

Prosody and syntax of sentence topics in Italian Sign Language

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The tangled concept of topic in spoken languages was extensively discussed in the past from semantics [4][8][13], syntactic [7][14-17] and prosodic [18] perspectives. Although scholars disagree in definitions, in the current study I intend to investigate three types of sentence topics in Italian Sign Language (LIS): aboutness topics, scene setting topics and contrastive topics. Since in sign languages (SLs) there are cross-linguistic differences in the kinds of manual and non-manual markers involved in the identification of these sentence topics [1][9-11][20], I plan to contribute to the discussion with this preliminary study. In fact, no specific previous studies exist on topics types in LIS, and although Brunelli [3] studied the information structure in LIS, he did not investigate in detail the topic features; Thus, the purposes of this study are (i) to clarify whether any consistency exists among their phonological realization (or at least if it possible find some frequent tendencies in the combinations of the non-manual markers) and (ii) to account for the syntactic distribution of aboutness topics, scene setting topics and contrastive topics, comparing the results with the cartographic approaches [7][14].

Following Reinhart [13], I considered as sentence topics those expressions which are found within the boundary of a sentence and in particular aboutness topics, scene setting topics and contrastive topics. An aboutness topic is what the sentence is about [13], and it must be familiar and identifiable for both the speaker and the addressee [8] (ex. 1 from LIS). Scene setting topics (ex.2) are elements which set a spatial, temporal or individual framework within which the main predication holds [4]. Contrastive topics consist of a combination of topics and focus, which indicate alternatives among given/old information, and they are marked by a specific intonation contour in spoken language [12] (ex.3).

(1) **JOHN** TODAY FISH BUY

Today John bought a fish.

(2) **YESTERDAY SUPERMARKET** JOHN FISH BUY

Yesterday at the supermarket John bought a fish.

(3) What Maria and Gianni feel for the cat?

CAT_i, IX_j, **MARY**_j, LOVE_i, **JOHN**_k, HATE_i.

As for the cat, Mary loves him, John hates him.

In SLs, these topics differ cross-linguistically because they are realized with different prosodic contours, namely manual and non-manual markers (NMMs). However, in the literature about SLs, the most frequent NMMs associated with topics are the raised eyebrows (which is indicated as a marker for dependency relations among phrases and clauses and was compared to the High Boundary tone in spoken languages [6]), the squint of the eyes (which has been considered a specific marker for the retrievability of constituents, [19]), the head and body tilt forward (both involved with the notion of contrast [5][21]) and finally the eye blinks and head nods (generally considered boundary markers). In previous studies about Hong Kong Sign Language (HKSL), Sze [20] argued that aboutness topics are not consistently marked by non-manuals and are not mandatory prosodically separated from the rest of the sentence. Scene setting topics in HKSL are mostly marked with more manual and non-manual features, as brow raise and specific head positions. On the contrary, contrastive topics seem to be not marked by the same non-manual markers of the other two kinds of topics. Unlike HKSL, in Sign Language of the Netherland (NGT) and in Russian Sign Language (RSL) [9-11] both aboutness and scene-setting topics are in sentence-initial position and could be marked by eyebrow raise and backward head tilt.

The data for this study has been collected from three native informants, in collaboration with the University of Venice. I collected two corpora: one based on spontaneous data and another one based on elicited sentences. As for this second kind of data, I differentiated two elicitation contexts: in the first, the stimuli were created to produce subject aboutness topics and in the second to produce object aboutness topics. I considered full DPs and strong pronouns, following [2].

The results show that no one-to-one relation between non-manual forms and topic types exists in LIS. In line with the studies on RSL and NGT, in LIS the same non-manuals mark both aboutness and scene setting topics (ex. 4) and they are: eyebrow raised (er), squint eye (sq), head (hf) and body forward (bf), eye blink (eb) and head nod (hn). Moreover, common tendencies of non-manuals can be identified, namely

eyebrow raised (that mostly marks subject and object aboutness topics), eyebrow raised + eye squint (which mark scene setting topics locations and subjects aboutness topics) and squint + head forward + blink after the topic (which consistently accompanied object aboutness topics). From a preliminary observations, I noted that scene setting time adverb topics behaves differently from the other topics, in fact they are less marked and very often they occur in the extreme left periphery of the sentence.

Differently from aboutness topics and scene setting topics, contrastive topics in LIS are only marked by the positions of the body to the right and to the left (ex. 5).

(4) $\overline{\text{br hf}} \overline{\text{eb hn sq}} \overline{\text{TODAY JOHN GARDEN}} \text{ CL-loc MUSHROOMS GATHER}$
Today, John gathers mushrooms in the garden.

(5) $\overline{\text{er, hf, eb, hn}} \overline{\text{body right}} \overline{\text{body left}} \text{CAT}_i \text{ IX}_i \text{ MARY}_j \text{ LOVE}_i \text{ JOHN}_k \text{ HATE}_i$
As for the cat, Mary loves him, Gianni hates him.

As for the syntactic account, in agreement with Rizzi[14]’s analysis for spoken languages, where the CP is split in [ForceP [TopP*[FocP[TopP[FinP[IP]]]]]], LIS appear to have a dedicated left periphery with different topic positions. However, differently from Rizzi’s template the topics are not freely recursive. Indeed, according to the hierarchy of Frascarelli & Hinterözl [7] (aboutness topics>contrastive topics>familiar topics) my data show a distribution of aboutness topics (FISH) in a higher position than contrastive topics (MARY). Note that in my data I only have contrastive subject topics which means that it is not possible to establish that their position is not the base position for subjects.

(6) $\overline{\text{er, eb, hn}} \overline{\text{body right}} \overline{\text{body left eb hn}} \text{FISH} \text{ IX}_i \text{ MARY}_i \text{ HATE}_i \text{ GIANNI LOVE}$
As for the fish, Mary hates it, John Loves it.

Considering the more frequent order of topics in my data, I can assume the following hierarchy: SsTopTime>SsTopLoc>AbTop>ContrTop>[...IP...].

In conclusion, LIS does not show a straightforward consistency between form and topic functions, but similarly to HKSL, NGT and RSL, eyebrow raised and other NMMs optionally marks aboutness and scene setting topics. This study thus contributes to our understanding of the complex phenomenon of topic marking in SLs. Finally, from a generative perspective, this investigation can serve as a litmus test for validating specific theories of the syntax of information structure [7][14].

References

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