## The aesthetic appeal of sign languages: intrinsic appeal or cultural associations?

Keywords: sign language; aesthetic appeal; valence; sociocultural stereotypes; language evolution

Are some languages perceived as more appealing than others, and if so, why? While some research suggests intrinsic differences in languages' appeal (e.g., Kogan & Reiterer 2021; Winkler et al. 2023), others argue that appeal is largely socio-culturally constructed (Anikin et al. 2023). Prior research has explored those questions for spoken languages, but similar endeavors are missing for sign languages. We address this gap by investigating if sign languages, specifically American (ASL) and French (LSF) Sign Language, are perceived differently in terms of appeal and how socio-cultural associations shape these perceptions.

Previous studies on spoken languages have found a "Latin-lover" effect, where Romance languages are perceived as more beautiful than, e.g., Germanic or Slavic languages (Kogan & Reiterer, 2021; Reiterer et al., 2020; Burchette, 2014). This effect likely stems from the fact that many (largely WEIRD) study participants were familiar with Romance languages, possibly triggering positive cultural associations. Based on this, we hypothesize that when participants are unaware of the languages being rated, ASL and LSF will be perceived as equally appealing. However, when participants are informed about the languages, we predict that LSF will be rated as more appealing than ASL, reflecting cultural associations that may drive the "Latin-lover" effect for spoken languages.

As a secondary aim, drawing on the iconic potential of sign languages (e.g. Mineiro et al., 2017; Pizutto & Volterra, 2000), we tested if the meaning of a sign influences its perceived appeal and valence (cf. Louverse & Qu 2017). In our experiment, half of the signs convey positive (e.g., love, peace) and the other half negative concepts (e.g., hate, war). We expect that positive signs will be rated as more appealing than negative ones, even though participants will be unaware of their meanings.

In our experiment, sign-language-naïve participants rate standardized videos of ASL and LSF signs for positive and negative concepts on two scales: (1) how appealing they find the look of the signs and (2) how positive they perceive the meaning of the signs. One participant group is uninformed, while another group is informed of the languages being rated.

Preliminary results of a cumulative link mixed model for the uninformed group (n=40) show, as predicted, no significant differences in the intrinsic appeal of ASL and LSF. However, positive signs received significantly higher ratings for both appeal and valence than negative ones (Fig. 1). This suggests that even without knowledge of the language, participants can differentiate signs based on their emotional content, and that perceived valence correlates with perceived appeal.

We will complement these initial findings with data from the informed participant group, predicting that this group will perceive the two languages differently in terms of appeal. This research offers new insights into the aesthetic perception of sign languages and the influence of socio-cultural associations on these perceptions. Further, comparing our results with spoken languages will clarify whether aesthetic appeal effects are unique to speech or extend to sign languages, while can also shed light on the role of aesthetics in language evolution.

## Mean ratings with 95 % confidence intervals

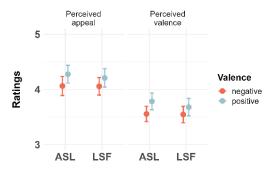


Figure 1. Participants' appeal and valence ratings of negative and positive concepts in ASL and LSF (rating scale from 1-7). Participants were not informed about the languages or meanings of the signs.

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