

IMPERSONATION IN FORENSIC CASEWORK

CASE OF TOMMY SHERIDAN

Elizabeth McClelland
Forensic Voice & Speech Analyst, UK
earsemc@gmail.com

Impersonation in forensic voice analysis casework is a particular category of voice disguise in which the aim of the impersonator is to convince their audience that they are listening to the voice of a specific individual. In conventional voice disguise, the aim of the speaker is primarily to obscure his own vocal identity. In doing so, he may choose to give an impression of a certain accent, emotional state or persona.

Previous studies (Markham, 1996, Schlichting and Sullivan, 1997, Zetterholm, 2007 and Mathon and de Abreu, 2007) suggest that the strategies used by professional and amateur impersonators may be highly relevant to casework scenarios in which impersonation is suspected. It is clearly crucial for forensic voice analysts to establish which areas of a person's voice and speech patterns carry most speaker-specific information and which elements contribute most to disguise. Of more general theoretical interest is the question of the flexibility of the human speaking apparatus and, in particular, how far can a speaker truly replicate the voice and speech patterns of another?

Research by Zetterholm (2007) indicates that impersonators (professional and amateur) focus on features in their target voice that they perceive to be most compelling in conveying speaker-specific information for that particular speaker. The features selected will vary depending on the individual phonetic and linguistic characteristics of the voices being imitated. This study aims to place Zetterholm's findings within a forensic casework context.

A comparison was made between the authentic voice of a Scottish politician called Tommy Sheridan, the voice in an evidential recording in which Sheridan alleged he had been impersonated and imitations of his voice performed by a professional comedian. The base accent of the comedian displayed many of the same local pronunciation features that were observed in the speech of Sheridan.

Salient and potentially speaker-specific features of the voice and speech patterns of the Sheridan were mapped against comparable features in the impersonations of his voice and the questioned voice in the evidential recording in order to assess how far these features corresponded in all three recordings.

Vowel and consonant pronunciations and measurements of pitch were found to be within a range that was consistent with the voice of Sheridan, the questioned voice and that of the impersonator all having originated from the same speaker.

Whereas certain characteristics of rhythm, pitch movement, vowel quality and language use in Sheridan's voice were exaggerated by the impersonator, they tended not to be realised systematically. In contrast, comparison of these features in the authentic Sheridan sample against the questioned voice in the evidential recording revealed a high level of similarity, providing evidence that the speech in these two samples originated from the same speaker.

The results of the study indicated that:

- When segmental features and pitch fail to distinguish between voices in samples, lack of stability in the realisation of supra-segmental features can be a powerful indicator of the presence of voice disguise
- Even when the true accent of a professional impersonator is similar to that of his target speaker, consistent replication of salient prosodic features in the target voice is challenging.
- Prosodic and stylistic aspects of Sheridan's voice were selected by the impersonator as more powerful than segmental information for capturing his vocal identity. These features were also the most productive for detection of authenticity/falsity.

References

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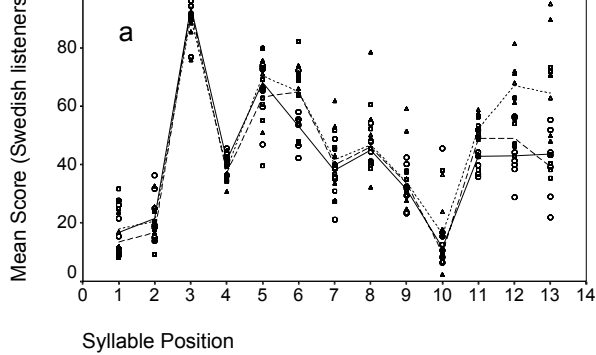
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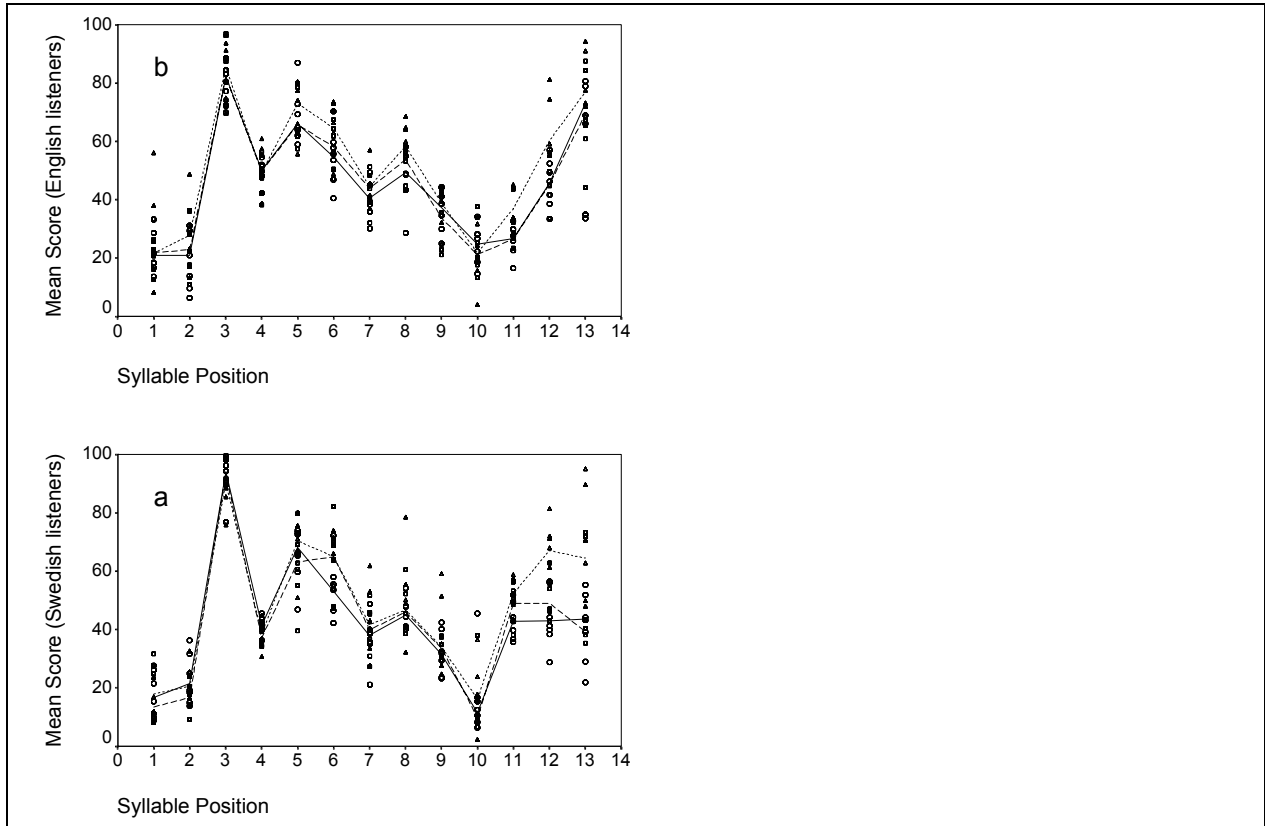


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References

Names of authors in alphabetical order. References are written in Arial 10 pt on 13 pt, left justified, 2 pt after. The first row has a hanging indent of 6 mm.

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