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Introduction

When mediated by both lexical and phonological decoding (Coslett et al., 1987), oral repetition in Transcortical Sensory Aphasia (TSA) has been shown to display linguistically informed altering of purposefully grammatically incorrect repetition stimuli (Whitaker, 1976; Davis et al., 1978; Berndt et al., 1987; Berthier et al., 1991; Berthier, 1995; Berthier, 2001), with a tendency to correct grammatical errors during repetition in spite of the absence of semantic comprehension. The present TSA single-case study, conducted in Italian, investigated the processing of linguistic Gender agreement errors through a series of oral repetition tasks, with the purpose of: (i) investigating whether morphosyntactic and semantic abilities can be independently spared; and (ii) investigating whether Gender agreement errors are among the linguistic facts that sensitivity is retained towards, and if so, how.

Methods

The patient (TST) was a 78 y.o. female native speaker of Italian diagnosed as TSA, who sustained an ischemic lesion in the white matter in the left temporo-parietal and insular area. TST was administered 8 oral repetition tasks, each containing Gender agreement errors that occurred in either phrase condition (i.e. 'definite article + noun') or sentence condition (i.e. 'subject + nominal predicate'). These different conditions were formulated with the purpose of appreciating possible differences in the processing of the Gender feature in two different syntactic environments. A number of additional variables was introduced: animate/inanimate noun referents; Gender morphological (un)informativeness; common noun/proper name status; singular/plural and feminine/masculine nouns.

Results

During repetition, the changes applied by the patient were almost exclusively corrective (82/96) and mostly followed a left-to-right strategy (75/82), meaning the Gender of words that preceded determined the Gender of words that followed in the phrase or sentence. Among the introduced variables, those that gave significant effects were: animate/inanimate noun referents and phrase/sentence agreement. Gender morphological (un)informativeness gave no significant effects, and neither did common noun/proper name status, singular/plural and feminine/masculine nouns (see Table 1).

Conclusions

Findings indicate that: (i) in TSA, morphosyntactic and semantic abilities can be independently spared; (ii) in Italian, Gender could be accessed for the purposes of agreement only in the case of animate nouns. This suggests that, Gender-wise, inflection on animate nouns might be qualitatively different from that of inanimate nouns, whose inflectional suffixes and related targets (i.e. definite articles referring to them) were never modified by the patient:

while the morphology of animate nouns carries a Gender value, the morphology of inanimate nouns might be an expression of morphological Class only. In this study, the morphological realization of Gender sat on determiners, adjectives, and on animate nouns. Inanimate nouns did not seem to bear the morphological realization of Gender on themselves.

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Table 1. Corrective changes across tasks 1-8

Number of corrective changes	
Task 1 <i>*la ragazzo</i> <i>*theF boyM</i> (60 items)	23
Task 2 <i>*la biglietto</i> <i>*theF ticketM</i> (40 items)	0
Task 3 <i>*la bicchiere</i> <i>*theF glassM</i> (40 items)	0
Task 4 <i>*il ragazzo è alta</i> <i>*theM boyM is tallF</i> (60 items)	16
Task 5 <i>*il biglietto è vecchia</i> <i>*theM ticketM is oldF</i> (60 items)	17
Task 6 <i>*il bicchiere è piccola</i> <i>*theM glassM is smallF</i> (60 items)	14
Task 7 <i>*Francesco è alta</i> <i>*FrancescoM is tallF</i> (40 items)	9
Task 8 <i>*Davide è bella</i> <i>*DavideM is beautifulF</i> (30 items)	3