

Norwegian dialect identification: is prosody enough?

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Abstract

Conventional wisdom dictates that Norwegians primarily use prosodic cues to place dialects into regions (e.g., (Hognestad, 2008)). Earlier work has monotonized intonation and shown that loss of prosodic information obfuscates correct dialectal classification (Gooskens, 2005). However, to the authors' knowledge, no attempt has been made to test the inverse: retaining only the prosodic information in a dialect classification task. Given that the actual hypothesis afforded by conventional wisdom is that prosody is the main contributor to regional dialect placement, the authors believe it to be of paramount importance to confront this hypothesis directly with empirical evidence.

This paper reports results from a pilot of a study implementing such a direct test. In our experiment, we low pass filtered audio of spontaneous Norwegian speech at 400Hz to remove non-prosodic information. Participants were asked to classify the audio into four dialect regions and provided their responses voluntarily through an online form. Analysis of the 25 responses received indicate that Norwegians are highly accurate (cumulative accuracy of 95.65%) at dialect identification when all audio queues are present. When presented with purely prosodic information, the accuracy drops to 50.33%. Even with the reduced performance, this accuracy is well above chance levels (25%), showing that prosody is a strong predictor of dialects for Norwegians.

As this work reports the result from a pilot, we are currently running a more expansive survey. For those interested in participating it can be accessed at <https://nettskjema.no/a/dialekter> (native Norwegians only).

References

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