Building a Global Visual Language: What Do 1,000 People Think of 1,000 Icons?
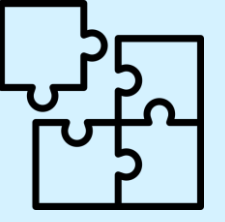
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PROJECT AIM

- Icons convey information intended to be understood by everyone.
- Yet, what we know about icons comes from **very few** (<200 people) and **very WEIRD** people (e.g., Western, rich).
- Our aim is to discover how icons are perceived by a diverse sample of people, across ages, languages, & cultures.
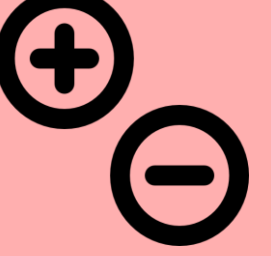
WHAT ARE THE KEY ICON CHARACTERISTICS?

Just an icon of a dog!

Goodness of fit
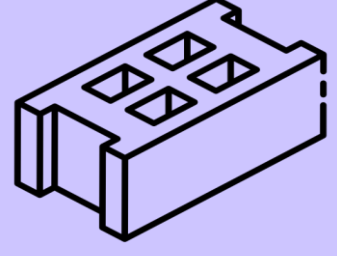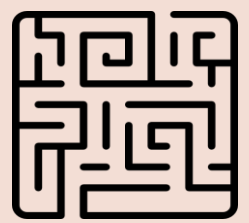Semantically close icons have a meaning which is very close to how the icon looks visually.

Valence
How intrinsically positive or aversive an icon is (positivity/negativity).

Concreteness
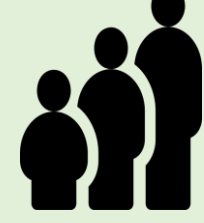Concrete icons depict real-life objects, places, or people.

Complexity
Complex icons have a lot of detail and intricacy, whereas simple icons have less.

Appeal
Appealing icons are ones that are visually highly likeable.

Order of learning
Some icons are learned at a young age while others may be learned later in life.

Feeling
Icons can make you feel happy or sad.

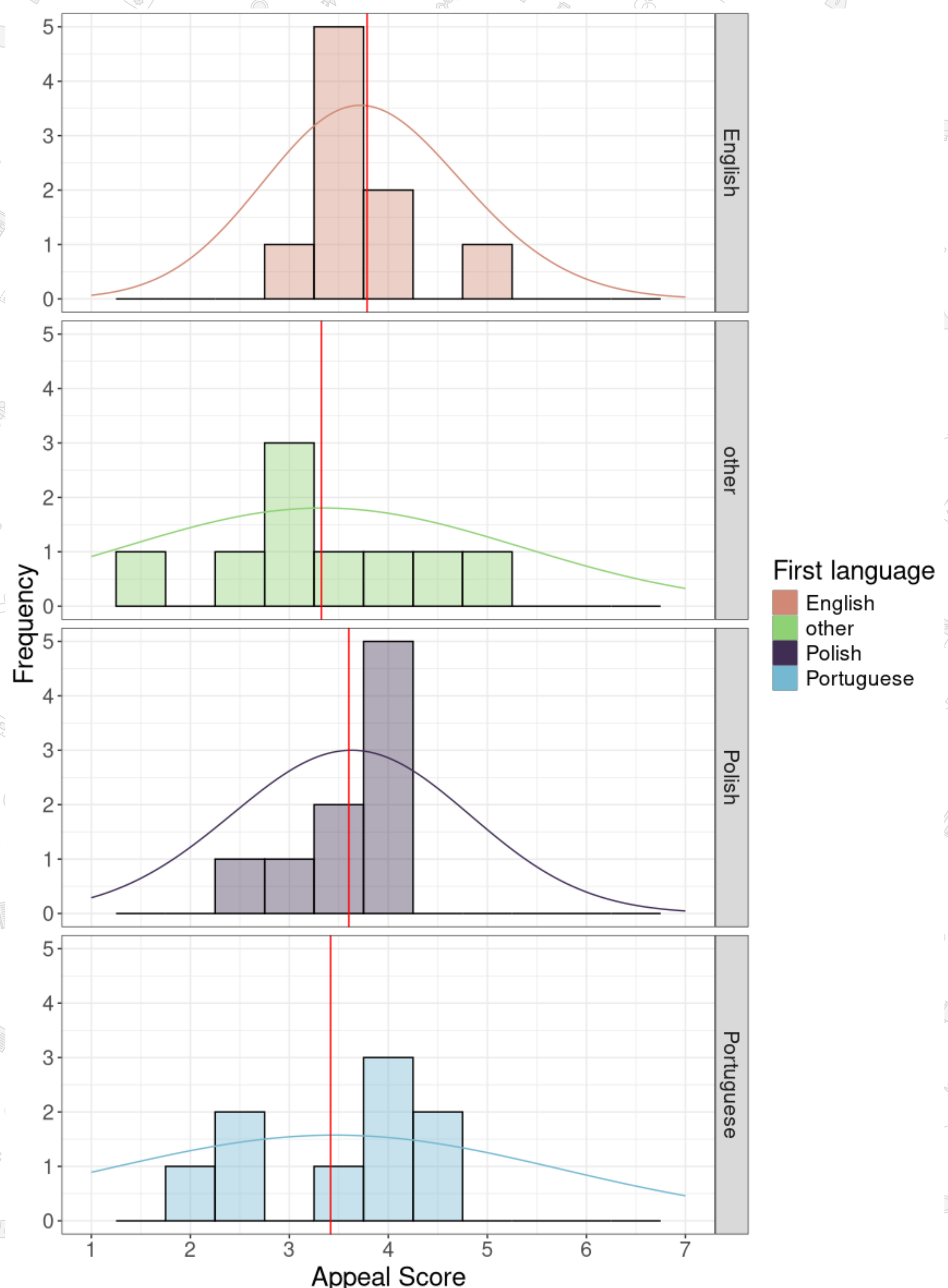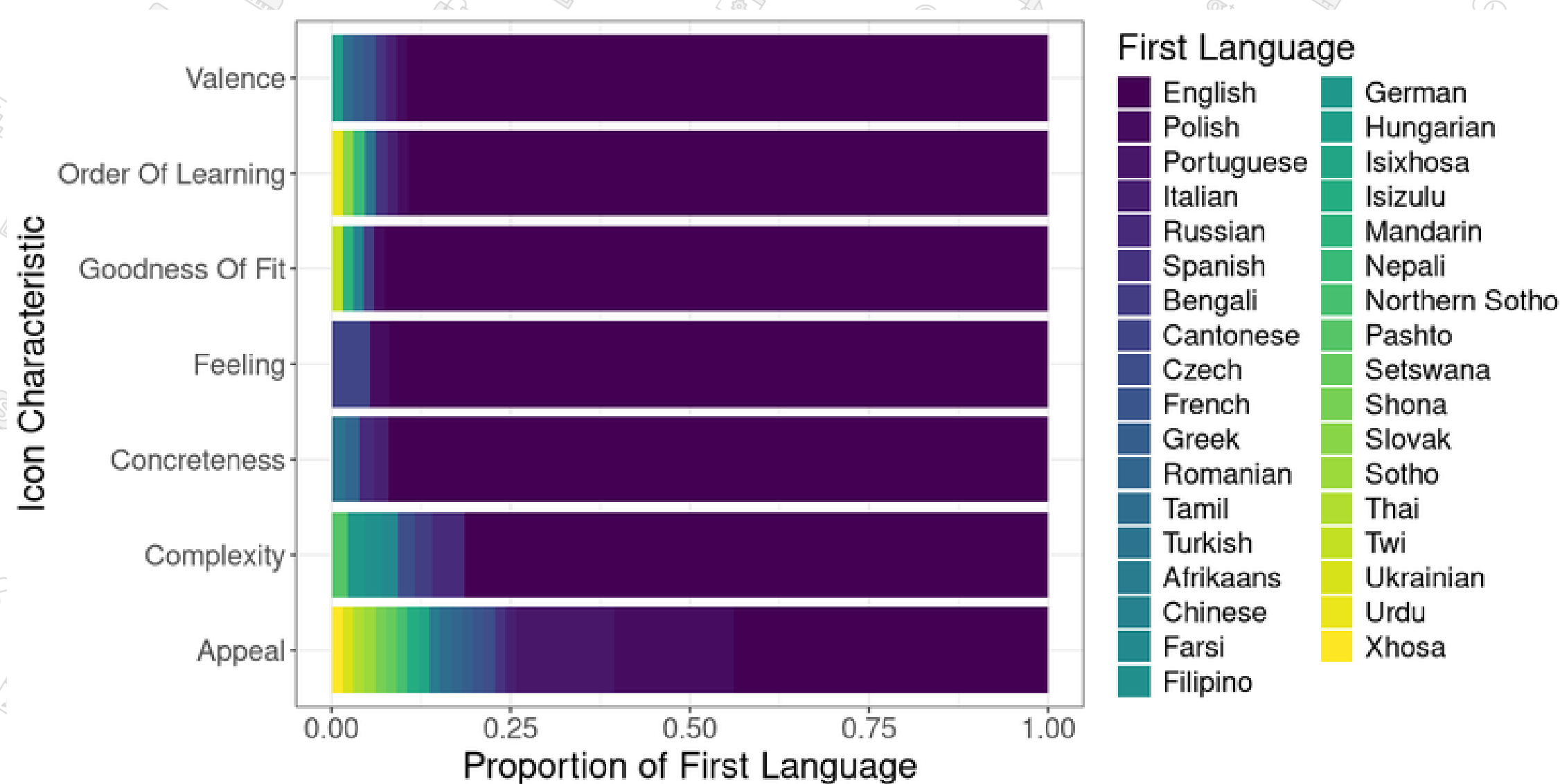## METHOD – (what did we do with the MASI fund?)

- Collected and catalogued **over 1,000 icons** from various sources – e.g., The Noun Project, BSI, ISO.
- 3 Experiments, with **over 1,000 participants**, yielding over 398,376 data points and counting.
- In each experiment, **seven surveys** (Likert 1-7 scales) collected ratings of 7 icon characteristics.

RESULTS SO FAR

- 36 Languages were sampled – **Fig. 1**.
- There are differences in how icon characteristics are rated by different language speakers.
- **Fig.2** shows how **ratings of icon appeal** differed across different languages (English was sub-sampled to match the other languages).

Fig. 1: Languages of our participants

Fig. 2: Significant differences in ratings of **appeal** across **different languages.**

WHAT'S NEXT?

- *Examine* differences and similarities in perception and understanding of icons across **ages**, **cultures**, **languages**, and **neural diversity**.

- *Train algorithms* that can classify icons according their characteristics, thereby removing the obstacles for developers to use icons based on evidence-based principles.