CHDV 23010. WIN 2021. WK1

SAFFRAN 2020 CHI DEV PERSPECTIVES

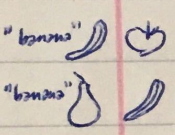
23 DEC 20

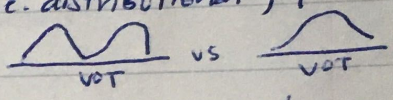
FOCUS: SL in language

SL sensitivity for: * detecting words in running speech w/ both forward & backward transitional probability → generate candidate forms for mapping to meaning. tupalodimopemetuye

* find non-adjacent dependencies $A X_1 B$ $A X_2 B$ ....

* discriminating relevant contrasts (i.e. distributional) & consistencies (cross-situational)





* detecting co-occurrence patterns → can be used w/ lexical categories (i.e. abstract grammatical knowledge)

{the, a} → {dog, flowers}
{pretty}

OPEN Qs: nature of underlying mechanisms, neural implementation, domain specificity, etc

MOTIVE FOR SL? * communicative engagement (though SL also works in non-communicative sits)

* uncertainty reduction → link to more active/agentive learning (sampling/selection)

* setting up predictions & updating them accordingly

CHALLENGES * More ecologically valid stims/paradigms

* Learning across multiple levels

* Role of learner sampling/selection

What methodological limitations do we need to break past to expand theory in this way? How far can computational modeling take us?