Repetition of signs in French Belgian Sign Language (LSFB) and Flemish Sign Language (VGT)

Typology and Annotation protocol

Ingrid Notarrigo   Laurence Meurant
ingrid.notarrigo@unamur.be   laurence.meurant@unamur.be
Mieke Van Herreweghe   Myriam Vermeerbergen
mieke.vanherreweghe@ugent.be   myriam.vermeerbergen@kuleuven.be

Repetition was described in the nineties by a limited number of sign linguists: Vermeerbergen & De Vriendt (1994) looked at a small corpus of VGT data, Fisher & Janis (1990) analysed "verb sandwiches" in ASL and Pinsonneault (1994) "verb echos" in Quebec Sign Language. More recently the same phenomenon has been the focus of research in a growing number of signed languages, including American (Nunes and de Quadros 2008), Hong Kong (Sze 2008), Russian (Shamaro 2008), Polish (Flilipczak and Mostowski 2013), Jamaican (Cumberbatch 2013), Italian (Branchini & al. 2013), and French Sign Language (Risler 2014) and Sign Language of the Netherlands (Crasborn 2009). Other studies have investigated "reduplication" in ASL (Wilbur 2009), in Swedish (Börstell 2011) or in German Sign Language (Pfau & Steinbach 2006). Among the numerous works on repetition in spoken languages see Tannen (2007), Betz (2008), Hurch (2008) and Dovicchi (2011). Examples of cross-linguistic analyses of sign languages are Šarac et al. (2007) and Kimmelman (2014). However, to our knowledge, within sign linguistics, the phenomenon has not been studied from both a cross-genre and cross-linguistic perspective.

Therefore, we decided to analyze corpus data from different text genres and from two sign languages: LSFB and VGT. We first had to build an annotation protocol going back and forth between the literature and our own cross-linguistic data to analyse the use of repetitions from the more local realizations (at phrase and clause levels) to the broader ones (at discourse level). On the poster, this protocol will be explained in detail.

We established a typology of two formal categories:
- *Contiguous repetition* (XX): both Xs are (near-)contiguous (possibility of the insertion of a pause or a palm-up sign);
- *Non-Contiguous repetition* (XYXZ or X ABC X DEF X GHI…): the repeated components are separated by at least one sign.

Moreover, within the second category, we identified *framing repetitions* (XYX), i.e. the repeated components act as symmetrical "braces" around a central element made up of one sign to one or several clauses so that the repeated component closes the chunk the first one had begun.

We considered as a structure of repetition a sign and its repeated occurrences which are part of the same signing turn. We used a system of codes, brackets and numbers to annotate the

repetition structures on a unique tier in ELAN (based on Crible, Dumont, Grosman & Notarrigo 2015). This system allows extracting in Excel a visual layout of the arrangement of all repetition structures across a turn. We added a *part of speech* annotation on a first child tier (based on Johnston & Ferrara 2012), and we tagged the *functions* of repetition structures on a second child tier. We established a typology of functions according to linguistic domains (grammar, semantics and pragmatics).

Using this annotation protocol and the corpora recently collected for LSFB and VGT, we are now in the process of carrying out detailed analyses on narratives and conversations in both languages. This work is part of a broader project on (dis)fluency (Notarrigo, forthcoming).

References:

Blondel, Marion & David Le Gac. 2007. Entre parenthèses… Y a-t-il une intonation en LSF? Silexicales 5: 1-16.

Börstell, Carl. 2011. Revisiting Reduplication. Toward a description of reduplication in predicative signs in Swedish Sign Language, Master's Thesis, Stockholms University.

Branchini, Chiara, Carlo Cecchetto, Anna Cardinaletti, Caterina Donati, Carlo Geraci. 2013. WH-duplication in Italian Sign Language (LIS). Sign Language Linguistics 16: 157-188.

Bergman, Brita & Östen Dahl. 1994. Ideophones in Sign Language? The place of Reduplication in the Tense-Aspect system of Swedish Sign Language. In C. Bache, H. Basboll & C.E. Lindberg (eds.). Tense, Aspect and Action. Empirical and Theoretical Contributions to Language Typlogy. Mouton de Gruyter, 397-422.

Betz, Emma. 2008. Grammar and Interaction: Pivots in German Conversation. Amsterdam: Benjamins.

Crasborn, Onno, Els van der Kooij, Johan Ros & Helen de Hoop. 2009. Topic agreement in NGT (Sign Language of the Netherlands). The Linguistic Review 26: 355-370. Cumberbatch, Keren Marissa. 2013. A linguistic description of the language of the urban deaf in Jamaica.

Crible L., Dumont A., Grosman I., Notarrigo I. 2015. Annotation des marqueurs de fluence et diflsuence dans des corpus multilingues et multimodaux, natifs et non natifs. Version 1.0. Working paper. Université catholique de Louvain et Université de Namur.

Degand et al. (forthcoming). Fluency and disfluency markers. A multimodal contrastive perspective, ARC: 12/17-044, University of Louvain-La-Neuve: Belgium.

Dovicchi, Francesca. 2010. Costrutti-eco nell'italiano parlato. Da repetizione a cardinalità. Tübingen: Narr Francke Attempto Verlag.

Fischer, Susan & Janis Wynne. 1990. Verb Sandwiches in American Sign Language. In S. Prillwitz & T. Vollhaber (eds). Current Trends in European Sign Language Research. Hamburg: SIGNUM Verlag, 279-293.

Filipczak, Joanna. & Piotr Mostowski. 2013. Repetition in Polish Sign Language (PJM). Discourse – grammar – information structure? Poster presented at Theoretical Issues in Sign Language Research 11, London.

Hurch, Bernhard. 2008. GRAZ database on reduplication. Institute of Linguistics, Univ-Graz, url: http://reduplication.uni-graz.at/

Kimmelman, Vadim. 2014. Information Structure in Russian Sign Language and Sign Language of the Netherlands. PhD dissertation, University of Amsterdam.

Johnston, Trevor and Lindsay Ferrara. 2012. Lexicalization in Signed Languages: When is an Idiom not an Idiom? Selected Papers from UK-CLA Meetings, http://uk-cla.org.uk/proceedings, Vol 1: 229 – 248.

Notarrigo, Ingrid. Forthcoming. Les marqueurs de (dis)fluence en Langue des Signes de Belgique Francophone (LSFB), Doctoral dissertation, University of Namur: Belgium.

Nunes, Jairo & Ronice Müller de Quadros. 2008. Phonetically realized traces in American Sign Language and Brazilian Sign Language. Signs of the time: Selected papers from TISLR 2004, 177-190.

Pfau, Roland & Markus Steinbach. 2006. Pluralization in sign and in speech: A cross-modal typological study. In by Fr. Plank (ed). Linguistic Typology. Volume 10, Issue 2, 135–182.

Pinsonneault, Dominique. 1994. Verb echo in LSQ (Language des Signes Quebecoise). In M. Brennan & G.H. Turner (eds). Word order issues in sign language: Working papers (presented at a workshop held in Durham 18-22 September 1991). Durham: ISLA, 113-132.

Risler, Annie. 2014. Parenthèses et ruptures énonciatives en langue des signes française. Discours. Revue de linguistique, psycholinguistique et informatique.

Šarac, Ninoslava, Katharina Schalber, Tamara Alibašić & Ronnie Wilbur. 2007. Cross-linguistic comparison of interrogatives in Croatian, Austrian, and American Sign Languages. Visible variation: Comparative studies on sign language structure 188, 207.

Shamaro, Elena J. 2008. Dublirovanie predikata v diskurse russkogo žestovogo jazyka (Doubling of predicates in Russian Sign Language discourse). Term paper, Moscow State University.

Sze, Felix. 2008. Topic constructions in Hong Kong Sign Language. Doctoral dissertation, University of Bristol.

Tannen, Deborah. 2007. Talking voices. Repetition, Dialogue, and Imagery in Conversational Discourse. 2nd ed. Cambridge University Press.

Vermeerbergen, Myriam & Sera De Vriendt. 1994. The Repetition of Signs in Flemish Sign Language. In I. Ahlgren, B. Bergman & M. Brennan (eds). Perspectives on Sign Language Structure. Papers from the Fifth International Symposium on Sign Language Research. Durham: Durham, 201-214.

Wilbur, R. B. 2009. Productive reduplication in a fundamentally monosyllabic language. Language Sciences (Oxford, England), 31(2-3), 325–342. http://doi.org/10.1016/j.langsci.2008.12.017