**Introduction**

- While we know from spoken languages research that temporal constructions can be expressed through a variety of syntactic strategies\(^1\) such as: a) subordination, b) juxtaposition or c) coordination\(^2\).
- Finding their equivalent in sign languages is often a challenge due to the absence of overt complementizers and other function words such as coordinators.

This study explores temporal constructions in LSF and compares it directly with Italian Sign language\(^3\) (LIS).

We show that LSF temporal clauses are very different from LIS baselines.

**Methodology**

- **Picture-Based elicitation**
  - Elicit the baselines for each strategy
  - No written language interaction
- **Syntactic and Semantic Survey**
  - Identify the core properties of each strategy
  - Based on scientific literature
- **Playback Method**
  - Allow to obtain positive and negative evidence
  - Allow cross-validation and generalization

### LIS baselines

- a. BOSS STOCK SELL AFTER, SECRETARY STAMP BUY
  - The secretary bought the stamps after the boss sold the stocks.'
- b. BOSS STOCK SELL NOT-YET/MUST\(^4\) BEFORE SECRETARY STAMP BUY
  - The secretary bought the stamps before the boss sold the stocks.'
- c. BOSS STOCK SELL, MOMENT PI/SAME, SECRETARY STAMP BUY
  - The secretary bought the stamps when the boss sold the stocks.'

From Aristodemo (2017)

### LSF baselines

- a. [lit. JEAN BUY FLOWER] \textit{AFTER} \textit{light} MARIE BUY VASE
  - ‘Jean bought flowers after Marie bought a vase.’
- b. [lit. JEAN BUY FLOWER] \textit{BEFORE} \textit{light} MARIE BUY VASE
  - ‘Jean bought flowers and before Marie bought a vase.’
- c. [lit. JEAN BUY FLOWER] \textit{SAME TIME} \textit{light} MARIE BUY VASE
  - ‘Jean bought flowers and at the same time Marie bought a vase.

**Data : Syntactic and semantic survey**

<table>
<thead>
<tr>
<th>Isolation</th>
<th>Inversion</th>
<th>Symmetric extraction</th>
<th>Extraction 1st clause</th>
<th>Extraction 2nd clause</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Juxtaposition</strong></td>
<td>✔</td>
<td># pragmatic</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Coordination</strong></td>
<td>X</td>
<td>Change Meaning</td>
<td>✔</td>
<td>X</td>
</tr>
<tr>
<td><strong>Subordination</strong></td>
<td>X</td>
<td>X</td>
<td>✔</td>
<td>X</td>
</tr>
</tbody>
</table>

**Typological perspective**

- In this paper we investigated the syntax of temporal constructions in French Sign Language, concluding that they involve an asymmetric coordination. Evidence for this analysis comes from morpho-phonological and syntactic properties.
- We observed that temporal constructions in LSF display the typical non-manual marking of coordinated structures, that inversion of the two clauses provokes a change of meaning and that wh-extraction is only possible from both clauses at the same time.
- We compared our results to those of a previous study on temporal clauses in Italian Sign Language (LIS) concluding that, despite a prima facie similarity between LIS and LSF constructions, a deep and detailed syntactic investigation reveals that the syntactic structure used in LSF is different from the one used in LIS, which involves subordination.
- These results confirm that temporal constructions in the visual modality exploit the same typological categories available in spoken languages.

**Conclusion**

**Selected references**


We deeply thank our LSF consultants, Thomas Levêque and Valérie Jendoubi for working with us.

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**Data : Non-manual Marking**

- **Giovanni FLOWER BUY AFTER MARIA VASE BUY**
  - NMM typical of subordination : raised eyebrows on the 1st clause only
- **JEAN BUY FLOWER** \textit{AFTER} \textit{light} MARIE BUY VASE
  - NMM typical of coordination : spatialization of the two coordinate clauses

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