Effect of phrases presentation (simultaneous vs. successive) on written subject-verb agreement in Grades 3 and 5: an on-line analysis.

Aline Frey[*1], Denis Alamargot[1], Marie-France Morin[2], Nathalie Chaves[1], and Séverine Maggio

[1]Laboratory Cognitions Humaine Artificielle (CHArt) – Université Paris-Est Créteil Val-de-Marne (UPEC) : EA4004 – Université de Paris-Est, F-94010, Creteil, France
[2]Chaire de Recherche sur l'Apprentissage de la Lecture et de l'Ecriture chez le jeune enfant (CREALEC) – University de Sherbrooke, Faculté d'éducation, Canada

Résumé

Following Alamargot et al. (2014), which shown an evolution the subject-verb agreement procedure with aging, the objective of this study was to further the processing involved in the verb inflection in noun (N1)-noun (N2)-verb (V) sentences by analyzing the effect of Working Memory encoding. The general assumption was that the effect of congruence (Singular-Plural - SP vs. Plural-Singular PS conditions), and specifically the asymmetry effect between N1 and N2 (SP > PS), would be higher if N1 and N2 would be encoded as a single unit in working memory (Gillespie & Pearlmutter, 2011). This interaction effect would be more pronounced in children in Grade 5, as compared to Grade 3, insofar as they would rely more on working memory to achieve verb inflection.
To that end, 40 children in Grade 3 and 34 children in Grade 5 had to complete, on a digitalizing tablet, verb inflection in N1N2V sentences, constructed in four conditions (N1 and N2 could be: singular/singular (SS) vs. plural/plural (PP) vs. singular/plural(SP) vs. plural/singular (PS)). The display of sentence were also manipulated. N1 and N2 were whether presented simultaneously or successively, enabling or not simultaneous encoding.
Preliminary findings showed that a simultaneous presentation of N1 and N2 enhances congruence and asymmetry effects in both age groups, supporting the hypothesis that attraction effects are due to a storing of N1 and N2 as a whole in Working Memory.

Mots-Clés: sentence production, subject, verb agreement, attraction effect, working memory

---

[*]Intervenant