Contribution ID: **57** Type: **Poster**

The interference of animacy in the processing of morphological number

Thursday, June 22, 2017 3:20 PM (2h 10m)

Morphological Number is widespread throughout natural languages and it is mostly marked on nouns denoting animate entities (Haspelmath, 2013). This trend may mirror the salience of number and animacy, whose conceiving relies on a core knowledge system, early available in development and phylogenetically ancient, dedicated to representing significant aspects of the environment such as numerosity or motion (Spelke 2000). In three experiments, we explored the morphological Number encoding with respect to the animacy of nouns and its interaction with linguistic as well as visual cues related to motion.

In all experiments, participants were presented with phrases made up of a demonstrative and of a noun which missed the inflectional morpheme. The task required to insert it by pressing a button for –o (masculine singular) or another one for -i (masculine plural).The conditions were: *Number* (singular vs. plural) and *Animacynoun*, (40 animate nouns vs. 40 inanimate nouns). In experiment 1 no prime was used. In experiments 2 and 3, trials were preceded by a prime (*Motion* condition), that was a verb denoting either movement (animate) or stillness (inanimate) in experiment 2, and a point light display giving the impression of a human either walking (animate) or rotating (inanimate) in experiment 3.

Response times were analysed by means of linear mixed effect models. *Animacynoun* was significant in all experiments; *Number* in experiment 1 and 3; *Motion* in experiment 3. A trend for *AnimacynounxMotion* is observed in experiment 2, but it was significant only in experiment 3, suggesting that semantic and visual features related to animacy interfere with Number inflection. *AnimacynounxNumber* were statistically significant in all experiments, showing that it is easier to inflect animate nouns for Number.
These data suggest that Number morphology may reflect the salience of animacy in counting, and more generally that morphology easily expresses core cognitive information.

Primary authors: ZANINI, Chiara (Departement of Neuroscience, University of Padova); FRANZON, Francesca (Department of Neuroscience, University of Padova)

Co-authors: GIOMO, Dunia (Department of Neuroscience, University of Padova); PERESSOTTI, Francesca (Department of Developmental Psychology and Socialization, University of Padova); RUGANI, Rosa (Department of General Psychology, University of Padova)

Presenter: FRANZON, Francesca (Department of Neuroscience, University of Padova)

Session Classification: Poster 1

Track Classification: Freely Contributed Paper