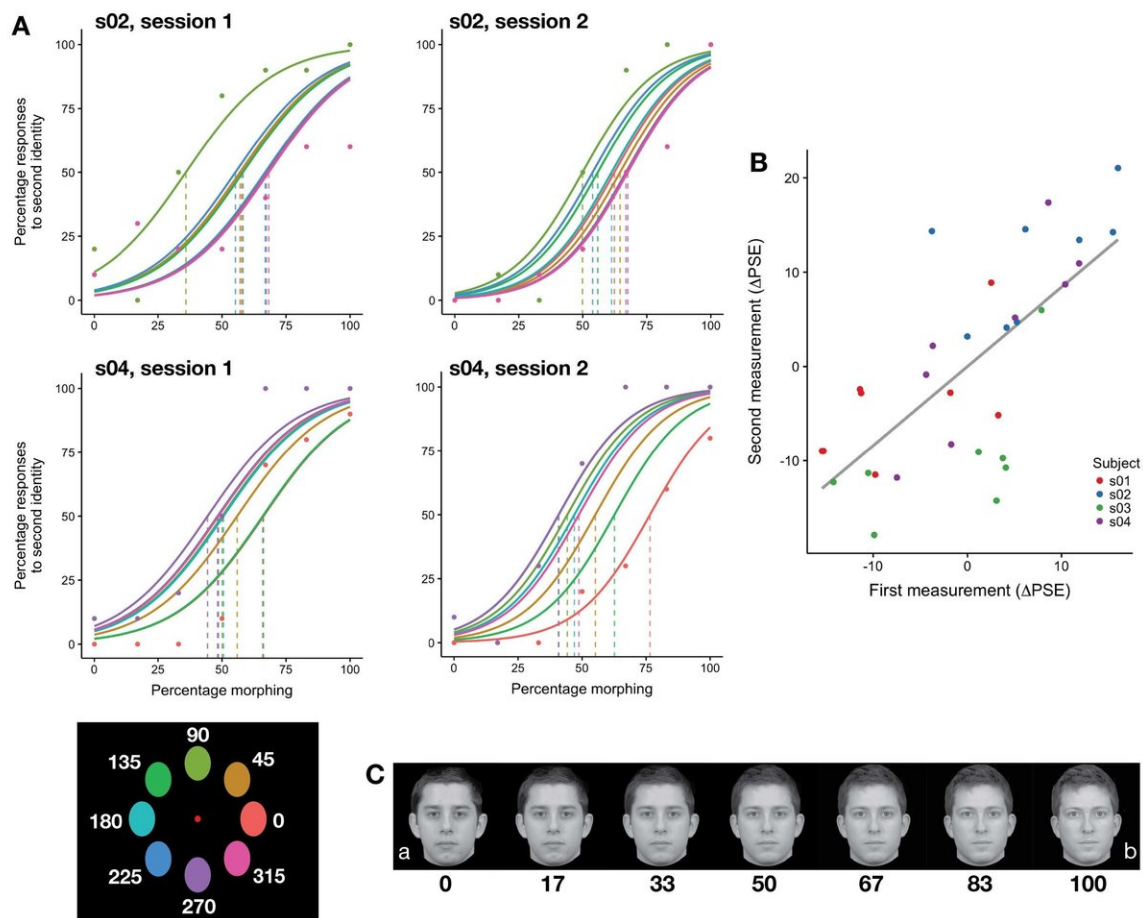


Learning to see friendly faces in different places

October 1 2018



Stable and idiosyncratic biases in identification in Experiment 1.

A) Psychometric fit for two subjects from both sessions. Colors indicate location (see colors in bottom left corner); actual data (points) are shown only for the extreme locations to avoid visual clutter. B) The parameter estimates across sessions (at least 33 days apart) were stable ($r = 0.71$ [0.47, 0.84], see Table 1). Dots represent individual parameter estimates for each location, color coded

according to each subject. Correlations were performed on the data shown in this panel. C) Example morphs used in the experiment. Note that the morphs depicted here are shown for illustration only, and participants saw morphs of identities that were personally familiar to them. Credit: Visconti di Oleggio Castello et al., *eNeuro* (2018)

Meaningful social interactions train visual cortex neurons to recognize a familiar face in different visual locations, suggests new research published in *eNeuro*. The study demonstrates how the brain learns to perceive other people as individuals.

Previous research has shown that attributes of the same face can appear to be different depending on where it is presented in the [visual field](#). For example, a face with unisex features can be seen as a male face in one place and as a [female face](#) in another.

This finding led Ida Gobbini, Matteo Visconti di Oleggio Castello, and colleagues to investigate how regular interactions with the people in one's life influence perception of such [familiar faces](#).

The researchers asked graduate students to identify photographs of their peers presented on a screen in various locations around a fixation point. They found participants who reported stronger familiarity with one another more consistently recognized the other individual in different parts of their visual field.

The team further simulated how repeated social interactions may tune independent populations of neurons to recognize an individual face regardless of where it appears in space.

More information: Idiosyncratic, retinotopic bias in face

identification modulated by familiarity, *eNeuro*DOI:
10.1523/ENEURO.0054-18.2018 , Pre-print:
www.biorxiv.org/content/early/2018/01/26/253468

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