

Personae and Stereotype in Scalar Implicature

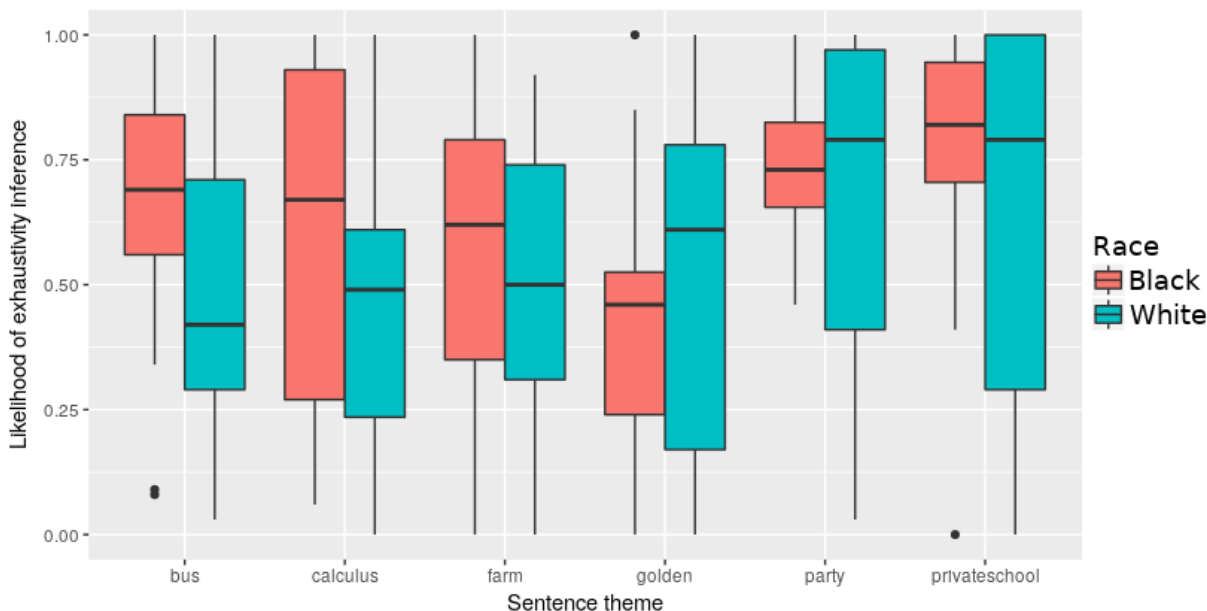
Racial bias impacts cognitive and linguistic processing. Activating racial stereotypes modifies how people remember black faces and interpret ambiguous images (Eberhardt et al., 2004; Correll et al., 2002). Similarly, racialized linguistic prejudice impacts how credible juries find testimony from black witnesses (Rickford & King, 2016). In this study, we investigate how these racial biases impact scalar implicature and the willingness of participants to make inferences about different racial groups. Our results show participants make scalar inferences at different rates for black names than they do for white names.

40 American English speakers recruited via Amazon Mechanical Turk completed the study and presented with two practice and six critical trials. Half of the critical trials contained stereotypically black names and half contained stereotypically white names. A pretest confirmed the names were perceived as expected. Each trial consisted of a **bolded** sentence, followed on a separate line by an *italicized* sentence. Participants were asked “How likely is it that the speaker meant to suggest [the italicized sentence]” in uttering the bolded sentence and to then provide their response on a slider with “very unlikely” on the left and “very likely” on the right. Bolded sentences included a weak scalar item [e.g. *some* in (1)a], and the italicized sentence expressed the exhaustive inference of that sentence [e.g. (1)c].

Our results show that participants more likely to make scalar implicatures (see Degen, 2015) when doing so is in line with racial stereotypes. We constructed two mixed effect linear models one with race as a fixed effect and one without; item was a random effect in both. The model with race as a fixed effect was significantly better than the model without [$\chi^2(1) = 4.009, p = 0.0453$]. Across examples, exhaustivity inferences were made most strongly when doing so reinforced controlling images (Hill-Collins, 2004). For example, when presented with sentences (1)a-b participants said that (1)c was more likely for Jake than it was for Marquis. Similarly, in (2), participants gave more credence to the judgments and abilities of White subjects, rating a calculus problem as more likely to be solvable if DeShawn thinks it is hard than if Tanner thinks it is hard.

These results have important implications for the role of pragmatics in understanding epistemic injustice (Fricker, 2007). Statements with the same illocutionary force are likely to be understood differently based on perceived race leading to the misconstrual of statements by racialized speakers. For example, teachers may be more willing to accommodate white students who complain about the difficulty of homework assignments than black students not based on overt statements but based upon their pragmatic reasoning based in and reinforcing racial bias about the intellectual abilities of students. We are in the process of collecting more data to investigate the effect of gender and event stereotypicality.

- (1) a. Marquis sent some of his kids to private school.
b. Jake sent some of his kids to private school.
c. Marquis/Jake sent some of his kids to private school.
- (2) a. The final assignment in DeShawn's calculus class is hard.
b. The final assignment in Tanner's calculus class is hard.
c. The final assignment in DeShawn's/Tanner's calculus class is not impossible to solve.



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