THE SYNTAX OF
PRONOMINAL POINTING SIGNS
IN ITALIAN SIGN LANGUAGE (LIS)

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POINTS OF SPACE AND ITS FEAUTURES

• In sign languages, indications are a system to establish reference and co-reference.
• They can belong to different categories: demonstratives, articles, and personal pronouns.
• The pointing sign encodes the space features [±prox, ±dist] (i.e., proximality to or distality from the speaker and the addressee).
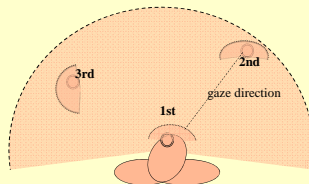
Participants: speaker(s), addressee(s)
1st person pronouns: Specific point on the speaker's body **[+prox]**
2nd person pronouns: Specific point in the space identified by the speaker's eye gaze **[-prox]**

Identified elements:
3rd person pronouns/demonstratives: Specific point in the space outside of the speaker's eye gaze **[+dist]**

Non-identified element(s):
Impersonal pronouns: Neuter space (any point in the space outside of the speaker's eye gaze) **[-dist]**
cf. Harley and Ritter (2002), Bertone (2007)

THREE CLASSES OF PERSONAL PRONOUNS IN LIS

To classify personal pronouns, we took into account:
• their **semantic** properties: anaphoric vs. non-anaphoric pronouns;
• their **syntactic** distribution;
• their **prosodic** properties:
  - the pause between the indication and previous or following signs,
  - the possibility of reduplicating the pointing,
  - the duration of indication, measured in the number of frames or fractions of seconds.

Strong pronouns:
▪ can be non-anaphoric, i.e. they can introduce a new referent into discourse;
▪ have the same distribution as full NPs and can be substituted by a proper noun or a NP;
▪ a pause after the pointing sign can be present; reduplication is possible; long time of holding the pointing.

Clitic pronouns:
▪ must be anaphoric;
▪ have a special distribution: always adjacent to the verb;
▪ no pause (are co-articulated with the verb); no reduplication; short time of holding the pointing (sometimes it is imperceptible).

Weak pronouns:
▪ must be anaphoric;
▪ have a special distribution, but need not be adjacent to the verb;
▪ no pause; no reduplication; length intermediate between a clitic and a strong pronoun.

In the following sentence, the numbers on each indication are the rate of pronominal pointing signs:
    Rate 1 corresponds to a **strong** pronoun (about 1/2 of second – 7-13 frames)*
    Rate 2 corresponds to a **weak** pronoun (about 1/6 of second – 4 frames)*
    Rate 3 corresponds to a **clitic** pronoun (about 1/12 of second – 1-2 frames)*

*The time is subjective, it differs from signer to signer. But in one and the same signer, it is possible to differentiate the time of holding the pointing. The programme I-movie counts 24 frames per second.

relative clause
    1   3 1 2   3
IX_{1p}OBLIGED TAXI IX_{1p} CATCH IX_j CAR-IX_j-MAN$_j$ IX_j-TELL-IX_{1p} BUS ON-STRIKE
I was forced to take a taxi. The taxi driver told me that busses were on strike.

The indications "1p" refer to the 1st person. The indications "j" refer to the taxi driver (3rd person).

➢ The rate 1 pronouns do not have an antecedent. They can be reduplicated.

The first indication (blue) is the subject of the first sentence; the third indication (purple) introduces a new referent: the following NP containing a reduced relative clause. (CAR$_j$ IX$_j$ MAN: non-manual expressions such as dimpled cheeks and squinted eyes found with full relative clauses). (See the figures)

➢ The rate 3 pronouns are anaphoric: the second pronoun (pink) refers to the first occurrence of the 1st person pronoun; the fifth and the sixth pronouns (green) refer to the *taxi driver* and the *first person*, respectively.
They are adjacent to the verb: see the OSV order, where the object TAXI precedes the pointing sign.
These two pronouns are co-articulated with the verb: they share the handshape with TELL; furthermore, the movement starts from point (j), where the subject is located, pass on the lips, where it means TELL, and ends up on the signer's body , that is the 1st person. (See the figures)

➢ The rate 2 pronoun is contained in the complex expression CAR-IX-MAN.
Another occurrence of a rate 2 pronoun is in the following sentence:

Topic
    1 1 2
BOOK IX_{1p} GIVE PETER. BOOK, PE IX_j++, IX_{1p} PETER GIVE
This book, I have given to Peter

The indication "1p" refers to the 1st person. The indications "j" refers to the book (3rd person).

➢ The rate 2 pronoun is anaphoric on the first occurrence of the first person pronoun and is separated from the verb by the object PETER.

CAR IX_j MAN$_j$
Relative clause

IX_j TELL IX_{1p}

THREE CLASSES OF PERSONAL PRONOUNS IN UNIVERSAL GRAMMAR

Cardinaletti (1994), Cardinaletti & Starke (1999) distinguished three classes of pronouns in spoken languages:
strong: e.g. English *him* in coordination: *I saw [him and his wife]*
weak: e.g. English *him* and *it*, e.g. outside of coordination, where they can be reduced: *I saw'm*
clitic: e.g. French *le*: *je l'ai vu*

NEW PERSPECTIVES ON THE NULL ARGUMENT PARAMETER

• Non-agreeing verbs (contact with the signer's body) must co-occur with pronominal pointing signs → no null arguments
• With agreeing verbs, pronominal pointing sign can be absent → null arguments. (Lillo-Martin1991)

If space features can be considered as the extreme contraction of the pointing sign, we could suggest that agreeing verbs do not co-occur with null arguments but with clitic pronouns.
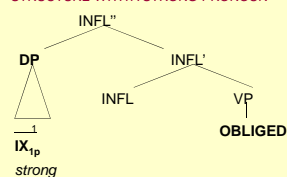Morphological agreement on agreeing verbs is the movement component in their articulation.
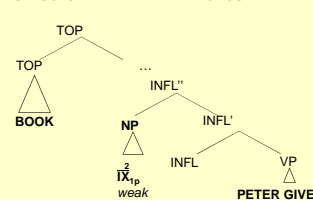Some evidence:
weather verbs can "agree" with the space upwards (i.e,, co-occur with a clitic) (2), towards which a possible pronominal pointing sign is directed (1); they may not "agree", in which case we claim that no clitic pronoun is incorporated into the verb:

(1) $IX_{pointing\ upwards}$ RAIN+++   (2) RAIN+++$_{articulated\ upwards}$
(3)   RAIN+++ $_{articulated\ in\ the\ space\ in\ front\ of\ the\ signer}$

STRUCTURE WITH A STRONG PRONOUN

INFL''
  DP   INFL'
                INFL   VP
                        OBLIGED
  __1
  IX_{1p}
  strong

STRUCTURE WITH A WEAK PRONOUN

TOP
  TOP   ...
            INFL''
  BOOK   NP   INFL'
            IX_{1p}^2 INFL   VP
            weak   **PETER GIVE**

STRUCTURE WITH A CLITIC PRONOUN

INFL''
  NP   INFL'
            INFL   VP
  CAR IX_j^2 MAN IX_j^3 **TELL**
  Taxi driver   *clitic*
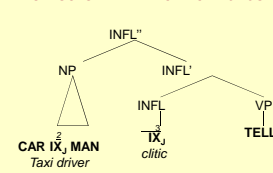
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