

Academy of Aphasia 2010

Noun-Verb Distinction as a Consequence of Antisymmetry: Evidence from Primary Progressive Aphasia

Ludovico Franco^{a,*}, Elisa Zampieri^a, Martina Garzon^b, Francesca Meneghello^b, Anna Cardinaletti^a, Carlo Semenza^c

^a University Ca' Foscari of Venice

^b IRCCS Ospedale S. Camillo, Lido di Venezia, Italy

^c Department of Neuroscienze, Università di Padova

In this work we present a case of primary progressive aphasia (PPA), whose problems with verb syntax seem to support the idea of verbs as a closed class (Kayne, 2009). Previous works on PPA reported either a greater impairment for verbs than nouns, or no evidence of reduced verb production (Hillis et al., 2006; Graham, Patterson, Hodges, 2004). PPA patients are also reported to use a vocabulary that is less specific than normal speakers, with a larger use of light-verbs (Graham & Rochon, 2007). BB is a 59-year-old right-handed Italian woman with 17 years of education. Standard tests (BADA, AAT) showed no difference in her production of nouns vs. verbs. A sample of her spontaneous speech of approximately 4,000 utterances shows that: (i) the progressive erosion of the lexicon left functional verbs almost intact. BB had no hesitation with volitional, modal, and causative verbs, which we assume to occur in positions external to the verb phrase ([FPz[FPy[FPx[VP]]]]) (Cinque, 2004, Cardinaletti & Shlonsky, 2004). (ii) intransitive (unergative) and transitive verbs were quite systematically substituted by a “light-verb + N” form (e.g. “fare una spiegazione” – “to do an explanation” instead of “spiegare” – “to explain”). In conclusion, from a quantitative viewpoint, a different ratio of performance between functional verbs (preserved) and lexical verbs (impaired) was detected. From a theoretical viewpoint, the fact that BB’s anomia selectively spares functional verbs, including light verbs, and leads to the surface’s retrieval of Hale & Keyser’s (2002) L-syntax could be considered as evidence that the noun-verb distinction may be understood as a consequence of antisymmetry: verbs may be seen as a closed class (all functional, all light), while nouns are the only open class (Kayne, 2009). The immediate retrieval of a light verb would be forced by anomia: BB uses the otherwise silent light verb to which nouns incorporate.

References

- Cardinaletti, A., & Shlonsky, U. (2004). Clitic Positions and Restructuring in Italian. *Linguistic Inquiry*, 35, 519-557.
- Cinque, G. (2004) Restructuring and functional structure. In A. Belletti (ed.), *Structures and Beyond. The Cartography of Syntactic Structures*, (pp 132-191) Oxford, UK: Oxford University Press.
- Graham, N., Patterson, K., & Hodges, J. (2004). When more yields less: speaking and writing deficits in nonfluent progressive aphasia. *Neurocase*, 10, 141–155.
- Graham, N., & Rochon E. (2007). Verb production in sentences by patients with nonfluent progressive aphasia. *Brain and Language*, 103, 69-70.

* Corresponding author.

E-mail address: franco.ludovico@gmail.com.

Hale, K., & Keyser, S.J. (2002). *Prolegomenon to a Theory of Argument Structure*, Cambridge, MA: MIT Press.

Hillis, A., Heidler-Gary, J., Newhart, M., Chang, S., Ken, L., & Bak, T. (2006). Naming and comprehension in primary progressive aphasia: the influence of grammatical word class. *Aphasiology*, 20, 246–256.

Kayne, R. (2009). Antisymmetry and the Lexicon, *Linguistic Variation Yearbook*, 8, 1-31