Anaphora Resolution in healthy bilingual ageing: Evidence from the Visual World Paradigm

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Introduction

Anaphora Resolution

In cases of language attrition (due to bilingualism) or cognitive decline (in healthy ageing), anaphora resolution may be affected.

Methods

Generic Measures

Working Memory: ‘syntactic-interference task’

Sentence-Picture-Matching

“The lady washes the man” and Word Recall

(4 consecutive words)

Updating: ‘two-back task’

Numerous appear for 600 msecs followed by block page which lasts 2500 msecs

Perceptual processing & Shifting: ‘local-global task’

(modeled after St Clair-Thompson, 2005)

Now, reverse the test (local figure).

Now, alternate between global and local condition by yourselves.

Visual world paradigm

Word Order (SVO vs. Oc/WS) & type of anaphor (aflos vs. o idhios)

Participants

- 32 Young L1 (Mean Age: 24.3; Range: 18-34 yrs)
- 32 Old L1 (Mean Age: 65.4; 6.3; Range: 54-82 yrs)
- 32 OlderL1 (Mean Age: 65.2; 6.6; Range: 55-85 yrs)

L2 is minority, low prestige, oral language

- Old L1 & OlderL1 participants matched in Years of Education (Mean: 11.3; 4.2; Range: 6-18 yrs)

Discussion

- No effects of Bilingualism on cognitive measures possibly due to matching in education levels.
- Bilingualism and age cumulative effects on language measures: a) on response times for marked word-order, b) on non-target responses
- Age effects on sensitivity to anaphor type: Young L1 look more at Subject in ‘idhios’ (The Same) than in ‘aflos’ (He), while older participants do not differentiate in the same TW
- Differences between OlderL1 and OlderL2L in language performance but not in cognitive tasks may be due to a) protective effects of bilingualism on non-verbal cognition despite low sociolinguistic and non-literate variables for Aromani and b) the autonomous status of language in cognition

References