

Study 2. Parts of Speech

- **Agrammatism** is an acquired deficit of morphosyntactic production.
- The challenge is to quantify Part of Speech (POS) production in connected speech.
- We built an NLP tool that automatically labels connected speech and provides the POS for each word produced.



Analyzing Morphosyntax

52 patients with PPA: 19 with nfvPPA, 18 with lvPPA and 15 with svPPA.

content words: proportion of *nouns, verbs, adjectives, and adverbs*.

function words: proportion of

- *conjunctions*, e.g., and, or, and but,
- *prepositions*, e.g., in, and of,
- *determiners, predeterminers*, e.g., the, a/an, both,
- *pronouns* such as he/she/it and wh- pronouns, such as what, who, whom,
- *modal verbs*, e.g., can, should, will,
- *possessive ending* ('s),
- *adverbial particles*, e.g., about, off, up, infinitival *to*, as in *to do*.

ratio of nouns and verbs with other POS: e.g., *Noun / Verb ratio, Noun / Adjective ratio, Verb / Pronoun ratio, and Verb / Preposition ratio*.

