



Prosodic Analysis of the Production of They/Them Pronouns

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Introduction

- Prosody refers to the relative prominence within an utterance, including fluency, stress, and rhythm. ^{5, 8-9}
- Prosody can convey meaning (ex. emphasizing new and important information) and serve as a indication of processing ease. ^{1, 5}
- Pronouns typically have a low level of prominence in an utterance, as they often refer to information that has already been introduced.¹
- Prosodic analysis has the potential to provide insight into the production processes associated with and the fluency with singular they as a personal pronoun (referred to as singular they for brevity), compared to plural they and binary personal pronouns.¹

Methods

Participants and Data

- In spring 2023, Dr. Arnold conducted a larger interview experiment that included a pronoun production task
- In this study, the data from the production task was used to conduct prosodic analysis
- Participants included 59 people from the Chapel Hill

Measures

- Two types of measures were used to compare the prosody of singular they and binary pronouns (he, she), and singular they and plural they
- **Perceptual Prominence**
 - Four raters evaluated the perceived emphasis/prominence of the pronouns in the sentences uttered during the production task
 - Raters were trained with a scale of 1 – 3.5 (with 1 representing a completely destressed pronoun and 3.5 representing an exceptionally emphatic pronoun)
- **Acoustic Prominence**
 - Measures: duration, intensity, pitch
 - Analyses of these measures were conducted in Praat

Results

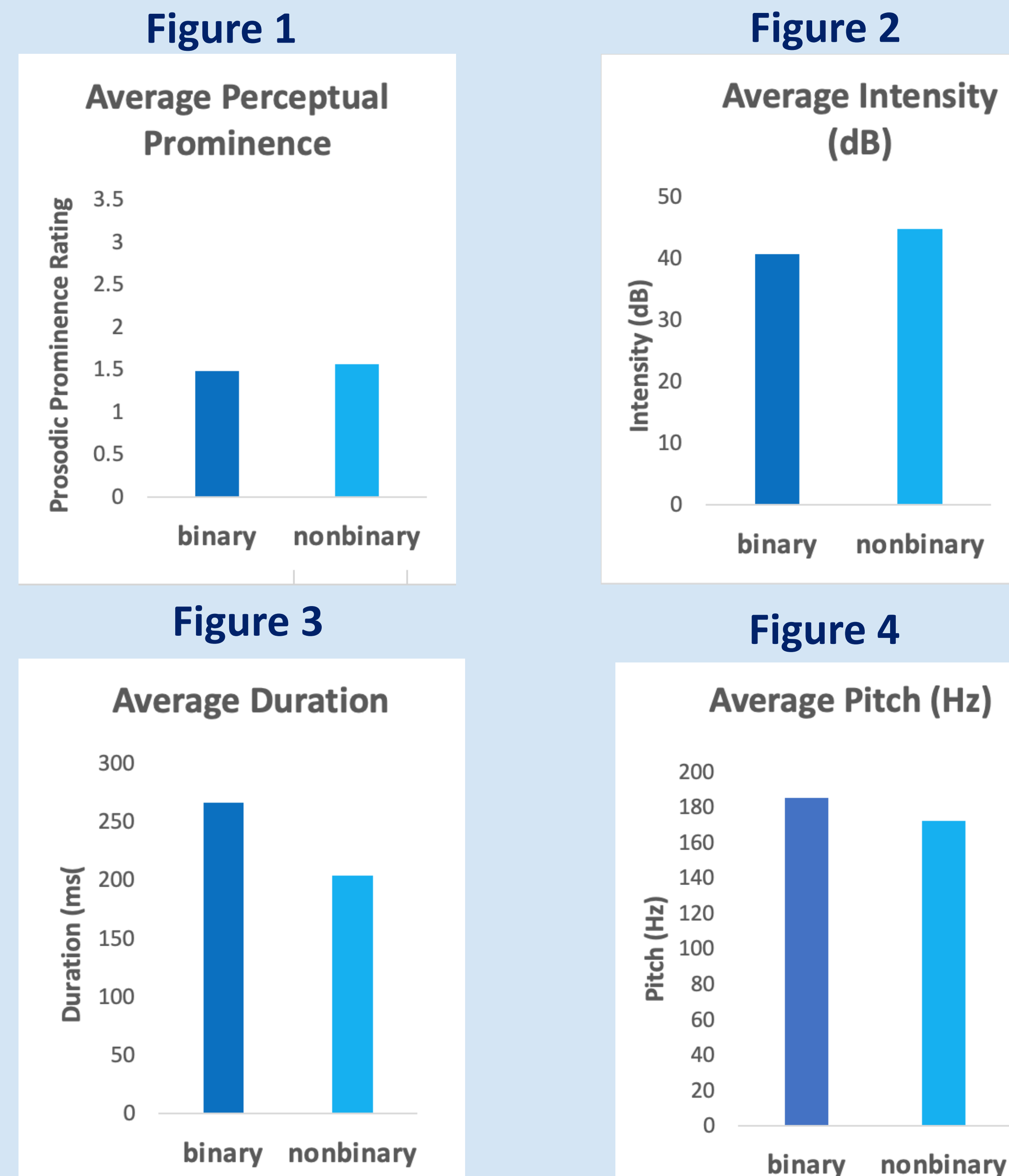


Figure 1-4: Perceptual Prominence, Intensity, Duration, Pitch for the binary pronouns (he, she) and nonbinary pronouns (they)

Singular they vs. Binary Pronouns (he, she)

- **Perceptual Prominence:** singular they was rated with a slightly higher level of perceptual prominence, but it was a significant difference
- **Intensity:** singular they had a higher average intensity than the binary pronouns
- **Duration:** the binary pronouns had a higher average duration than singular they
- **Pitch:** binary pronouns had a higher average pitch than singular they

Singular they vs. Plural they

- There were no significant differences across any of the perceptual and acoustic prominence measures

Discussion

- Results indicated a limited and inconsistent prosodic difference between singular they and binary pronouns, and no significant differences between singular they and plural they
- It's possible that differences between singular they and binary pronouns are due to the word differences

Future Directions

- The majority of participants overall had either reported some experience or a relatively high level of experience with singular they as a personal pronoun during the larger interview study
- It would potentially be interesting to run similar analyses with participants that had either an overall lower level of experience with singular they as a personal pronoun or a larger range of experience with singular they as a personal pronoun

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