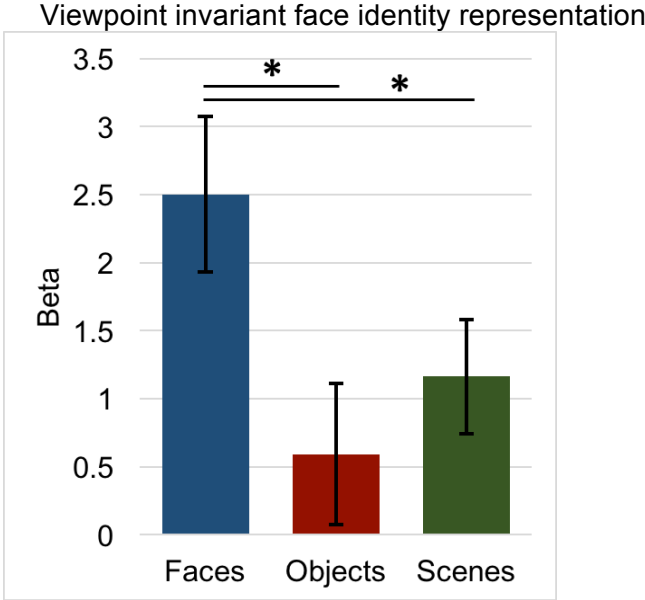
Mirror symmetric view model



Identity model

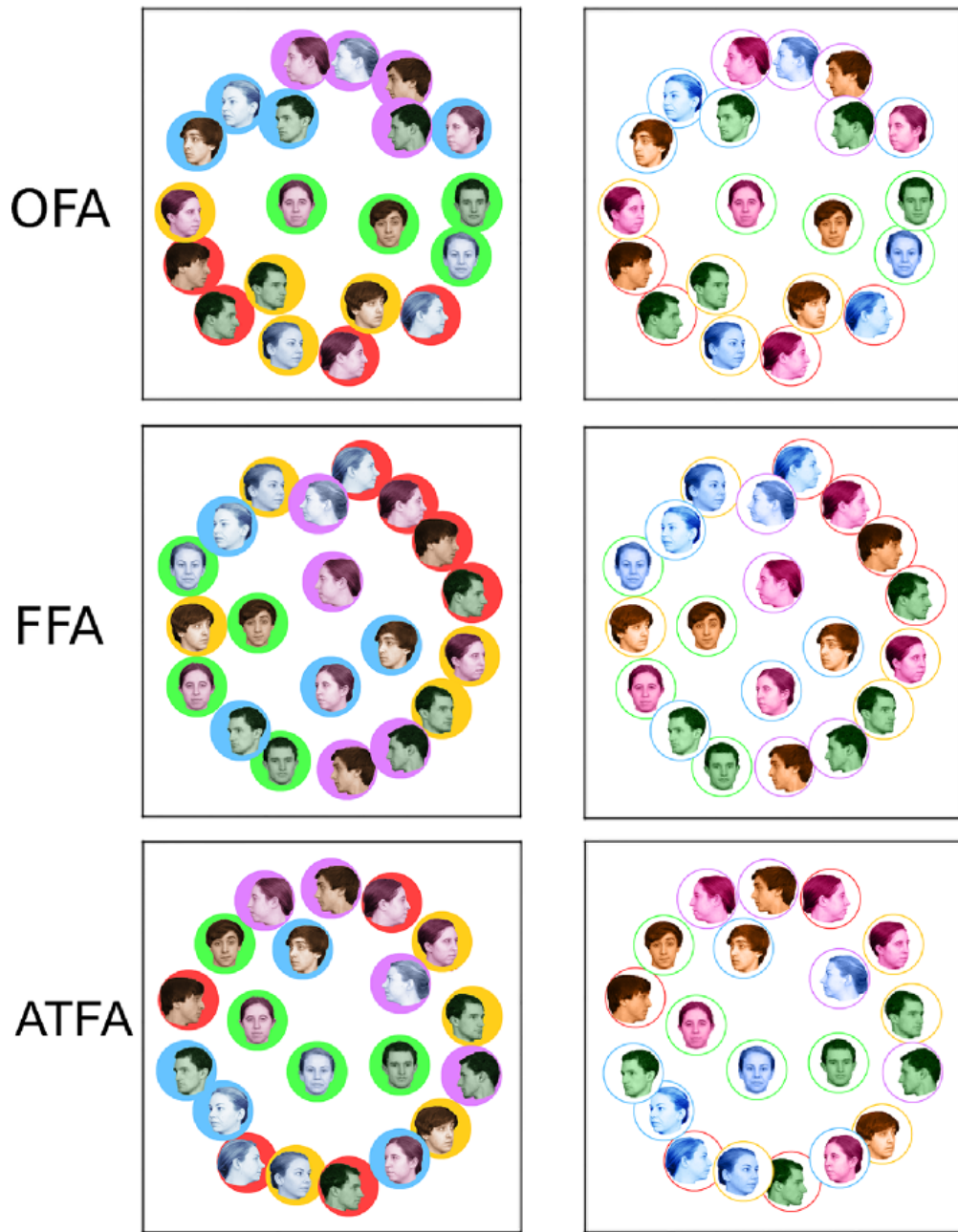


Supplementary Figure S2. Model similarity structures of face stimuli. Head view model captures similarity between faces based on their view. Mirror symmetric view model captures similarity of face views that are mirror symmetric. Identity model captures similarity of faces based on identity invariant to view.



Supplementary Figure S3. Face selectivity in the right inferior frontal cluster. We defined a cortical disc of 10 mm radius centered on the surface node with peak accuracy in the identity classification analysis as our ROI. We then averaged the beta coefficients for each category presented during the localizer in each subject within that ROI. Average estimated response to faces was greater than the response to both objects and scenes across subjects. Error bars indicate SEM, and asterisks indicate $p < 0.05$.

Viewpoint invariant face identity representation
Head view Identity



Supplementary Figure S4. Multidimensional scaling plots of stimulus categories based on the cortical responses in face-selective ROIs. For each ROI, left and right columns

Guntupalli et al. Viewpoint invariant face identity representation
depict the same MDS solution with coloring based on head view emphasized on the left
and with coloring based on face identity emphasized on the right.

Supplementary Table S1. Size of face-selective regions across subjects

	OFA (RH+LH)	FFA (RH+LH)	pSTS (RH)	ATFA (RH)
Voxels	255.7	351.4	162.4	128.8
Volume (mm ³)	2045.3	2811.1	1299.1	1030.8