Contribution ID: **41** Type: **not specified**

Morpho-lexical and morpho-orthographic components in reading acquisition: Evidence from a masked priming study

Introduction.
The role of morphology in reading acquisition has been proved in different languages, but it is still unclear which features of linguistic input lead to a morphemically driven processing of complex words. Data on adults suggested that early in processing, morphological segmentation proceeds irrespectively of semantic transparency (morpho-orthographic decomposition: see Davis & Rastle, 2010). Data from young readers are much less clear. Quémart et al. (2011) presented 3rd to 7th graders with a masked primed LDT and found the classic, adult-like pattern of results. On the contrary, testing Hebrew children, Schiff et al. (2012) found that 4th graders did not show any morpho-orthographic effect, which was instead close to significance with 7th graders. In English, morpho-orthographic effects did not emerge in either 3rd or 5th graders, despite clear morpho-lexical effects (Beyersmann et al., 2012). Language differences in orthography-to-phonology mapping rules, and individual differences in language proficiency (Andrews & Lo, 2013; Beyersmann et al., 2015) might explain inconsistency of results. This work studied morpho-orthographic effect in Italian, a shallow orthography language, and took into account the role of reading skills on morphemic processing, considering children attending primary and secondary school.

Method.
Participants. 159 typically developing Italian children attending to 3rd-5th-7th grades (51% M).
Stimuli. 120 prime-target related pairs were selected, 40 for each of the following conditions: a) morphological (e.g., farinoso-FARINA, mealy-meal); b) pseudoderivation (e.g., violenza-VIOLA, violence-violet); c) orthographic control (e.g., costume-COSTO, costume-cost). Each target could be preceded by either a related or an unrelated word (e.g., timoroso-FARINA). Target words were matched for Child word frequency, length in letters and orthographic neighbourhood size.
Procedure. Participants were asked to perform a masked primed lexical decision task, with prime-target SOA of 60 ms. E-Prime 2.0 was used to collect data.

Results and discussion.
Mixed-effects models carried out on RTs showed that, for 3rd and 5th graders, priming only emerged in the truly morphological condition, whereas no sign of facilitation was found in either the pseudoderivation or in the orthographic condition. However, 7th graders showed a pattern of results similar to that found in adults, with a facilitation in the case of pseudoderived and derived primes.
Data are consistent with the hypothesis that, in the course of reading acquisition, form-meaning mapping is crucial to detect morphemic units, and that the morpho-orthographic parsing is a late mechanism, which develops only when a high level of reading skill is mastered, also in a transparent orthography.

Primary author: Prof. CREPALDI, Davide (SISSA)

Co-authors: Prof. TRAFICANTE, Daniela (Department of Psychology - Catholic University of Milan); Dr MARCO, Marelli (University of Gent)

Presenter: Prof. CREPALDI, Davide (SISSA)