## Gestural focus marking

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**Introduction.** In recent years gestures have been a topic of much interest in formal linguistics, especially with respect to their semantic and pragmatic contribution (Ebert and Ebert 2014; Schlenker 2018; Esipova 2019a; *i.a.*). A consistent observation within this literature is that the semantic content of gestures can be integrated into the meaning of spoken utterances, and one way to explain this semantic integration is to treat them as part of the sentence grammar. The hypothesis by which gesture can participate in semantic relations because they can appear in syntactic representations has caught the attention of some scholars (Jouitteau 2004, Sailor and Colasanti 2020). In particular, since gestures are performed with the same articulators as sign languages (e.g. hands, eyebrows), this could mean that at least some gestures are just normal lexical items (*qua* bundles of features projected in the syntax) that happen to be externalised at PF in the visual-gestural modality, rather than in the auditory modality (and see Esipova 2019b; Sailor and Colasanti 2020 on gesture as evidence that syntax is modality-blind).

Following previous studies on the syntacticisation of gesture in the gesture-heavy languages of Italy (Colasanti 2021b), we discuss the conventional co-speech gesture RING (Figure 1) in Italo-Romance. This gesture was described by De Jorio (1832) for Neapolitan, and Kendon (1995; 2004) reports it to be a focalising discourse marker in several southern Italo-Romance varieties spoken in the Campania region. Based on novel data from the southern Italo-Romance variety Lancianese (Abruzzo region), we present syntactic evidence that RING can be a focus marker: we show that it can co-occur with different kinds of focalised constituents and focus types, and furthermore that its articulation can be narrow (aligned just with the focalised constituent) or broad (aligned with the whole sentence), akin to the behaviour of certain focus particles in the spoken modality (e.g. *only* in English; Rooth 1992).

**Background.** RING is a manual gesture articulated with the tip of the index finger touching the tip of the thumb, forming a circular or ovular shape. The other fingers are semi-extended and spread apart (Kendon 1995). The place of articulation is the torso/body mid-line and the orientation of the palm of the hand is facing downwards. Note that this is unlike e.g. the 'OK' gesture, '<sup>(1)</sup>, in which the palm faces away from the speaker. Also unlike OK, the articulators are not static with RING; rather, the hand and forearm are moved up and down, with the frequency of this movement keyed to prosodic factors described below (its amplitude is seemingly keyed to affective factors left aside here).

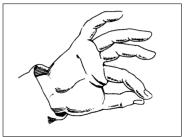


Figure 1: RING handshape

RING is obligatorily co-speech, in the sense that it necessarily associates with a constituent in the spoken modality; it has no solely pro-speech use in the Italo-Romance varieties under discussion here. As reported by Kendon (1995:270, 274), RING accompanies speech in "the attempt to ensure that the specific information be given prominence" as it indicates the "focality" of a constituent. For instance, in (1), the articulation of RING aligns with the domain of prosodic focus, i.e. *ventitré ventiquattro sedici* 'twenty-three twenty-four sixteen', which is contrastively focused in context. Articulation of RING also involves a sharp downward movement of the hand and forearm aligned to each accented syllable. (Throughout, **bold** indicates the domain of prosodic focus, and underline indicates the temporal alignment of the gesture.)

(1) Neapolitan (adapted from Kendon 1995:269) Context: the speaker and the addressee are looking at a poster. The

Context: the speaker and the addressee are looking at a poster. The speaker thinks that the telephone number ber reported on the poster is the wrong one because somebody else gave him a different telephone number (which he considers to be the correct one). He says to the addressee:

e.

Α	me	mi	ha	dato	ventiTRÉ	ventiQUAttro	SEdici	US.
to	$\mathrm{me}$	of.it	he.has	given	twenty-three	twenty-four	sixteen	RING
'To	o me	he g	ave TW	/ENTY	-THREE TV	VENTY-FOUR S	IXTEEN	[.'

An experiment. To investigate the focus-marking properties of RING, we ran an experiment with 20 native speakers of Lancianese combining forced-choice and acceptability judgment rating tasks. The stimuli were constructed according to fieldwork methodologies previously used to collect theoretically-grounded gestural data from the endangered languages spoken in Southern Italy (Colasanti 2021b,a), and were designed to test the co-occurrence of RING with different kinds of focalised constituents (e.g. broad and narrow foci, etc.) across various contexts. In forced-choice tasks, participants were shown two different pre-recorded videos for each context: both contained the same utterance (spoken by a native Lancianese speaker), but one was performed with accompanying RING, and one without: (2b) vs (2c). The participants were then asked to provide a brief rationale for their choice in each context.

(2) Lancianese

Context: Toninə knows that Rocchə bought a new car. When he bumps into Rocchə's dad at the market he asks him:

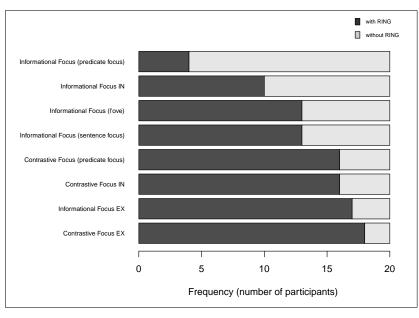
a. Rocchə s' a accattatə n' Audi? Rocchə to.himself has bought an Audi 'Did Rocchə buy an Audi?'

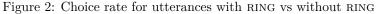
Rocchə's dad replies:

- b. No, **na BMW** s' a accattatə Rocchə. no a BMW to.himself has bought Rocchə
- c. No, **na BMW** sing s' a accattate Rocche. no a BMW RING to.himself has bought Rocche 'No, Rocche has bought A BMW.'

We also tested the temporal alignment of RING based on the hypothesis that the onset and duration of certain co-speech gestures reflects their c-command/scope domain, following previous work by Colasanti (2021b) on the Italo-Romance gesture *Mano a borsa* (i.e. MAB). For a given focus-triggering context, participants were shown four pre-recorded videos and asked to indicate the degree of naturalness of each (0 = unnatural, 10 = natural). In two of the videos, RING is articulated throughout the focused constituent and through the entire utterance respectively; in the others, other alignments were tested (details to be presented during the talk).

Results/Discussion. The choice rates in Figure 2 for the forced-choice task show that the co-speech gesture RING can be paired with the majority of the focus types we tested in our questionnaire (with the exception of one utterance whose predicate bears new-information focus; during the talk, we address this puzzling result using a qualitative judgment retrieved from our questionnaire). Our results show that participants strongly reject items in which the articulation of RING entirely follows or precedes the spoken utterance, whereas they accept items with RING aligned to the focalised constituents (see Ebert et al. (2011) for a similar finding in German), as well as those items involving RING articulated across the entire utterance. This holds





for all the focus types tested in our questionnaire (details to be presented during the talk).

**Contributions.** The distribution of co-speech RING in Lancianese constitutes empirical evidence for the syntactic integration of gesture. This non-iconic gesture is grammaticalized, and thus part of the lexicon of Italo-Romance languages (Kendon 2004). Specifically, RING shows a smiliar behaviour to certain well-known focus particles in the spoken modality.

## Selected references

Colasanti, Valentina. 2021a. Gestural fieldwork: a case study from southern Italy. Paper presented at Language Documentation and Linguistic Theory 6, SOAS London, December 2021.

Colasanti, Valentina. 2021b. Linguistically-integrated gestures: a case study from the languages of Southern Italy. Talk given at the annual meeting of the LAGB, September 2021.

De Jorio, Andrea. 1832. La mimica degli antichi investigata nel gestire napoletano. Naples: Fibreno.

Ebert, Cornelia, and Christian Ebert. 2014. Gestures, demonstratives, and the attributive/referential distinction. Talk given Semantics and Philosophy in Europe (SPE 7), Humboldt-Universität zu Berlin.

- Ebert, Cornelia, Stefan Evert, and Katharina Wilmes. 2011. Focus marking via gestures. In *Proceedings of Sinn & Bedeutung 15*, ed. Ingo Reich.
- Esipova, Maria. 2019a. Acceptability of at-issue co-speech gestures under contrastive focus. Glossa~4: 35. 1–22.
- Esipova, Maria. 2019b. Composition and projection in speech and gesture. Doctoral Dissertation, NYU.

Kendon, Adam. 2004. Gesture: Visible action as utterance. Cambridge University Press.

Rooth, Mats. 1992. A theory of focus interpretation. Natural Language Semantics 1:75–116.

Sailor, Craig, and Valentina Colasanti. 2020. Co-speech gestures under ellipsis: a first look. Talk given at Annual Meeting of Linguistic Society of America, New Orleans, 2-5 January 2020 2020.

Schlenker, Philippe. 2018. Gesture projection and cosuppositions. Linguistics and Philosophy 41:295–365.