

The Impact of Font Weight on Expressiveness Beyond Latin: Insights from Arabic and English



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BACKGROUND

- Readability research on text properties (like fonts, spacing) has primarily focused on Latin scripts.
- Variable font technology now enables detailed study of specific features like font weight, known to be highly impactful.
- Despite widespread global use of digital documents, typography's impact on non-Latin scripts remains significantly underexplored.
- Understanding how features operate beyond Latin is crucial for a broader, more inclusive view of cross-script typographic design.

Aim:

- Investigating how font weight affects the perceived expressiveness of reading materials in English (Latin script) and Arabic (non-Latin script).

Questions:

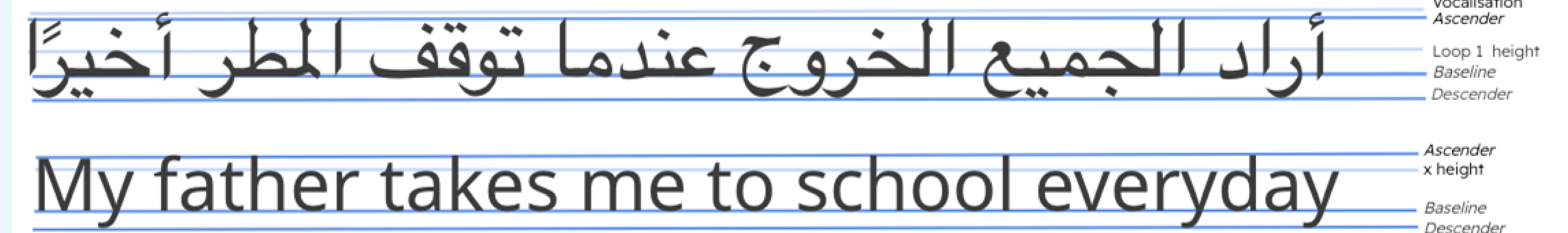
- Does font weight influence the perceived expressiveness of text similarly across both English and Arabic writing systems?
- Are specific expressive qualities (e.g., calmness, activity) consistently associated with particular font weights, regardless of the script?
- Are there significant interaction effects between font weight and writing system on how expressiveness is perceived?

METHODS

Participants

- 50 bilingual (English/Arabic) participants.
- Age range: 18-49 (Mean: 31.2)
- Normal or corrected-to-normal vision

Noto Sans Arabic



Materials & Design

- Stimuli: Sentences adapted from MNREAD were presented in both English and Arabic.
- Typeface: Noto Sans (chosen for language coverage & variable font capabilities) was shown at varying font weights.

Procedure

- Task: After reading, participants chose adjectives from a predefined list of 21 (e.g., calm, active, sophisticated) to describe the font's perceived expressiveness.

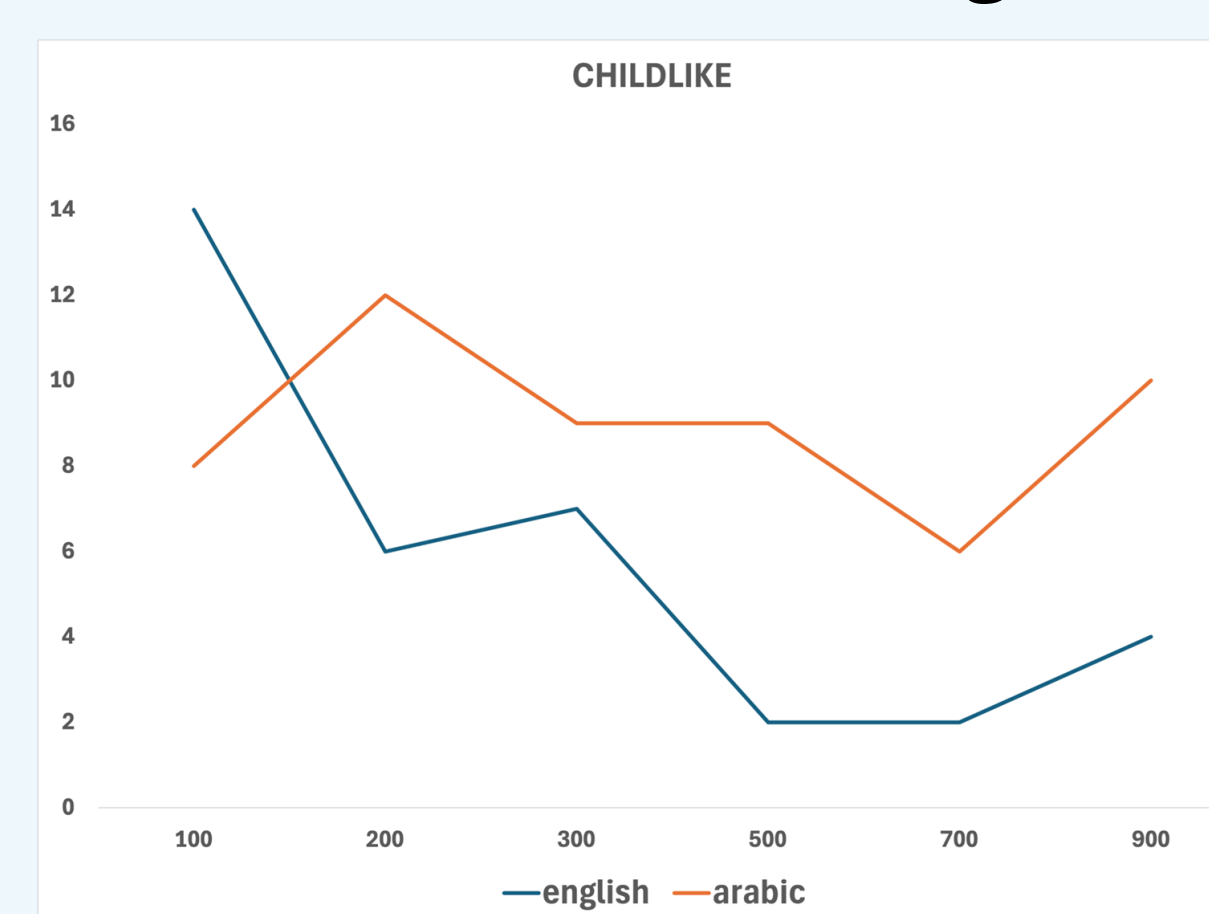
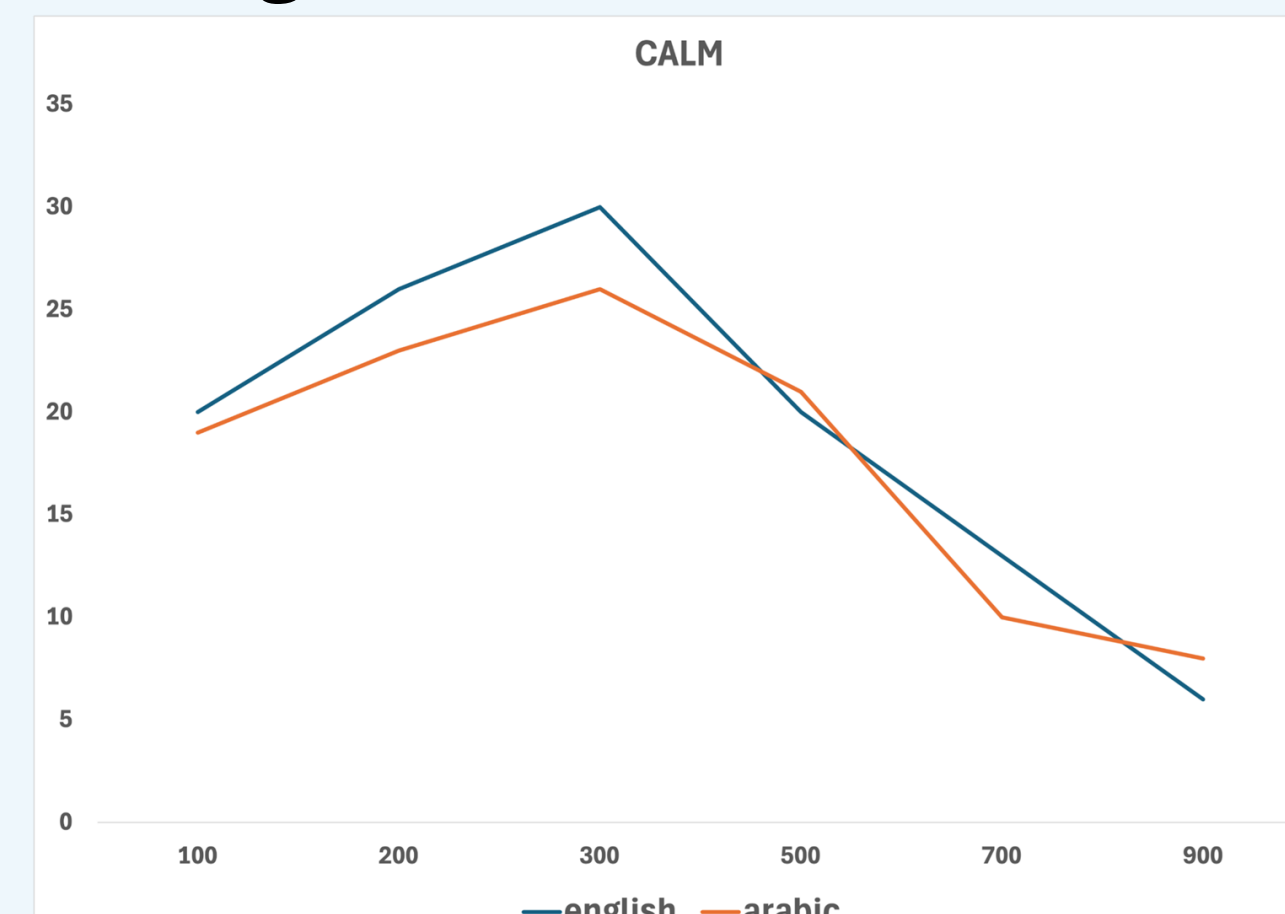
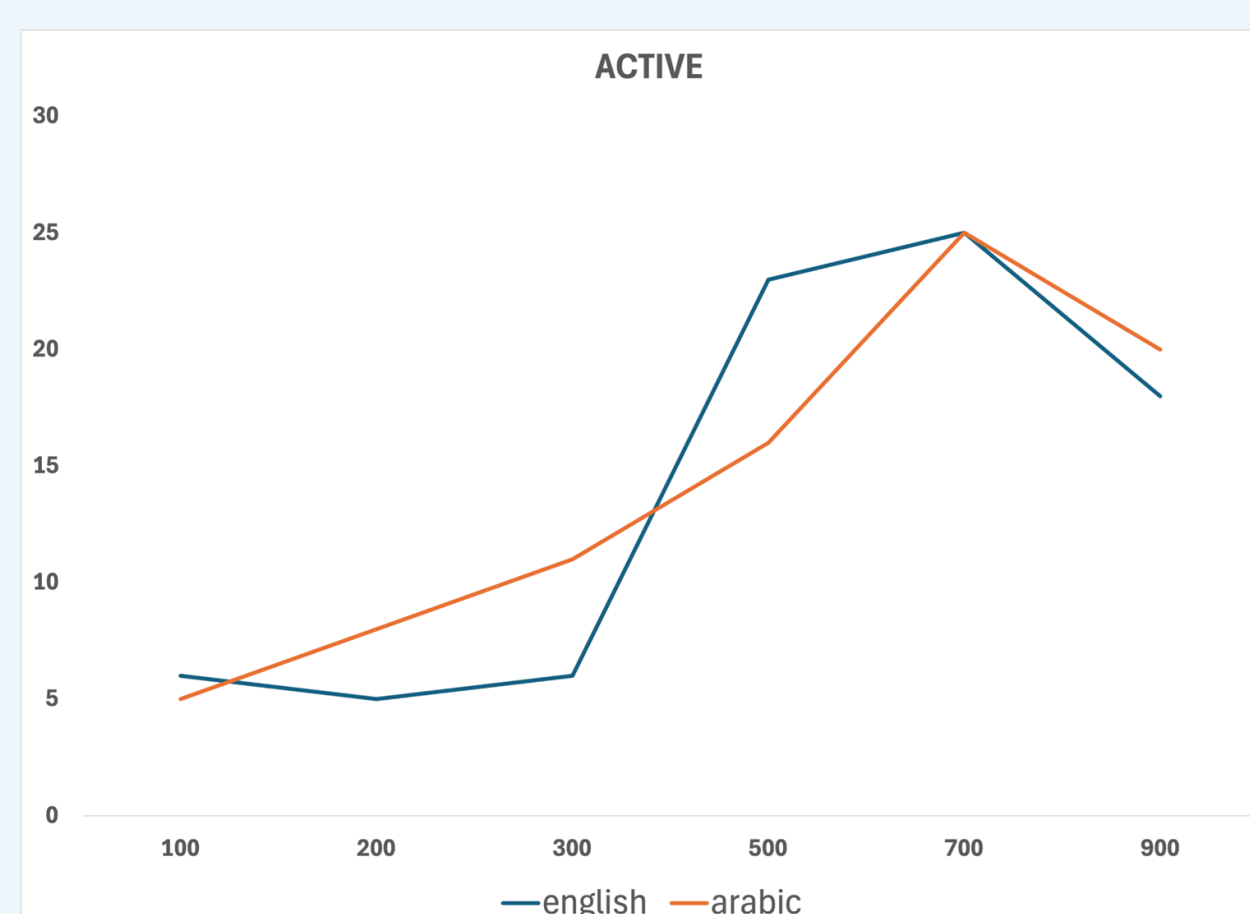
Analysis

- A General Linear Model was used to analyze the effects of writing system, font weight, and their interaction on adjective selection patterns.

100	Thin	خفيف جداً
200	Extra Light	رفيع جدا
300	Light	رفيع
500	Medium	متوسط
700	Bold	عريض
900	Black	أسود

RESULTS

- No significant main effect of **writing system** found, indicating similar overall response patterns across English and Arabic.
- Font weight** significantly influenced **adjective selection** ($p < .001$).
- Lighter weights** were consistently associated with descriptors like 'calm' across both writing systems ($p < .001$).
- Bolder weights** were consistently perceived as more 'active' across both writing systems ($p < .001$).
- Significant **interaction effects** were observed; e.g., bold Arabic text was rated more 'childlike' than bold English text.



CONCLUSIONS

- Font weight is a tool for expressive typography**, influencing perception across scripts.
- Parallels in weight perception (e.g., calm/active) suggest **shared associations between English & Arabic**.
- Unique interactions (e.g., bold Arabic 'childlike') reveal **script-specific effects of font weight**.
- Highlights need to **extend research beyond Latin** for globally relevant typographic understanding.

