Does the Reported Speaker's Socio-linguistic Background Modulate Access to Word Meaning in Silent Reading of Direct versus Indirect Speech?

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Successful speech communication depends on accurate inferences of speaker-intended meaning (Pickering & Garrod, 2004). Such inferences become a challenge when words have different preferred meanings in different varieties of a language (e.g., *"bonnet"* typically refers to a car part in British English but a type of hat in American English). To resolve such semantic ambiguity in speech perception, listeners use the speaker's accent (either British or American) to access the intended meaning of ambiguous words (Cai et al., 2017). Recent research shows that characteristics of a speaker's voice are also represented in inner speech during silent reading (Alexander & Nygaard, 2008; Yao & Scheepers, 2011). Can silent readers resolve meaning ambiguity via speaker-specific inner speech in silent reading? The present study addresses this question by examining 1) whether the prior knowledge of a reported speaker's socio-linguistic background influences word-meaning retrieval during silent reading, and 2) whether this ambiguity resolution is facilitated by increased inner speech in silent reading of direct rather than indirect speech (Yao & Scheepers, 2011).

48 British and 45 American participants (aged 18-35) who correctly identified at least 80% of the public figures used in our stimuli were included. They then silently read and judged the sensibility of 24 written stories (+12 nonsensical fillers) in binary yes-no choices. Each story contained a direct or indirect fictional quotation by a well-known British or American public figure, that was counterbalanced to activate either the British or American dominant meaning of an ambiguous target word. This dominant meaning would either be congruent (e.g. *push a <u>trolley</u>*) or incongruent (e.g. *board a <u>trolley</u>*) with the socio-linguistic background of the reported speaker (e.g. *Adele*).

GLMM of reading times for quotations showed a significant three-way interaction between Reporting Style (Direct, Indirect), Celebrity Nationality (British, American) and Word Meaning (British, American) in both the British (b=75.25, t=7.26, p<.001) and American (b=132.16., t=7.26, p<.001) samples. Participants were faster when reading quotations with a word meaning matching their own socio-linguistic background, regardless of speaker nationality. Importantly, this socio-linguistic matching effect was significantly larger for direct than indirect speech in both the British and American sample. No effect on sensibility judgements was found. Our results suggest that readers' own socio-linguistic background may influence word meaning retrieval, particularly when the word is reported in direct speech. This socio-linguistic matching effect may be driven by readers' own dialectic identity (Cai et al., 2017), guided by regional accents of their inner speech (Filik & Barber, 2011) that may be particularly salient in silent reading of direct speech (Yao & Scheepers, 2011). These findings did not support our hypothesis - dialectic identities of reported speakers appeared to be weak, which may be influenced by individual differences in celebrity/public figure knowledge and/or the ability to generate inner speech in a different accent.

Example Stimuli:

David Attenborough **(British speaker)** / Mark Zuckerberg **(American speaker)** had returned home after meeting with his sister and her daughter at the exclusive sushi restaurant. While recounting a tale of the events that had happened earlier,

[Direct Speech - British meaning] he said: “The girl failed her exam and was **gutted**.”
[Indirect Speech - British meaning] he said that the girl failed her exam and was **gutted**.
[Direct Speech - American meaning] he said: “The fish were delivered to the restaurant and immediately **gutted**.”
[Indirect Speech - American meaning] he said that the fish were delivered to the restaurant and immediately **gutted**.

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