Gender-neutral pronouns increase reading time during anaphor resolution: Evidence from Swedish

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Conclusions

This study investigated how the Swedish gender-neutral pronoun ‘hen’ affects anaphor resolution. Results indicate that processing ‘hen’ causes a slowing in reading in the pronoun spillover region, which may indicate a revised gender inference. Reading ‘hen’ differs from reading pronouns incongruent with the noun gender (The hairdresser... He) in it not leading to longer first-pass fixations of the pronoun or longer refixations of earlier parts of the sentence.

Method

• 109 undergraduates participated
• Reading behavior was recorded with an eye-tracker (SMI iView X Hi-Speed).
• Participants read 48 sentence pairs with a noun at the start of the first sentence and a pronoun at the start of the second sentence (see illustration to the right).
• Half of the nouns were job titles associated with a gender (e.g. hairdresser), the other half were not associated with a gender (e.g. colleague). Half of the pronouns were consistent with the gender associated with the role noun (e.g. hairdresser... She), and the other half were the gender-neutral pronoun ‘hen’.

Results

1. No evidence was found for longer first-pass fixations on ‘hen’ compared to gendered pronouns (BF = 0.43)
2. Evidence was found for a longer dwell time on the words following ‘hen’ compared to words following a gendered pronoun (BF = 555). See illustration to the right.
3. No evidence was found for longer refixations of the noun region after encountering ‘hen’ in comparison with gendered pronouns (BF = 1.09).

References