# THE INFINITIVE AS THE SPELL-OUT OF A MORPHOSYNTACTIC CATEGORY. THE CASE OF GRIKO AND NEIGHBOURING ROMANCE DIALECTS

Giuseppe Torcolacci *University of Leiden* 

Στόχος μας στην παρούσα εργασία είναι να εξετάσουμε από συντακτική και σημασιολογική σκοπιά την απαρεμφατικότητα σε μία ομάδα νεοελληνικών και ιταλορομανικών γλωσσικών ποικιλιών που μιλούνται στη νότια Ιταλία. Συγκεκριμένα, θα εστιάσουμε την έρευνά μας σε μία υπο-ομάδα γλωσσικών ποικιλιών της Γκρίκο και της Σαλεντίνο που μιλούνται στη νότια Απουλία. Όπως είναι ευρέως γνωστό από την πλούσια βιβλιογραφία για τις δομές τροπικότητας και τις δομές ελέγχου, παρόλο που η Κοινή Νέα Ελληνική δεν διαθέτει απαρέμφατα σε εγκιβωτισμένα συγκείμενα, στις ποικιλίες της Γκρίκο εμφανίζονται απαρεμφατικοί τύποι, μόνο όμως μετά το τροπικό ρήμα sózzo 'μπορώ'. Σε άλλα συγκείμενα, ο ρηματικός τύπος που βρίσκεται σε εγκιβωτισμένη θέση είναι κλιτός και ακολουθεί μετά από το μόριο na. Στις γειτονικές γλωσσικές ποικιλίες της Σαλεντίνο όμως, οι απαρεμφατικοί τύποι είναι περισσότερο διαδεδομένοι. Βασιζόμενοι στα γλωσσικά αυτά δεδομένα, αλλά και στην πλούσια σχετική βιβλιογραφία, στοχεύουμε, στο πλαίσιο της εργασίας αυτής, να προσδιορίσουμε τους σημασιο-συντακτικούς μηχανισμούς που υπαγορεύουν την επιλογή ενός απαρεμφατικού έναντι ενός παρεμφατικού ρηματικού τύπου στις δομές τροπικότητας και ελέγχου τόσο στη Γκρίκο όσο και στις γειτονικές ιταλορομανικές ποικιλίες. Η αντιπαραβολική μελέτη θα αναδείξει τον τρόπο με τον οποίο η μικροποικιλότητα επηρεάζει την επιλογή απαρεμφατικών έναντι παρεμφατικών ρηματικών τύπων σε δύο ομάδες γλωσσικών ποικιλιών, οι οποίες, μολονότι ανήκουν γενετικά σε δύο διακριτούς γλωσσικούς κλάδους, βρίσκονται σε στενή επαφή για εκατοντάδες χρόνια.

Keywords: modals, control structures, infinitives, modal logic, agreement

### 1. Introduction

The present study aims at investigating the syntax and semantics of infinitives in a group of Modern Greek dialects and Italo-Romance varieties spoken in southern Italy. Precisely, a subset of Griko and Salentino dialects, spoken in southern Apulia, will be taken into account. As is well known from the rich literature about modal and control structures, while Modern Greek features the total absence of infinitives in embedded contexts, Griko dialects feature the presence of infinitives only after the modal verb sózzo 'can'. In other contexts, the embedded verb results as an inflected form preceded by the particle na. In the

neighbouring Salentino dialects, instead, infinitives are more widespread. Based on these linguistic facts, as well as on a vast literature on the topic, the goal of this paper is to identify the semantico-syntactic mechanisms that induce the selection of infinitives vs finite verbs within modal and control structures in Griko and neighbouring Italo-Romance varieties. This comparative study will shed light on the microvariation affecting the selection of infinitives vs finite verbs within a set of dialects that, although belonging to two distinct linguistic branches, have been in strict contact with each other throughout the centuries.

This paper is structured as follows: while in section 2 the state-of-the-art with regard to Griko modal and control structures will be presented, section 3 will scrutinise the semantics and logic of modals. Based on the analyses put forward in sections 2 and 3, section 4 will outline the syntax of modal and control structures, as well as the mechanism that induces the selection of infinitives vs finite verbs in Griko dialects and Italo-Romance varieties spoken in Salento. The conclusions, as well as the final remarks, are presented in section 5.

# 2. The Griko finite vs non-finite verb alternation in embedded contexts. The state-of-the-art

Griko dialects, on a par with Greko varieties, are to date the only two groups of dialects of the Hellenic group spoken in Italy. While Greko survives only in a handful of villages situated in the southernmost portion of Calabria, more precisely on the southern slopes of the Aspromonte group of mountains, Griko is spoken within Grecia Salentina, i.e. a geolinguistic area located in the southern-central part of Salento, in the southernmost region of Apulia. Both groups of dialects, which in the existing literature are considered to have been spoken in the two regions as either indigenous languages since classical times (Rohlfs 1924; 1933; 1974; 1977; Falcone 1973: 12–38; Horrocks 1997: 304-306; Manolessou 2005: 112-121; Ralli 2006: 133) or as a more recent import that took place during the Byzantine period of domination in southern Italy, i.e. in a time lapse between the 6th and the 11th century (Morosi 1870; Battisti 1927; Parlangeli 1953)<sup>1</sup>, feature, as opposed to Modern Greek and other Hellenic dia-

<sup>&</sup>lt;sup>1</sup> A theory that reconciles these two approaches is outlined in Fanciullo (1997), according to whom Italiot-Greek communities result as the relic of Classical Greek speaking areas which got influenced by Byzantine Greek in the Middle-Ages.

lects, the quasi-complete absence of infinitives<sup>2</sup>. As a matter of fact, as amply discussed in Joseph (1983), where a diachronic and synchronic approach to the selection of infinitives in a group of languages spoken in the Balkan Sprachbund are outlined, infinitives in Italiot-Greek dialects, i.e. in Griko and Greko varieties, are productive, and attested only for a very restricted set of syntactic contexts. Furthermore, Ledgeway (2015), by focusing on a number of linguistic aspects that characterise Griko and Greko varieties, observes that the selection of infinitives in these two groups of dialects has undergone a significant change over the last century, whereby infinitives, which were a very productive category in the last decades of the 19<sup>th</sup> century, are to date reported to emerge only in embedded contexts headed by a subset of modals and control verbs. These facts are made explicit by means of the Table 1.

	Infinitive <del>←</del>								Na-complement		
Griko	Can	Hear	Know	Make	Let	Want	Come	Must	Go	Aspectual	
Morosi (1870)	I	(I/)F		(I/)F		(I/)F		(I/)F		F	
Cassoni ([1937] 1990)	I	I	I	I/F		(I/)F		(I/)F			
Rohlfs ([1950] 1977)	I	I/F	I/F	I/F	I/F	(I/)F	(I/)F	F	F	F	
Rohlfs ([1972] 1997e)	I	F	F	F	F	F	F				
Italia & Lambro. (2001)	I	F	F	F	F	F	F	F	F	F	
Cotardo ([1975] 2010)	I	I/F	F	F	F	F	F	F	F	F	
Frassanito (2010)	I	F	F	F	F	F	F	F	F	F	
Baldissera (2012)	I/F	F	F	F	F	F	F	F	F	I/F	
Greko	Can	Hear	Know	Make	Let	Want	Come	Must	Go	Aspectual	
R. T. Caracausi (1959)	I <sup>(/F)</sup>	I <sup>(/F)</sup>	I	I(/F)	I(/F)	(I)/F	(I/)F	F	00	F	
Rohlfs ([1950] 1977)	I	I/F	I/F	I/F	I/F	(I/)F	(I/)F	F		F	
Rohlfs ([1972] 1997e)	I	I(/F)	I(/F)	I(/F)	F	F	( - /				
Katsoy (1992: 2001)	I	F	F	F	F	F	F	F		F	
Violi (2004)	I		(I/)F	(I/)F	F	F	(I/)F	F		F	
Remberger (2011)	I/F			I/F		F		F			
Bovese	I/F	I/F	F	F	F	F	F	F	F	F	

Table 1: The distribution of infinitives headed by modal and control verbs in Griko and Greko

<sup>&</sup>lt;sup>2</sup> The only Hellenic dialect outside the Italian peninsula that is considered to feature infinitives in its grammar is the Pontic Greek variety of Romeyka, spoken in Turkey (Sitaridou 2014).

Data from Bovese and Baldissera (2013) referred to in Table 1 indicate that infinitives are highly restricted in use, thus been found consistently after the modal verb 'can' both in Griko and Greko. In combination with other main verbs, the presence of infinitives seems to be sporadic. However, data collected by the author in three villages of *Grecia Salentina*<sup>3</sup> reveal that infinitives in this group of dialects are restricted to sentences introduced by the modal verb  $s\acute{o}zzo$  'can'<sup>4</sup>. All other modals and control verbs, instead, seem to have the property of selecting only embedded complements headed by particle na followed in turn by a finite verb inflected for present tense and person-number reference (henceforth na-clauses). These facts are exemplified in  $(1-3)^5$ :

#### (1) Dialect of Calimera

- a. proi i-ssozza pi before pst-can.1sg say.inf 'I could say/speak before'
- b. ártena é nna gguó now must that go.out.1sg 'Now I must/have to go out'
- c. *i-sela* na voráso
  PST-want.1SG that buy.1SG
  'I wanted to buy'

#### (2) Dialect of Sternatía

a. sózzi **milísi** pló ffermá
can.2/3sG speak.INF more strong/loud
'You/(S)he can speak louder'

<sup>&</sup>lt;sup>3</sup> The Griko and Salentino data presented in this paper were collected by the author during a series of research stays in the field, i.e. in summer 2016, 2019, 2020 and 2021, by means of interviews held with local speakers. The fieldwork investigation consisted in the production of sentences in Italian by the fieldworker, who, once on the spot, asked the local speakers to translate them into Griko and Salentino.

<sup>&</sup>lt;sup>4</sup> A similar behaviour is attested for Romanian, which is a language that admits the selection of either infinitives or the equivalent of *na*-clauses after the modal *pot* 'can', as documented in Jordan (2009: 15): i. *pot pleca imediat* 'can.1SG leave.INF immediately'; ii. *pot să plec imediat* 'can.1SG sBJ leave.1SG immediately'.

<sup>&</sup>lt;sup>5</sup> The glossing system used in this paper refers to the Leipzig Glossing Rules (Comrie et al. 2015).

- b. é nna kúso to méssho mu must that hear/listen.1sg DET teacher my 'I must/have to listen to my teacher'
- c. kulutó na toríso ti ttelevisióna continue.1sg that see/watch.1sg det television

  'I continue to watch the TV'
- (3) Dialect of Corigliano D'Otranto
  - a. sózzo éggui?
    can.1sG go.out.INF?
    'Can I go out?'
  - b. é **nna pplóso**must that sleep.1sG
    'I must/have to sleep'
  - c. azzikkónno na milíso start.1sg that speak.1sg 'I('m) start(ing) to speak'

Baldissera (2013: 57), however, based on data reported in Greco (2003), argues that *na*-clauses in the Griko dialect of Castrignano de' Greci are attested also after the modal *sózzo* only when this verb is endowed with specific semantic properties, i.e. when it licenses an agent or experiencer that is endowed with some sort of (temporary) physical and/or mental strength with regard to the embedded event. Tommasi (2020: 490), in the grammar section of his Italian-Griko dictionary of the variety of Calimera, provides further examples indicating that infinitives in this language are attested for a wider set of constructions. More precisely, Tommasi (2020) reports that infinitives in the dialect of Calimera are attested also after verbs such as *kànno* 'make', *tsèro* 'know', *finno* 'let', *kùo* 'hear' and *echo* 'have'. The author further claims that infinitives are attested also in indirect interrogative clauses. The examples (4) and (5) illustrate a selection of the data from Baldissera (2013: 57) and Tommasi (2020: 490), respectively, discussed above.

<sup>&</sup>lt;sup>6</sup> Tommasi (personal communication) suggests that sentences composed of infinitival clauses headed by this set of control verbs in the dialect of Calimera are endowed with idiomatic interpretation.

- (4) en sózo na pao

  NEG can.1sG that go.1sG

  'I don't have the strength to go'
- (5) a. *tséri* **gapísi** can.2/3sg love.INF
  'You/(S)he can love'
  - b. se finno kámi овј let.1sg do.inf 'I('ll) let you do it'
  - c. en échi **kanonísi** típo NEG have.3SG see/observe.INF nothing 'There is nothing to see'
  - d. en etséro ti pi NEG know.1sg what say.INF 'I don't know what to say'

Based on the above referred facts as well as on the data gathered by the author during different research expeditions in *Grecia Salentina*, section 3 will aim at detecting the linguistic mechanism that enables the selection of infinitives after the modal verb *sózzo* as opposed to all the other cases where *na*-clauses are attested after the modal of obligation *é* and control verbs. In view of this analysis, I will first shed light on the cross-linguistic properties of modals of obligations and modals possibilities and further propose, by referring to and updating Torcolacci & Leivadara (2019), that the selection of infinitives by the modal of permission *sózzo* and of *na*-clauses by the modal of obligation *é* is driven by purely semantic factors.

## 3. The semantics and logic of modals

Taking a diachronic approach, Roberts & Roussou (2003) propose that modals in English can be treated as a fairly case of grammaticalization of what was once a fully verbal element which, throughout the centuries, has undergone a category change, thus becoming later on an auxiliary the syntactic merging site of which

corresponds to F, i.e. a functional head. The basic evidence leading to this hypothesis stems from a series of diagnostics put forward by the two authors, who assert that modals in Modern English:

- (i) lack non-finite forms (e.g. \*To can swim is useful);
- (ii) cannot be iterated (e.g. \*He shall must do it);
- (iii) lack complements of all types, except bare infinitives (e.g. \*I shall you a penny);
- (iv) are in complementary distribution with do-support and always precede not (e.g. \*I don't can speak Chinese; \*Do you can speak Chinese?; \*I not can speak Chinese);
- (v) always move to C in inversion contexts (e.g. \*How many languages (do) you can speak?);
- (vi) can license VP fronting, and also VP ellipsis (e.g. *Win the election, I thought she would* (\*win) —);
- (vii) can phonologically contract (e.g. We c'n fish)7.

The approach reserved to English modals can be also proposed for Griko modal verbs, inasmuch as Griko modals behave similarly to English ones as far as the diagnostics outlined in (i)-(iii) and (vii) are concerned. As a matter of fact, modals in Griko varieties:

- (i) lack non-finite, i.e. infinitive, forms and cannot be headed by other modals (e.g. \*é nna sózzo 'I must/have to can);
- (ii) cannot be reiterated (e.g. \*é ce sózzo marézzo 'I must/have to and can cook');
- (iii) lack complements of all types (e.g. \*sózzo prámata 'I can things');
- (iv) can phonologically contract, thus being devoid of person and number reference (e.g. é nna páo 'I must/have to go').

As far as interpretation is concerned, modal verbs are generally conceived as been endowed with either epistemic or root/circumstantial import, depending on the reading they obtain at LF. In (6), which reports data from Hacquard (2007: 305), the modals in the sentence in (6a) can be considered to obtain epistemic

<sup>&</sup>lt;sup>7</sup> The examples provided in this list are from Roberts & Roussou (2003: 37).

<sup>&</sup>lt;sup>8</sup> Griko dialects do not share with English a series of syntactic properties, such as *do*-support, T-to-C movement in interrogative contexts and VP fronting.

interpretation, as opposed to those in the sentences in (6b-d), the interpretation of which is supposed to be circumstantial:

- (6) a. It's 6:00 pm. Anne is not in the office. She may/must be at home (what is known or evident)
  - b. *Anne's father imposes on her a strict diet. She can/must eat broccoli* (permissions/obligations)
  - c. Anne is very strong. She can lift this table (ability)
  - d. Anne must be in Paris at 5pm. She can/must take the train to go to Paris (possibilities/necessities given a subject's goal)

Regardless of the manifold interpretations modals are considered to receive at LF, Kratzer (1981)'s view relies on a unifying account of modals. In her view, there is just one possibility (can) and one necessity (must) modal, which are treated as an existential and a universal quantifier, respectively, over a set of possible worlds. This set of accessible worlds is provided by a modal base, identified with f, i.e. a conversational background, made available by the context. The type of modality conveyed by the modal is thus determined by the type of f, which is epistemic in f and circumstantial in f and f are facts are outlined by means of the formulae in f and

(7) a. 
$$[[can]](w)(f)(q) = \exists w' \notin MB_f(w): q(w')$$

b. 
$$[[\textbf{must}]](w)(f)(q) = \forall w' \notin MB_f(w): q(w')$$
 where  $f_{epis}(w) = \lambda w'.w'$  is compatible with what is known in w  $f_{circumstantial}(w) = \lambda w'.w'$  is compatible with certain facts in  $w$ 

Nonetheless, as pointed out by Hacquard (2007), a Kratzerian approach to modals seems to be not supported by syntactic analysis in the spirit of Cinque (1999), whereby epistemics, on the one hand, tend to scope high in the clausal structure, syntactically merged higher than Tense and Aspect, while roots, on the other hand, scope low, thus been merged below these two functional categories. In spite of the different syntactic merging sites of modals, the two formulae in (7) indicate that while the modal of permission *can* is linked to the existential logical operator  $\exists$ , the modal of obligation *must* is associated to the universal logical operator  $\forall$ . Works on modal logic, the aim of which is to ascertain the truth value of a given proposition, maintain that the basic modal operators are  $\Box$  and  $\Diamond$ , where the former expresses

necessity and the latter possibility. Based on Kripke (1959)'s studies on modal logic and possible-worlds semantics, propositions that are linked to the necessity operator  $\square$  are intended to be true if they are true in all the possible worlds (e.g. all unmarried men are bachelors), while propositions that are linked to the possibility operator  $\lozenge$  are true if they are as such in at least one possible world (e.g. it rained yesterday and could have rained the day before). This is shown in the postulates in (8):

- (8) a. The proposition "it is necessary *p*" is true in a world w if it is true in all the worlds v accessible from w
  - b. The proposition "it is possible *p*" is true in a world w if it is true in at least one world accessible from w

The truth-value calculus deriving from the postulates in (8) is illustrated in (9):

- (9) a.  $\Box p \rightarrow$  (in the actual world) iff  $p \rightarrow$  1 in all the possible worlds
  - b.  $\Diamond p \rightarrow (\text{in the actual world}) \text{ iff } p \rightarrow 1 \text{ in at least one possible world}$

To conclude, a proposition linked to a necessity modal such as *must* can be considered, based on (8) and (9), as well as on the Kratzerian approach to modality, as being true only if this is true in all the possible worlds accessible from the actual world. On the contrary, a proposition linked to a possibility modal such as *can* is true only if this is true in at least one of the possible worlds accessible from the actual world. Based on these assumptions, as well as on the afore-mentioned analyses, I propose that, capitalising on Torcolacci & Leivadara (2019)'s work on the morphosyntactic nature of modals in Griko, the necessity modal *must*, by being associated to the necessity operator  $\Box$ , selects an embedded complement which is underspecified for a realis value. By contrast, the possibility modal *can*, endowed with the possibility operator  $\Diamond$ , c-commands an embedded complement which is instead endowed with a realis value.

## 4. The syntax of modals

Aissen & Perlmutter (1976) and Rizzi (1982) advance the hypothesis that a certain class of modal and aspectual verbs in Italian undergo clause-union with their infinitival complements. The type of clause-union hypothesized by the two authors and referred

to in the literature under the term 'restructuring' consists in the creation of a monoclausal structure deriving from the union of two independent clauses under a given type of trigger, which, according to Givón (2001), is of purely semantic significance. Specifically, Givón (2001: 40) proposes that «the stronger is the semantic bond between the two events, the more extensive will be the syntactic integration of the two clauses». This is to say that the strongest bond between two events is obtained in the occurrence of modality and aspectual verbs such as *must* and *begin*, while the weakest bond is obtained in the presence of perception-cognition-utterance (PCU) verbs such as *see* and *hear*.

All in all, Wurmbrandt (2001) proposes that **restructuring** is not uniform, as it can result in different degrees based on the amount of syntactic material that gets severed from the embedded clause. The four different types of **restructuring** are given in (10b–e), while (10a) represents a clausal structure that is not affected by **restructuring** effects:

```
(10) a. matrix V_{CP}
                                                          \begin{bmatrix} v \\ v \end{bmatrix}
                                                                         ]]]]
                                                                                     no restructuring
                                          TP/WollP
                                                         \begin{bmatrix} v_{\rm P} & \begin{bmatrix} v_{\rm P} & \end{bmatrix} \end{bmatrix}
        b. matrix V
                                          \left[_{\mathrm{TP}}/_{\mathrm{WollP}}\right]
                                                                                     a little restructuring
        c. matrix V
                                                           vP VP
                                                                                     more restructuring
        d. matrix V
                                                                                     most restructuring
        e. matrix V
                                                                                     truncation
```

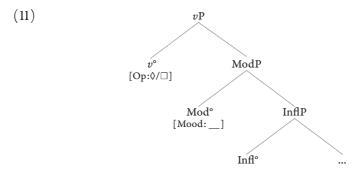
Since, as proposed in section 3, modals are traditionally considered as verbs that have undergone processes of grammaticalization in English, as well as in Griko, I assume that modals are not externally merged in V position, but rather higher up in the syntax, presumably in  $v^9$ . Under this approach, the embedded clause headed by the modal is assumed to have undergone the type of **restructuring** outlined in (10b), where a C head is removed from the structure. If a C head were merged, no semantico-syntactic union between the main and the embedded event would be at place, as C, capitalising on Chomsky (2000; 2001), is conceived to be a phase head on a par with

<sup>&</sup>lt;sup>9</sup> Cinque (1999) proposes the existence of a syntactic structure featuring about thirty functional categories, ten of which are reserved to modals and mood heads. Leaving aside mood heads, he hypothesizes that root modals are merged low in the structure, right above V, while possibility and necessity modals, respectively, are merged between Tense and the root modal head. Epistemic modals, on the other head, are merged quite high in the clausal spine, above T, i.e. in the C-field. In the present paper, based on the Kratzerian approach outlined in section 3, I propose that modals are all externally merged in the root position, i.e. in *v*, and move higher up in the syntax due to some movement-triggering properties associated to the syntactic head that induces internal merge of the modal.

v. In the literature regarding core functional categories, v and T are recognised as being endowed with their defective counterparts, i.e.  $v_{\rm def}$  and  $T_{\rm def}$  while  $C_{\rm def}$  is assumed not to exist. If a C head were heading an embedded complement, the Phase Impenetrability Condition, or PIC, would apply, which implies that no properties of the main verb/clause would be transmitted to its complement due to the presence of some sort of barrier licensed by C, i.e. a phase head. Because, as argued in section 3, the obligation and possibility modals are able to determine the selection of realis versus non-realis feature in the embedded clause, these must be somehow visible from outside their domains.

#### 4.1. The Griko case

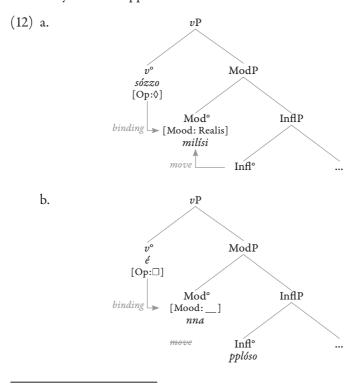
Based on the facts outlined in section 4, which refer to the syntax of modals, I propose in (11) the syntactic structure that is activated in the case of Griko propositions headed by modals of obligation and permission:



In (11), the operators linked to the modals of possibility and obligation are encoded within the phase head  $v^{\circ}$ . The Mood feature, instead, which is underspecified, is encoded in Mod<sup>o 10</sup>. Following and updating Torcolacci & Leivadara (2019), I propose that the Mood feature in Mod<sup>o</sup> is a variable that gets bound by the operator in  $v^{\circ}$ . Specifically,

The idea of resorting to the presence of a Mod° head derives from a series of studies on future considered as a complex tense, i.e. a semantic category that combines present or past tense with the abstract preposition woll, endowed with modal force yielding posteriority (Thomason 1970; Condoravdi 2001; Kaufmann 2005; Wurmbrandt 2014). In this paper, no reference to the woll preposition will be made, which, in turn, will be replaced by a Mood feature conveying irrealis/realis interpretation, or underspecification thereof, according to the type of truth-value expressed by the proposition.

I propose that while Mood° encodes [Realis] in the presence of the operator  $\Diamond$  in  $v^\circ$ , the Mood value in Mod° results underspecified in cases when the operator licensed by  $v^\circ$  is  $\Box$ . The underspecification of Mood° in the latter case is due to the fact that the truth-value of all the possible worlds accessible from w cannot be checked. Depending on the Mood value, the inflected verb, merged in Infl°, either undergoes movement to Mod° or stays in Infl°  $^{\text{n}}$ . In this paper, similarly to what proposed in Torcolacci & Leivadara (2019), I hypothesise that the raising of the inflected verb to Mod° instantiates only when [Realis] is the value expressed by Mood. Conversely, in the case of underspecification of the Mood feature, the verb stays in Infl° and Mod° is overtly expressed by means of a dedicated marker, i.e. the prepositional-like particle na. The structures in (12) outline the two cases analysed above, where in (12a) the raising of the inflected verb from Infl° to Mod° is at play because of the Mood feature being valued as [Realis] and in (12b), conversely, the non-application of Infl°-to-Mod° movement of the verb is shown.



The presence of Infl° as a syntactic category relies on the set assumptions put forward by Ritter & Wiltschko (2009), according to whom Infl° is the universal syntactic category that hosts three deictic features, i.e. Tense, Location and Person.

However, it is worth noticing that the verb in (12a), which undergoes movement from Infl° to Mod°, does not share the same morphological properties with that in (12b). More precisely, while the verb in (12b) shows full inflection for number and person, the verb in (12a) is underspecified for the person feature. Based on the work on morphological markedness proposed by Calabrese (2011), according to whom cases of syncretism and zero exponence in the system of subject clitics of northern Italian dialects strictly depend on deletion of a given set of morphosyntactic features at PF, I advance the hypothesis that the inflected verbs that undergo the Infl°-to-Mod° movement in (12a) are affected by the application of the morphological operation **Deletion** <sup>12</sup> that targets marked morphosyntactic features <sup>13</sup>. As a matter of fact, I propose that the feature that gets deleted is Person, which, as proposed by Harley & Ritter (2002), is marked. Regardless of the deletion of Person on the displaced verbal element, the Speaker vs Addressee reference encoded on the embedded verb is conveyed by the modal, which in turn is fully inflected for person interpretation.

#### 4.2. The Salentino case

Similarly to Griko varieties, Salentino dialects, on a par with a large set of southern Italian varieties, feature a very restricted use of infinitives in embedded clauses. The domain of selection of infinitives in these languages has been widely described and analysed by many linguists and dialectologists in the last decades, and is summarised by means of the Table 2, taken from Ledgeway (2015), which refers to both Salentino and Calabrian varieties.

For a thorough understanding of the morphological operation at stake here, see Halle & Marantz (1993), where all the basic operations referred to the framework of **Distributed Morphology** are outlined.

The idea of marked morphosyntactic feature exploited in this paper refers to the analysis presented in Torcolacci (2015), according to whom, based on previous works proposed by Benveniste (1966) and Harley & Ritter (2002), Person is more marked than Number due to the fact that the former is acquired later than the latter in the acquisitional path of a language.

	Infinitive <del>←</del>						→ mu/cu-complement				
Salentino	Can	Hear	Must	Know	Make	Let	Aspect.s	Want	Come	Go	
Rohlfs ([1972] 1997e)	I	I		I/F	I/F	(I/)F		F			
Mancarella											
Brindisi	I	I	I	I	I			F			
Lecce	I	I		I				F			
Casarano (LE)	I			F	F			F			
Sternatia (LE)	I	F		F	F		F	F			
Martignano (LE)	I	F			F		F	F			
N. Sal. (Calabrese 1993)	I	I			I		I	F	F		
Scorrano (Musio 1995)	I	I	I	I/F	I/F	I/F	I/F	F	F	F	
LE (Protopapa 1900–92)	I	I	I	I	I/F	I/F	I/F	F	F	F	
Calabrese	Can	Hear	Must	Know	Make	Let	Aspect.s	Want	Come	Go	
Rohlfs ([1972] 1997e)	I	I(/F)	I	(I/)F	I/F	(I/)F	F	F		F	
Lombardi (1998)											
Tyrrhenian Coast	I		I				I/F	I/F	F	F	
Ionian Coast	I/F		I/F				I/F	F	F	F	
Cristofaro (1998)	I		I		I		I	F			
Boval. (Remberger 2011)	I		I/F		F			I/F			
Bovese	I/F	I/F	I/F	I/F	I/F	I/F	I/F	I/F	I/F	F	

Table 2: The distribution of infinitives headed by modal and control verbs in Salentino and Calabrese

Salentino dialects, which are spoken in southern Apulia, feature a wider set of distribution of infinitives if compared to that observed for Griko, as scrutinised in Table 1. As a matter of fact, while Salentino infinitives are generally attested after verbs such as 'hear', 'know', 'make', 'let' and aspectual verbs, finite verbs introduced by the particle *ku/mu* are categorically attested after verbs like 'want', 'come' and 'go'. Data collected by the author during a series of fieldwork expeditions in southern Apulia (see fn. 3) reveal that the infinitive vs finite verb selection attested for embedded complements of a handful of Salentino varieties mirror the situation observed for Salentino in Table 2, inasmuch as infinitives are categorically selected after modals and verbs of perceptions, while the volitional verb 'want' and the andative and venitive verbs 'go' and 'come', conversely, consistently select finite verbs

introduced by ku. Aspectual verbs, on the other hand, seem to fluctuate between the selection of infinitives and finite verbs, depending on whether the embedded event is anterior or posterior to the reference time predicated by the main verb. This situation is outlined by means of the examples in (13), which refer to the variety spoken in the municipality of Andrano, a town located south-east of the Griko-speaking area, on the Adriatic/Ionian Sea. In (13), the only case where an aspectual verb is followed by an inflected verb is shown.

- (13) a. pózzu ssíre de kása can.1sg go.out.INF of home 'I can go/get out of my house'
  - b. m ággiu ffáre i cómpiti me.DAT have.1sG do.INF the homework 'I have to/must do my homework'
  - c. áci a víshu rriváre

    AUX OBJ see.1sG arrive.INF

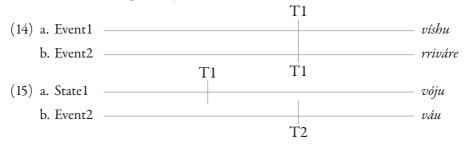
    'I can see her coming'
  - d. *kumínciu* **kkucínu** alle ttréi start.1sg cook.1sg at three 'I'll start to cook at three'
  - e. vóju vváu a llu máre want.1sg go.1sg to the sea 'I want to go to the sea'

The embedded finite verbs in (13d and e) are not preceded by any particle, hence they appear linearly adjacent to the main verb. These verbs, however, feature a double consonant in word-initial position, which, based on Loporcaro (1997), can be treated as an instance of *Raddoppiamento Fonosintattico* (RF), i.e. a phonological phenomenon that results from regressive spreading of the first consonant of the verb featuring the doubling phenomenon due to the presence of an empty mora. The empty mora triggering RF in (13d and e) can be considered to be endowed with dedicated morphosyntactic content <sup>14</sup>. As a matter of fact, the embedded verbs

<sup>&</sup>lt;sup>14</sup> See Torcolacci (2015) for cases of RF due to the overt realization of a segment conveying morphosyntactic import.

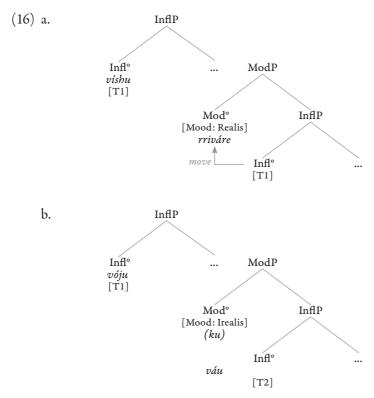
kkucínu and vváu in (13d) and (13e), respectively, can be replaced by forms such as ku kucínu and ku váu, which, in turn, do not feature any instance of RF in initial position of the verb. The lack of RF in these two cases can be justified by the presence of the particle ku.

At this point, similarly to what analysed for Griko in section 4.1 and based on the data presented in this section, I propose to inspect the conditions under which infinitives and finite verbs are licensed in embedded clauses in Salentino as well as the morphosyntactic interpretation of the particle *ku*, which, when absent, is able to trigger RF. Let us start by observing the data in (13a-c), which include infinitival forms in embedded position. In these sentences, the time reference of the infinitival is concomitant with that of the main verb. In (13c), for instance, the event of seeing predicated in the main clause is simultaneous with the event of arriving predicated in the embedded clause. By contrast, the data in (13d and e) feature that the time reference of the main and embedded clause do not converge, thus referring to two distinct moments in the timeline. These facts are highlighted by means of the configurations in (14) and (15), which refer to the time references, or T, of the sentences in (13c) and (13e), respectively.



As (14) illustrates, the time references of Event1 and Event2, i.e. of the events predicated by the main verb vishu and by the embedded infinitive riváre, converge, thus referring to T1 (15), conversely, shows that the time references of State1 and Event2, i.e. of the state predicated by the main verb *vóju* and of the event predicated by the embedded inflected verb *váu*, diverge, inasmuch as the former refers to T1 and the latter to T2. With this in mind, I propose that the convergence of time reference between the main and the embedded verb licenses the external merge of a ModP in embedded position endowed with realis value. This hypothesis is justified by the fact that the embedded event is concomitant with that of the actual world, and therefore the truth-value of the embedded proposition can be considered as true. The same argument cannot be advanced for sentences where the time

reference of the main verb diverges from that of the embedded verb. In this case, as the configurations in (15) shows, the time reference of the main verb, which is linked to the actual world, is anterior to the time reference of the embedded verb, which is expected to happen at a certain moment in the future. Because of this, the hypothesis is that the truth-value of the embedded proposition is not true, and the Mood feature of ModP in embedded position is thus valued as [Irrealis]. These facts are highlighted by means of the syntactic structures in (16).



In (16a), the embedded verb raises to Mod° by virtue of the fact that [Mood] bears [Realis]. Similarly to what argued for the selection of infinitives in Griko, Mod°, by being endowed with [Realis], has the property of selecting an infinitival in the morphophonological component of the grammar. By contrast, the structure in (16b) shows that no raising of the finite verb to Mod° instantiates. This can be argued to hinge upon the fact that Mood in Mod° expresses [Irrealis], i.e. a value that is responsible for selecting the particle ku at PF. If ku is not phonologically attested, RF

takes place due to the fact that the morpheme spelled-out by Mod° is devoid of phonological content, and hence must be filled by segmental material stemming from the first consonant of the following lexical item, i.e. the inflected verb.

## 5. Conclusions and final remarks

In the present contribution, I have shown that the distribution of infinitives in Griko and Salentino dialects spoken in the southernmost portion of Apulia is driven by morphosyntactic as well as semantic ingredients. In section 2, I have scrutinised cases where infinitives are attested in Griko. In this set of languages, infinitives seem to be restricted to propositions introduced by modal verbs, whereby only the modal 'can' has the property of selecting an infinitive while all other modals, i.e. 'must', and lexical verbs categorically select finite verbs introduced by the particle na. Based on semantics and modal logic analysis, I have argued in section 3 that the property of selecting infinitives by the modal 'can' is strictly linked to the fact that modals of permission license true propositions. As far as syntactic configuration is concerned, I have argued that modals of permission are externally merged in  $v^{\circ}$ , which, in turn, merge with Mod° endowed with a Mood feature, whose value is [Realis]. In the case of must, by contrast, the impossibility of selection of infinitives by this modal has been claimed to hinge upon the fact that modals of necessity do not license true propositions, unless they are true in all the worlds accessible from the actual world. Because of this, the modal 'must' has been considered to merge with Mod° endowed with a Mood feature, the value of which is underspecified for realis interpretation. A similar analysis has been proposed in section 4 that accounts for the finite verb vs infinitive alternation attested for Salentino dialects. In these languages, the distribution of infinitives differs from that observed for Griko varieties, inasmuch as infinitives in these dialects are attested only when the reference time of the main and embedded verbs are concomitant. Because of this property, I have argued that simultaneously of time reference between the main and the embedded verb licenses the merge of Mod° endowed with [Realis], which in turn triggers the raising of the embedded verb from Infl° to Mod°. This mechanism, instead, has been claimed to be inapplicable in cases where the reference time of the main and embedded verbs diverge. In this context, Mod° has been considered to express an irrealis value, thus disabling Infl°-to-Mod° movement.

The data tackled in this paper, as well as the analyses proposed for the selection of infinitives in Griko and Salentino varieties, aim at establishing once again that these two groups of dialects, although belonging to different linguistic branches within the Indo-European family, share a number of linguistic properties that are partially attested in the Romance and Hellenic group of languages, as schematised in (17).



If, on the one hand, Griko and Salentino dialects cluster together with Romance dialects because of featuring infinitives in their grammars, they share on the other hand the property of admitting finite verbs in embedded contexts with Hellenic varieties. Because of this, Griko and Salentino are able to offer interesting insights into the study of the microvariation of linguistic phenomena that emerge at the border between Hellenic and Romance languages which, in spite of being of Indo-European origins, are genetically quite distant.

## **Bibliography**

Aissen, J. & D. Perlmutter. 1976. Clause reduction in Spanish. *Proceedings of the Annual Meeting of the Berkley Linguistic Society* 2: 1–30. Available at: https://escholarship.org/uc/item/9ng022mf (accessed on 24.08.2022).

Baldissera, V. 2013. *Il dialetto grico del Salento: elementi balcanici e contatto linguistico*. Ph.D. thesis. Venice: University of Venice Ca' Foscari.

Battisti, C. 1927. Appunti sulla storia e sulla diffusione dell'ellenismo nell'Italia meridionale. *Revue* de Linguistique Romane 3: 1–91.

Benveniste, E. 1966. Problèmes de linguistique générale. Paris: Gallimard.

Calabrese, A. 2011. Investigations on markedness, syncretism and zero exponence in morphology. *Morphology* 21: 283–325.

Chomsky, N. 2000. Minimalist inquiries. The framework. In R. Martin, D. Michaels & J. Uriagereka (eds.), Step by Step: In Honor of Howard Lasnik. Cambridge: MIT Press, 89–155.

Chomsky, N. 2001. Derivation by phase. In M. Kenstowicz (ed.), Ken Hale: A Life in Language. Cambridge, MA: MIT Press, 1–52.

Cinque, G. 1999. Adverbs and Functional Heads: A Cross-Linguistic Perspective. Oxford: Oxford University Press.

Comrie, B., M. Haspelmath & B. Bickel. 2015. The Leipzig glossing rules: conventions for interlinear morpheme-by-morpheme glosses. Available at: http://www.eva.mpg.de/lingua/resources/glossing-rules.php (accessed on 08.12.2021).

- Condoravdi, C. 2001. Temporal interpretation of modals: Modals for the present and for the past. In D. Beaver, S. Kaufmann, B. Clark & L. Casillas (eds.), Stanford Papers on Semantics. Stanford: CSLI Publications, 59-88.
- Falcone, G. 1973. Il dialetto romaico della Bovesia. Milan: Memorie dell'Istituto Lombardo di Scienze e Lettere
- Fanciullo, F. 1997. Raddoppiamento sintattico e ricostruzione linguistica del Sud italiano. Pisa: ETS. Givón, T. 2001. Syntax. An Introduction. Vol. 2. Amsterdam & Philadelphia: John Benjamins.
- Greco, A. 2003. Ivrika tin glossa mu: grammatica grika della Grecìa Salentina. Nardò: Besa.
- Hacquard, V. 2007. Speaker-oriented vs. subject-oriented modals: A split in implicative behaviour. In E. Puig-Waldmüller (ed.), Proceedings of Sinn und Bedeutung 11. Barcelona: Universitat Pompeu Fabra, 305-319.
- Halle, M. & A. Marantz. 1993. Distributed morphology and the pieces of inflection. In K. Hale & S. J. Keyser (eds.), The View from Building 20. Cambridge: MIT Press, 111-176.
- Harley, H. & E. Ritter. 2002. Person and number in pronouns: a feature-geometric analysis. Language 78: 482-526.
- Horrocks, G. 1997. Greek. A History of the Language and its Speakers. London: Longman.
- Jordan, M. 2009. Loss of Infinitival Complementation in Romanian. Diachronic Syntax. Doctoral dissertation. Florida: University of Florida.
- Joseph, B. 1983. The Synchrony and Diachrony of the Balkan infinitive. Cambridge: Cambridge University Press.
- Kaufmann, S. 2005. Conditional truth and future reference. Journal of Semantics 22: 231-280.
- Kratzer, A. 1981. The notional category of modality. In H. J. Eikmeyer & H. Rieser (eds.), Words, Worlds, and Contexts. New Approaches in Word Semantics. Berlin: de Gruyter, 38-74.
- Kripke, S. A. 1959. A completeness theorem in modal logic. Journal of Symbolic Logic 24: 1-14.
- Ledgeway, A. 2015. Spirito Greco, Materia Romanza? L'interpretazione del contatto Greco-Romanzo nell'Italia Meridionale in base alle Gerarchie Parametriche. Report at the University of Trento. Trento, Italy, March 17, 2015.
- Loporcaro, M. 1997. L'origine del raddoppiamento fonosintattico. Saggio di fonologia diacronica romanza. Basel & Tübingen: Francke.
- Manolessou, I. 2005. The Greek dialects of Southern Italy: an overview. Cambridge Papers in Modern Greek 13: 103-125.
- Morosi, G. 1870. Studi sui dialetti greci della terra d'Otranto, preceduto da una raccolta di canti, proverbi e indovinelli nei dialetti medesimi. Lecce: Edizione Salentina.
- Parlangeli, O. 1953. Sui dialetti romanzi e romaici del Salento. Milan: Hoepli.
- Ralli, A. 2006. Syntactic and morphosyntactic phenomena in modern Greek dialects. The state of the art. Journal of Greek Linguistics 7: 121-159.
- Ritter, E. & M. Wiltschko. 2009. Varieties of INFL: TENSE, LOCATION, and PERSON. In J. van Craenenbroek (ed.), *Alternatives to Cartography*. Berlin: Mouton de Gruyter, 153–202.
- Rizzi, L. 1982. Issues in Italian syntax. Dordrecht: Foris.
- Roberts, I. & A. Roussou. 2003. Syntactic Change: A Minimalist Approach to Grammaticalization. Cambridge: Cambridge University Press.
- Rohlfs, G. 1924. Griechen und Romanen in Unteritalien. Geneva: Olschki.
- Rohlfs, G. 1933. Das Fortleben des antiken Griechentums in Unteritalien. Cologne: Petraca Haus.
- Rohlfs, G. 1974. Scavi linguistici nella Magna Grecia. Galatina: Congedo.

- Rohlfs, G. 1977. *Grammatica storica dei dialetti greci (Calabria, Salento)*. Munich: C. H. Beck'sche Verlagsbuchhandlung.
- Sitaridou, I. 2014. The Romeyka infinitive: continuity, contact and change in the Hellenic varieties of Pontus. *Diachronica* 31(1): 23–73.
- Thomason, R. 1970. Indeterminist time and truth-value gaps. *Theoria* 36: 264–281.
- Tommasi, S. 2020. *Griko Dizionario*. Lecce: Argo.
- Torcolacci, G. 2015. Marking the Default. Auxiliary Selection in Southern Italian Dialects. Utrecht: LOT Publications.
- Torcolacci, G. & A. I. Leivadara. 2019. The nature of infinitives in Griko-Greek dialects of Southern Italy. In I. Kappa & M. Tzakosta (eds.), Proceedings of the 7<sup>th</sup> International Conference of Modern Greek Dialects and Linguistic Theory (MGDLT 7). Rethymno, Greece. 6–8 October 2016. Patras: University of Patras, 193–205.
- Wurmbrandt, S. 2001. *Infinitives: Restructuring and Clause Structure*. Berlin: Mouton de Gruyer. Wurmbrandt, S. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45: 403-447.