ISCH COST Action IS1006 SignGram

STSM final report

Milan, July, 23 2012

Dear STSM coordinator,

This is to notify that the following STSM:

Beneficiary: Cecchetto Carlo, Universita' degli Studi di Milano-Bicocca, Dipartimento di Psicologia
Host: Steinbach Markus, Georg-August-Universität
Period: from 06/07/2012 to 22/07/2012 Place: Gottingen (Germany)
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started and finished in the expected dates.

The main purpose of my STSM was starting a project that aims at identifying tests of constituency that, modulo cross-linguistic differences that will require specific adaptations, may apply to various European sign languages. Since LIS and DGS are among the best studied sign languages of Europe, we started by discussing if (and how) canonical tests for constituency elaborated for spoken languages can be applied to LIS and DGS. These tests include:
Movement
Pro-form substitution
Ellipsis
Coordination

During various meetings with Prof. Steinbach we discussed various problematic aspects that a mechanical application of these tests to sign languages would arise. For example, splitting between a determiner and its restriction is common both in LIS and DGS and this somehow affects the way

the movement tests should be used. Distinguishing between pro-form substitution and ellipsis is not always straightforward, but some strategies have been identified. We also discussed the possible application of modality specific constituency tests, like Non-Manual-Marking spreading.

All in all, it appears that a crosslinguistic perspective is useful, because problems that arise in one sign language typically arise in the other as well and solutions identified for one language can be extended to the other, at least in some cases.

A second research topic that has been discussed is the creation of a comprehension test for LIS and DGS. In various meetings with Prof. Steinbach and Dr. Hosemann, I showed the preliminary version of a test for LIS based on picture matching. I got feedbacks on the type of sentences that should be included in such a test and we discussed possible problems with the images that we plan to use for the picture matching task. Finally in meetings with Dr. Hosemann, I was informed of recent experimental results on the processing of spatial verbs in DGS. By looking at ERP, the Gottingen lab could identify neural correlates of the PAM auxiliary and of ungrammatical forms of agreement that were artificially created. We reached the conclusion that the absence of PAM auxiliary in LIS might be the basis to run a parallel experiment in Bicocca, where artificially created sentences with PAM are confronted with the artificially created forms of agreement that have been studied in DGS.

All these three lines of research require further developments, which will take place both by long distance interactions and by future exchanges, possibly in the frame of COST.

As for publications, Prof. Steinbach and I are planning to write a paper on constituency tests in sign language and a draft will be available soon. The other two lines of research might lead to the creation of a comprehension test and to the planning an ERP experiment, depending on future development of the cooperation.

All the best,
Carlo Cecchetto