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Intonational phonology of Friulian and its dialects

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4.1 Introduction

Friulian, the easternmost Rhaeto-Romance language, is spoken by about 600,000 people in Friuli, a region of approximately 8,250 km² that is bordered on the west by the Livence River, on the north by the Carnic Alps, on the east by the Julian Alps and the Timau River, and on the south by the Adriatic Sea.

The linguistic history of Friulian, concisely summarized by Frau (2007), has been characterized by its peripheral position within Romance Europe. Its geographic marginality and political separation from other Romance areas during the Middle Ages have been identified as the twin reasons why Friulian displays a mixture of conservative features combined with a set of specific innovations which are a consequence of its contact with non-Latin languages. In fact, Friulian is the result of the evolution of the Aquileiese variety of vernacular Latin, which was spoken in the area around the Roman cities of Aquileia, Iulia Concordia, and Iulium Carnicum, with a pre-Roman Celtic substrate having left its mark in certain lexical items. During and after the decay of the Roman empire, the local vernacular Latin entered into contact with the languages of the Germanic peoples who settled in Friuli, the most important among them being the Lombards, who ruled Friuli from 568 to 774 AD. Beginning in the 9th century, part of the Friulian plain was repopulated by Slavs, who were assimilated over time, leaving traces of their language in place names and vocabulary. For several centuries after 1000 AD, Friuli experienced a triglossic situation: while the common people spoke Friulian, the upper class, centered around the court of the Patriarch of Aquileia (lord of Friuli and a vassal of the Emperor of Germany), spoke German, while Latin was the medium for written communication. At the beginning of the 15th century, a large part of Friuli was conquered by the

Republic of Venice. Following this political change, while Latin remained the language of the liturgy and Friulian remained the language of the lower class, Venetian made inroads as the spoken language of choice for the local ruling classes (in addition to Friulian), and Italian began to prevail over Latin as the written language. In 1866 much of Friuli was conquered by the Savoy dynasty and incorporated into the newborn Italian state, the remainder being added in 1918. The new state embarked on a systematic campaign to make Italian the common language of the state, by means of its use first in the public education system and later in the mass media (Andri 1997; De Mauro 2011[1963]). Although in the 1990s Friulian was granted a certain degree of legal protection as a minority language, it is currently considered in danger of extinction due to the sharp decline in the number of speakers (Unesco 2011; Strassoldo 2001). All speakers of Friulian living in Italy now also know Italian (Vicario 2005).

On the basis of segmental and lexical criteria, as suggested by Francescato (1966) and Frau (1984), Friulian can be divided into two main dialects: Eastern Friulian (locally known as *furlan di ca da la aghe*, lit. ‘Friulian from this side of the river’) and Western Friulian (locally known as *furlan di là da la aghe*, lit. ‘Friulian from the other side of the river’). The Eastern dialect is made up of the Northern variety, which is the most conservative variety and also goes by the name of *cjargnel*, and the Central-Eastern variety, which is the basis for the standard language and is divided into two further subvarieties (Central and Outer Eastern). Western Friulian, which has for centuries been exposed to the influence of neighboring Venetian, is divided into two main varieties: Inner Western Friulian and Outer Western Friulian, the latter being in direct geographic contact with Venetian. Fig. 4.1 shows a simplified map of the main dialects of Friulian (based on Francescato 1966: 91–100) and the distribution of sites where the data for this chapter were collected. The major dialectal divisions of contemporary Friulian roughly correspond with the territorial borders of the ancient Roman *municipia*, which gave their names to the subsequent early Christian dioceses: Central-Eastern Friulian is spoken in the territory of Aquileia, Western Friulian around Iulia Concordia, and Northern Friulian in the region of Iulium Carnicum.

In addition to the local spoken dialects, Friulian has since the 17th century a literary and standard variety (Marchetti 1985; Lamuela 1987; Vicario 2005), which is used exclusively for reading and writing and is not spoken (Roseano 2010). The in-text examples presented in this chapter are in standard Friulian, whereas the utterances presented in the figures are taken from local non-standard spoken dialects.

The literature about Friulian intonation is not abundant. Miotti (2002) and Finco (2007) offer concise descriptions of the contours of two modalities (broad-focus statements and information-seeking yes/no questions) in Central, Northern, and Western Friulian. Basing themselves on the analysis of read speech, D’Agostin and Romano (2007) describe the intonation of the same sentence types in Central



FIG. 4.1 The main dialectal areas of Friulian and locations where recordings were carried out

Friulian, whereas Roseano (2008) and Roseano and Fernández Planas (2009) do the same for the Northern dialect. Roseano (2012) analyses a corpus of 3,276 read sentences and offers a phonetic and phonological description of broad-focus statements and information-seeking yes/no questions in Northern, Central, Eastern, and Western Friulian, as well as the first draft of a ToBI labeling system for this language (see also Roseano and Fernández Planas 2009–13). The present chapter will focus on the same dialects considered in these previous studies but, in contrast to them, will analyze semi-spontaneous speech as well as a more extensive set of sentence types.

4.1.1 Relevant non-intonational features of Friulian

As in several other languages, intonation in Friulian serves a variety of linguistic functions, such as marking the edges of discourse units, implementing the lexical accent, focusing, and expressing modality. Nevertheless, intonation is not the only strategy that can be used to encode these linguistic features. In the following sections, before our description of the intonational phonology of Friulian, we will give an overview of certain non-intonational resources of this language that can interact with Fo modulation in transmitting each of the above-mentioned features.

4.1.1.1 Lexical accent Friulian is a lexical stress language and displays three accentual positions: the last syllable, the penultimate syllable, and the antepenultimate syllable. A few functional words are unstressed. Vocalic duration is a strong acoustic correlate of stress, since stressed vowels are always significantly longer than the corresponding unstressed vowels, regardless of syllable structure (Roseano 2008; 2012; Roseano and Fernández Planas 2009). Duration also seems to be a correlate of stress in the other languages of the Italic peninsula, although there is no consensus in this regard (Canepari 1979: 75; Bertinetto 1981; Pàmies Bertrán 1993: 35–50, and others). Likewise, vocalic duration is an acoustic correlate of stress in Slovene, a Slavic language that is geographically adjacent to Friulian (Srebot Rejec 1988; Golob 2011).

There exists as yet no research on rhythm in Friulian, but it is likely that Friulian is stress-timed. This is suggested mainly by the existence of a contrast between long and short vowels (§4.1.1.4) and the fact that Friulian shows the complex syllable structures that are typical of stress-timed languages, such as CCCVCCC (White and Mattys 2007: 238). Tonal density is another aspect of Friulian prosody that has not yet been explored. Nevertheless, the data collected for this chapter seem to suggest that Friulian is a language with a dense pitch accent distribution (see e.g. Figs 4.17 and 4.24).

4.1.1.2 Lexical marking of modality As in the neighboring German, modal particles seem to play an important role in conveying information about modality (e.g. Schubiger 1980; Barker 2005; Cattarin 2009). The most important modal particles and tags used in Friulian are detailed in the Appendix (§4.5).

However, modal particles are not the only lexical elements that can mark modality in Friulian. For example, *wh*-words (not surprisingly) are characteristic of *wh*-questions (e.g. *Ce fâstu?* ‘What are you doing?’), and the etymologically related *wh*-exclamative pronouns introduce exclamations (e.g. *Ce bon odôr!* ‘What a nice smell!’). Adverbs, as in other Romance languages, are used to express doubt (e.g. *forsit* ‘perhaps’), obviousness (e.g. *claramentri* ‘obviously’), and so on.

4.1.1.3 Morphosyntactic marking of modality Like other Rhaeto-Romance and Gallo-Italic languages, Friulian has subject clitics (SCLs) (e.g. Renzi and Vanelli 1982; Rizzi 1986; Brandi and Cordin 1989; Poletto 1991). SCLs are used only with specific finite verbal

TABLE 4.1 Examples of the use of SCLs in Friulian and analogous subjective pronouns in German in statements, questions, wishes, and imperatives (SCLs and pronouns are underlined)

Sentence type	Friulian	German	English
Statement	<u>O</u> <i>tasès.</i>	<u>Ihr</u> <i>schweigt.</i>	You are silent.
Question	<u>Tasêso?</u>	<u>Schweigt</u> <i>ihr?</i>	Are you silent?
Wish	<i>Tasessiso!</i>	<i>Schwieget</i> <u>ihr</u> <i>doch nur!</i>	I wish you were silent!
Imperative	<i>Tasêt!</i>	<i>Schweigt!</i>	Be silent!

moods (indicative, subjunctive, conditional, and optative) and depend phonologically on the verb. They are proclitic in statements, enclitic in questions and wishes, and do not appear in imperatives (Vicario 1998; 2005: 62–3). The presence and position of SCLs is therefore clearly related to sentence modality. Their use thus resembles the use of subjective pronouns in some Germanic languages (Table 4.1).

Nevertheless, whereas in Germanic languages the subjective pronoun occupies the position of subject only if this is not occupied by a noun, SCLs in Friulian are used with the above-mentioned finite modes also if the subject of the sentence is expressed by means of a noun, as in the utterance *Marc al cjante* ‘Marc sings’, exemplified and glossed¹ in (1).

- (1) *Marc al=cjante.*
 Marc SCL.3SG.M=sings
 ‘Marc sings.’

Another morphological device for expressing modality that is found in all Romance languages is verbal mood. In addition to the moods that it shares with the other languages of this family, Friulian has an optative mood. This mood, which is morphologically built as a subjunctive with enclitic SCL, is used to express wishes (e.g. *Tasessial!* ‘I wish he were silent!’).

As in most Romance languages, verbs in Friulian have simple tenses and compound tenses, the latter being formed with an inflected auxiliary and the past participle of the main verb (e.g. *O ai fevelât* ‘I have spoken’). However, Friulian verbs using the auxiliary *vê* ‘to have’ also have bi-compound tenses, which are formed by a compound tense of the same auxiliary followed by the past participle of the main verb. The use of a bi-compound tense implies that the action is non-intentional and occasional (Marchetti 1985: 232–3; Vicario 2005: 63), as exemplified in the sentence *O ai vût fevelât* in (2).

¹ In this chapter we follow the Leipzig Glossing Rules: <<http://www.eva.mpg.de/lingua/resources/glossing-rules.php>>

TABLE 4.2 Minimal pairs containing short and long stressed vowels in Northern Friulian

Short stressed vowel	Long stressed vowel
['mil] 'thousand'	['mi:l] 'honey'
[ta'ʒe] 's/he was silent'	[ta'ʒe:] 'to be silent'
['car] 'cart'	['ca:r] 'expensive'
[a'tor] 'around'	[a'to:r] 'actor'
['nul] 'null'	['nu:l] 'cloud'

- (2) *O=ai vût fevelât.*
SCL.1SG=have had spoken
'I've had the chance to speak.'

Finally, modality and syntax are clearly connected in the case of *wh*-questions, since they display *wh*-movement in Friulian as in most Romance languages (§4.3.4).²

4.1.1.4 Vocalic system In Friulian there is a phonological and phonetic contrast between stressed short and stressed long vowels (V vs. V:), with unstressed vowels always being short (e.g. Prieto 1992; Vanelli 1998; Finco 2007; Torres-Tamarit 2012s). Table 4.2 shows some examples of minimal pairs in Northern Friulian.

The existence of a contrast between short monomoraic vowels and long bimoraic vowels implies that it is forbidden to add vocalic morae (i.e. to lengthen the stressed vowel) because such lengthening would entail a change in meaning. As we shall see in §4.1.3, this prohibition has important intonational consequences.

4.1.2 Intonational lexicon and phrasing

4.1.2.1 Prosodic phrasing The number of studies about phrasing in Friulian is limited. Roseano (2012) suggests the existence of two intonationally defined prosodic constituents above the level of the prosodic word (PW), namely the Intonational Phrase (IP) and the intermediate phrase (ip). Both levels are acoustically characterized by pre-boundary lengthening, which is more strongly realized in IP than in ip domains. IP domains are also characterized by the presence of final pauses. The basis for Roseano's (2012) proposal is the phonetic analysis of prosodic boundaries in 1,638

² *Wh*-movement is a syntactic phenomenon found in many languages around the world, in which sentences headed by interrogative words (also called *wh*-words) show a word order that differs from the word order usually found in declaratives. For example, a declarative sentence in English with normal word order would be *He ate a snake*, where the direct object *a snake* follows the verb. When the direct object is replaced with a *wh*-interrogative word, the *wh*-word appears at the beginning of the sentence, as in *What did he eat?* In some cases, *wh*-movement does not occur in English and the *wh*-word appears in situ, as in an echo question like *He ate what?!*

SVO broad-focus statements and 1,638 SVO yes/no questions in four varieties of Friulian. His data show that in statements there is usually a H- phrase accent at the end of the subject, whether branching or not. By contrast, intonational phrase final edges in statements are signaled by a low boundary tone (L%). On the other hand, the subject of SVO yes/no questions shows a L- phrase accent, whereas the end of the intonational phrase is signaled by a H% tone.

Roseano (2012) also offers support for the idea that, similarly to what has been shown by Prieto (1997) for Catalan and by Nibert (2000) and Hualde (2003a) for Spanish, the position of a phrase accent is the acoustic cue that allows listeners to interpret sentences that would otherwise be syntactically ambiguous. For example, in Eastern Friulian the sentence *La vecja lanza la menaza* is syntactically ambiguous insofar as it can have two interpretations. If the subject is *la vecja* ‘the old woman’ and the verb is *lanza* ‘throws’, the meaning of the sentence is ‘the old lady makes a threat’. By contrast, if the subject is *la vecja lanza* ‘the old spear’ and the verb is *menaza* ‘threatens’, its meaning is ‘the old spear is threatening her’. This difference is encoded prosodically by means of Fo and duration. Figs 4.2 and 4.3 show that the ip break is at the end of the subject and is characterized by preboundary lengthening (compare e.g. the duration of the final vowels of the words *vecja* and *lanza* in the two figures) and by the presence of the high H- phrase boundary at the end of the subject (i.e. at the end of *vecja* in Fig. 4.2 and at the end of *lanza* in Fig. 4.3).

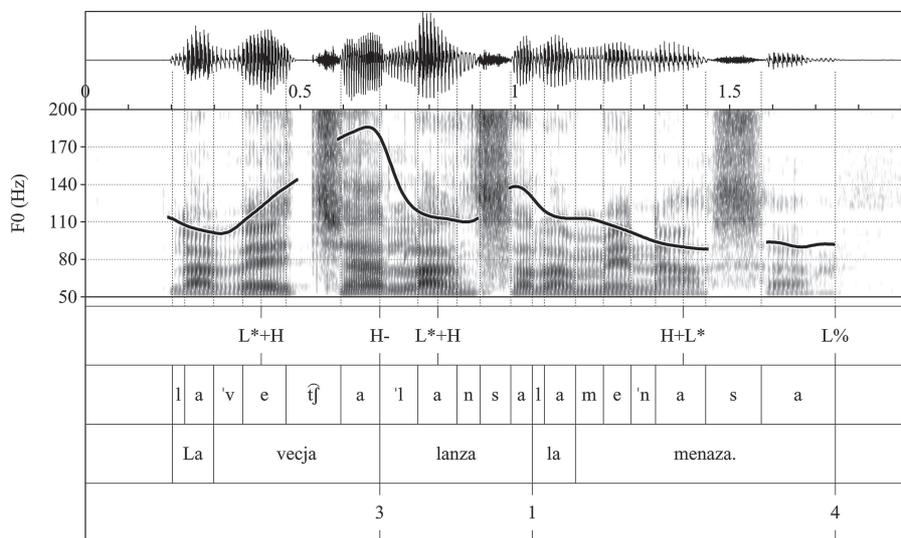


FIG. 4.2 Waveform, spectrogram, and F0 track of the broad-focus statement *[La vecja]_{SUBJ} [lanza]_{VERB} [la menaza]_{OBJ}* ‘The old lady makes a threat’, produced by a speaker of Eastern Friulian (Gurize) (adapted from Roseano 2012: 17)

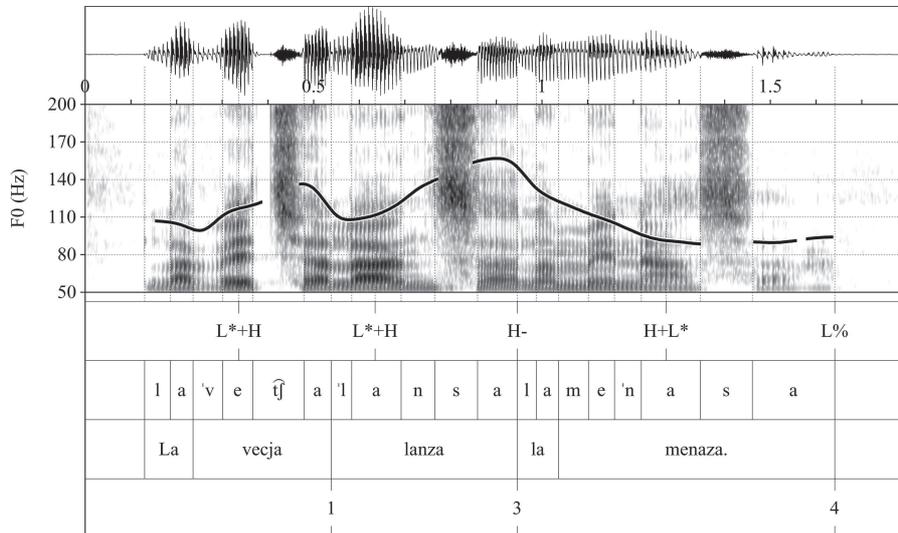


FIG 4.3 Waveform, spectrogram, and F0 track of the broad-focus statement [La vecja lanza]_{SUBJ} [la]_{OBJ} [menaza]_{VERB} ‘The old spear is threatening her’, produced by a speaker of Eastern Friulian (Gurize) (adapted from Roseano 2012: 17)

4.1.2.2 *Intonational lexicon* The description of the intonational lexicon of Friulian that we set out in this chapter is based on Roseano’s (2012) proposal of a ToBI labeling system for this language. Nevertheless, the data analyzed here will allow the inclusion in the intonational lexicon proposed by Roseano of two boundary tones not attested in previous research (HL% and H!H%).

The Friulian intonational lexicon includes pitch accents, ip boundary tones, and IP boundary tones. Three phonological tonal levels are attested in pitch accents: a low level (L), a high level (H), and a superhigh level (¡H), the latter being used only in L+¡H* pitch accent. Table 4.3 reproduces the inventory of pitch accents of Friulian, with a description of how tonal targets phonetically align with the tone-bearing units³ (TBU). No noteworthy differences have been found in the phonetic implementation of pitch accents in the different Friulian dialects.

The Friulian inventory of boundary tones includes three monotonal and two bitonal intonational morphemes. Three phonological tonal levels are attested in IP-final boundary tones: a low level (L%), a mid level (!H%), and a high level (H%). Table 4.4 reproduces the inventory of final boundary tones of Friulian, with a description of how tonal targets phonetically align with the tone-bearing units (TBU) and comments about differences among dialects. The inventory of boundary

³ We use the term ‘tone-bearing unit’ instead of ‘syllable’ because, unlike what happens in other Romance languages, the tone bearing unit in Friulian is the mora, not the syllable (see §4.1.3).

TABLE 4.3 Inventory of monotonal and bitonal pitch accents in Friulian and their schematic representations

	L*	The low pitch accent is phonetically realized as a low tone at the minimum of the speaker's range in the tonic TBU with no significant difference with the pretonic TBU. It appears in the nucleus of yes/no information-seeking questions. This pitch accent is exemplified in Figs 4.5 and 4.13.
	L*+H	The late rising pitch accent is phonetically realized as a Fo rise beginning at some point in the tonic TBU and with the peak in the post-tonic TBU. It has been attested in the pre-nucleus of broad-focus statements and wh-questions. This pitch accent is exemplified in Figs 4.7 (where the rise begins at the end of the stressed TBU) and 4.8 (where the rise begins early in the stressed TBU). ^a
	L+H*	The early rising pitch accent is phonetically realized as a Fo rise with the peak at the end of the tonic TBU. It is frequently found in the pre-nucleus of most sentence types and also appears in the nucleus of several sentence types. It is exemplified in Figs 4.4 and 4.9.
	L+!H*	This superhigh rising pitch accent is phonetically realized as a Fo rise with a superhigh peak at the end of the tonic TBU. It is attested in echo questions. It is exemplified in Figs 4.6 and 4.16.
	H+L*	The early falling pitch accent is phonetically realized as a Fo fall from a high pretonic TBU ending in the tonic TBU. It appears in the nucleus of broad focus statements, imperative wh-questions, and orders. It is exemplified in Figs 4.7, 4.8 and 4.22.
	H*+L	The late falling pitch accent is phonetically realized as a Fo fall beginning well before the end of the tonic TBU and ending in the posttonic TBU. Optionally, the fall may be preceded by a rise from the previous TBU. It appears in the nucleus of epistemically biased statements and wh-questions. This pitch accent is exemplified in Figs 4.11 and 4.18.

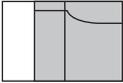
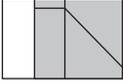
^a Friulian does not display the phonological contrast that has been described for Spanish (Face and Prieto 2007) between an early rising accent (L+H*) and a late rising accent (labeled L+<H* in Sp_ToBI; see also Ch. 10, this volume; Roseano 2012: 245–7).

tones that appear in ip-final position seems to be similar to those found in IP-final position, but further research is needed on this topic.

4.1.3 *Phonetic implementation*

The phonetic implementation of the phonological tones described in the previous section is usually transparent, in the sense that underlying tones are phonetically realized in a recognizable way. One noteworthy apparent exception is represented by the final rises that may occur with L% and !H%. As mentioned previously, this final rise in Friulian is optional and not phonological.

TABLE 4.4 Inventory of monotonal and bitonal boundary tones in Friulian and their schematic representations

	L%	The low boundary tone is phonetically realized as a low or falling tone at the baseline of the speaker. In Northern and Western Friulian it can often be realized as a shallow rise after the low target has been achieved. In Central-Eastern Friulian this rise can be substantial (up to 4 semitones—Roseano 2012), but it is not phonological, because it is optional and does not entail a change in pragmatic meaning. ^a This boundary tone is exemplified in Figs 4.7 (where it is phonetically realized as a shallow rise), 4.8 (where it surfaces as a steep rise), and 4.9 (where it is realized as a fall).
	H%	The high boundary tone is phonetically realized as a rising pitch movement coming from a low or high pitch accent. If preceded by a rising pitch accent, it can surface as a high plateau. This boundary tone is exemplified in Figs 4.13 and 4.20.
	!H%	The mid boundary tone is phonetically realized as a falling movement to a target mid point. In all varieties of Friulian it can be realized as a rise after the mid target has been achieved. Though common and sometimes steep, this rise is not phonological because it is optional and does not entail a change in pragmatic meaning. ^b This boundary tone is exemplified in Fig. 4.15 (showing the implementation as shallow final rise).
	H!H%	The high-mid boundary tone is phonetically realized as a Fo peak in the post-tonic TBUs followed by a fall to a target mid point. The mid tone is sustained, i.e. is associated with a lengthened TBU. This boundary tone is exemplified in Fig. 4.25.
	HL%	The high-low boundary tone is phonetically realized as a Fo peak in the posttonic TBUs followed by a fall to a target low point. The low tone is associated with a lengthened TBU. This boundary tone is exemplified in Fig. 4.26.

^a The allophonic realization of the final L% tone as a rise does not seem to be related with the speaking style. In fact, the realization of L% as a rise is common not only in read and semi-spontaneous speech, but also in spontaneous speech (e.g. the Map Task dialogs and interviews available in the *Interactive Atlas of Romance Intonation*; Prieto et al. 2010–2014). Friulian declaratives seem thus to differ from Italian yes-no questions, where speaking style has a main role in determining the final boundary tone, insofar as the final tone is predominantly falling in spontaneous speech but rising in read speech (Savino 2012).

^b The allophonic realization of the final !H% tone as a rise is found in read, semi-spontaneous and spontaneous speech (e.g. the Map Task dialogs and interviews mentioned in fn. 5).

Another interesting example of allotonic variation is the alignment of the targets in the L*+H pitch accent: the rise to the high tone can begin at any point in the stressed TBU, from the beginning to the end, and the only constant alignment is that of the high target, which is reached in the post-tonic TBU (Roseano 2012).

Friulian intonational phonology includes some rules that, in the case of tonal crowding (i.e. the situation where multiple tones link to a single TBU), cause some phonological tones either not to be associated with any TBU (and therefore to be truncated) or to surface in a different phonetic form than the usual one.

The first such association rule foresees that the TBU is the mora. This is demonstrated by the fact that, exactly as in the intonational languages where the TBU is the mora and not the syllable, light monomoraic and heavy bimoraic syllables may not bear the same number of tones (Yip 2002: 73). Furthermore, not all morae are as good as TBUs: vocalic morae are preferred to consonantal morae, and non-sonorant consonantal morae may not act as TBUs at all.

An important consequence of this rule is the alignment of the tonal targets of the L+H* and L+_iH* pitch accents. Their H targets are aligned at the end of the stressed TBU, in other words at the end of the stressed vocalic mora, which does not always coincide with the final boundary of the syllable. In fact, if the stressed syllable is closed, the Fo local maximum usually occurs not at the end of the coda but at the end of the syllabic nucleus. If the vocalic nucleus is bimoraic, the high target is aligned at the end of the first vocalic mora. Fig. 4.4 offers an example of a L+H* pitch accent associated with a closed syllable ['lan], where the Fo peak is at the end of the nucleus and the Fo fall takes place in the consonantal coda. The same figure contains an example of a L+H* pitch accent associated with a syllable with a bimoraic nucleus ['laa], where the Fo peak is at the end of the first vocalic mora of the nucleus and the Fo fall takes place in the second vocalic mora.⁴

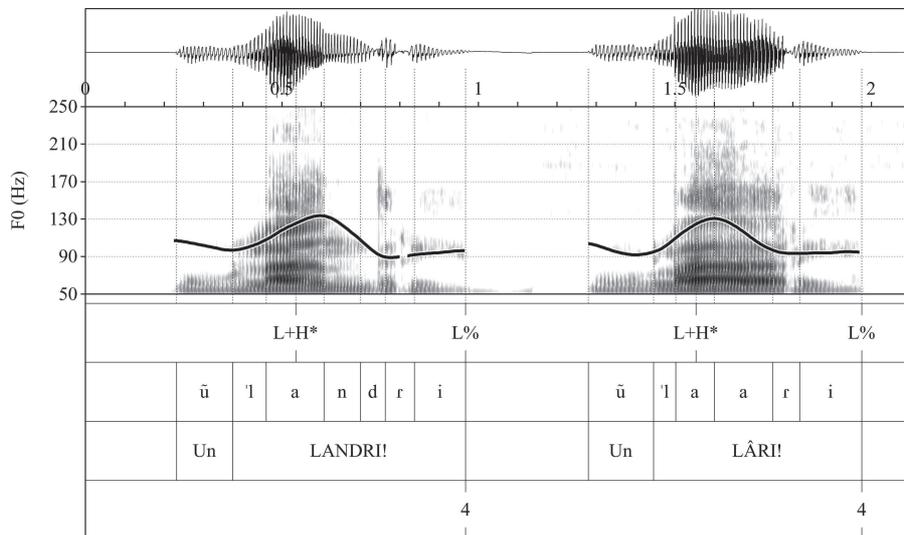


FIG. 4.4 Waveform, spectrogram, and F0 track of the narrow-focus statements *Un LANDRI!* 'A CAVERN!' and *Un LÂRI!* 'A THIEF!', produced by a speaker of Northern Friulian (Negrons)

⁴ Figures in this section contain a tier with a phonetic transcription by segments and morae. In the other sections the figures contain a broad phonetic transcription by syllables, as in the other chapters of this book.

The second rule, which also finds a correspondence in tonal languages (Zhang 2002), sets a limit on the number of tones that can be associated with one TBU: in Friulian one mora cannot bear more than two tonal targets.

A third rule, which is active at the segmental level, has important intonational consequences. In some other intonational languages, like Portuguese, Catalan or Spanish, when three or more tones are associated with the same stressed syllable, there exists the possibility of lengthening its nuclear vowel, so that there is enough segmental material to realize all tonal targets (Prieto and Ortega-Llebaria 2009). Given the fact that Friulian—as mentioned in §4.1.1.4—has a contrast between short monomoraic and long bimoraic vowels, it is forbidden to add vocalic morae, i.e. to lengthen the vowel. In fact, if a vocalic mora were to be added in order to associate an otherwise floating tone with it, this could bring about a lexical change.

These three rules do not produce any relevant effect in the case of nuclear words with the stress on the penultimate or antepenultimate syllable, but have consequences in cases where the nuclear word has the stress on the last syllable. The effects of the rules differ depending on the structure of the nuclear syllable and the number of tonal targets that have to be linked with it.

If two tonal targets are associated with a word having the stress on the last syllable, there are several solutions, depending on the syllable structure of the word itself. The different implementations are exemplified in Fig. 4.5, where a L* H% configuration is

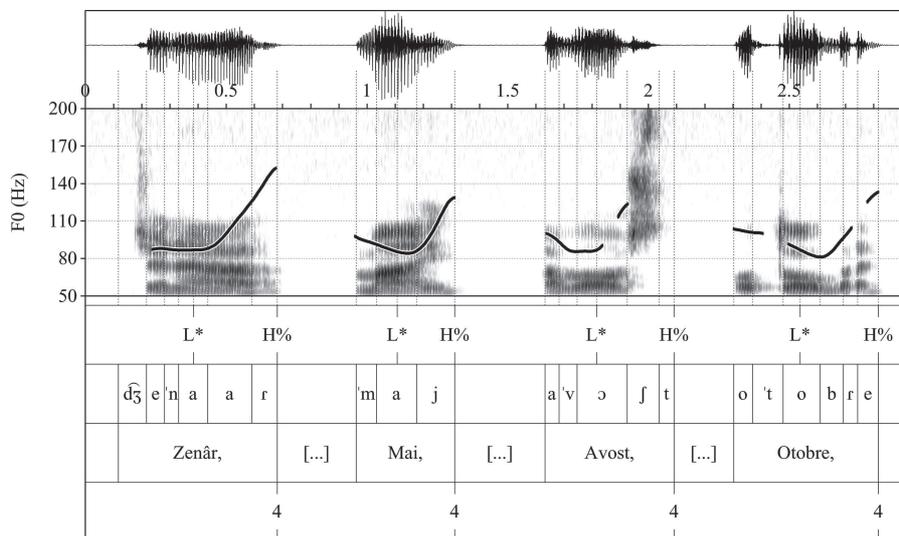


FIG. 4.5 Waveform, spectrogram, and F0 track of the declarative enumeration *Zenâr*, [*Fevrâr*, *Març*, *Avrîl*,] *Mai*, [*Jugn*, *Lui*,] *Avost*, [*Setembre*,] *Ottobre*, [*Novembre*, *Dicembre*] ‘January, [February, March, April,] May, [June, July,] August, [September,] October, [November, December]’, produced by a speaker of Northern Friulian (Negrans)

associated with some non-final items of a declarative enumeration. If the stressed nuclear syllable has a bimoraic nucleus, as in the first item (*Zenâr* ‘January’), the L* is associated with the first vocalic nuclear mora, whereas the H% is associated with the final consonantal mora. If the stressed syllable has a monomoraic nucleus and a sonorant coda, as in the second item (*Mai* ‘May’), the L* is associated with the vocalic nuclear mora, whereas the H% is associated with the final glide: in this word, in fact, the vocalic nucleus is low and the rise takes place in the final glide. If the stressed syllable has a monomoraic nucleus and an unvoiced coda as in the third item (*Avost* ‘August’), both the pitch accent and the boundary tone are realized in the vocalic mora. In this case there is tonal compression, since the Fo curve appears to be a phonetic rise from the beginning to the end of the TBU and it is not possible to clearly separate the L* and H% timings. Finally, the last element of the enumeration in Fig. 4.5 represents a canonical realization of L* H% associated with a nuclear word with the stress on the penultimate syllable (*Otobre* ‘October’), where it is evident that the L target is associated with the vowel of the stressed syllable and the H target with the final edge of the word.

If three tonal targets are associated with a word having the stress on the last syllable, there are several solutions, depending on the syllable structure of the word itself. The canonic realization of a tri-tonal contour as L+_iH* L% would be as represented in Fig. 4.16 in §4.3.3.2: a rising movement associated with the stressed vowel and a low target associated with the word-final unstressed vowel. Fig. 4.6, on

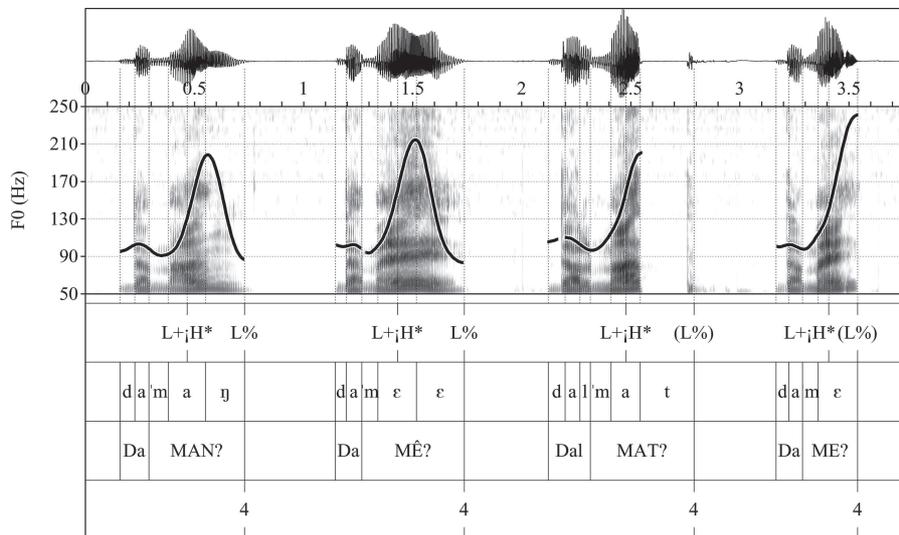


FIG. 4.6 Waveform, spectrogram, and Fo track of the echo questions *Da MAN?* ‘Of the hand?’, *Da MÊ?* ‘Of mine?’, *Dal MAT?* ‘Of the madman?’ and *Da ME?* ‘At my place?’, produced by a speaker of Northern Friulian (Negrans)

the other hand, shows non-canonic realizations of the same contour, when it is associated with words having the stress on the last syllable and whose nuclear syllables have different structures. If the stressed syllable has a monomoraic nucleus and a sonorant coda as in the first item (*man* ‘hand’), the \uparrow H target is aligned with the end of vocalic nuclear mora, whereas the Fo fall leading to the final L target is realized in the coda, the L target being thus associated with the sonorant coda itself. If the stressed nuclear syllable has a bimoraic nucleus, as in the second item (*mê* ‘mine’), the \uparrow H target is aligned with the end of the first vocalic nuclear mora, and the Fo fall takes place in the second vocalic mora. If the nuclear syllable has a monomoraic nucleus, it is closed and its coda is unvoiced, as in the third case (*mat* ‘madman’): the \uparrow H target is aligned with the end of vocalic nuclear mora, and the final L target does not surface. Finally, if the nuclear syllable is open and has a monomoraic nucleus—as in the last case (*me* ‘me, my place’)—the final L target does not surface either. In the last two cases we consider the boundary tone to be truncated and we transcribe it between brackets.

4.2 Methodology

The data analyzed here were collected by means of a questionnaire based on the Discourse Completion Task (DCT), an inductive method that is widely used in research on pragmatics and sociolinguistics (see e.g. Blum-Kulka et al. 1989; Billmyer and Varghese 2000; Félix-Brasdefer 2010). The Friulian questionnaire included the 31 situations referred to in the questionnaires used to elicit data for all the Romance languages described in this volume, plus a situation aimed at eliciting different degrees of insistent vocatives and another situation designed to elicit a specific subtype of echo question (this will be described in §4.3.4.2).⁵ In addition to the data collected by means of this standard questionnaire, the subjects from the linguistically conservative area (Northern Friuli) responded to a separate DCT questionnaire that included 67 situations and was aimed at investigating the intonational processes described in §4.1.3 as well as gathering information about the intonational features of postfocal elements.

The questionnaire was carried out with speakers from 9 different geographic locations chosen in such a way that all major dialects of Friulian would be represented, albeit with a special focus on Central Friulian, which is the most widely spoken variety and the basis of the standard written language (see Fig. 4.1). The informants were 9 native speakers of Central Friulian (5 from the village of

⁵ The reader can access the Friulian version of the questionnaire, as well as the questionnaire used for the other Romance languages in this volume, in the *Interactive Atlas of Romance Intonation* (Prieto et al. 2010–14). The sound files included in the figures in this chapter will be found in the *OUP Companion Webpage*.

Remanzàs, 1 from Colorêt di Montalban, 1 from Nimis, 1 from Bicinins, and 1 from Udin, the capital of Friuli), 4 speakers of Northern Friulian (all of them from the village of Negrons), 2 speakers of Outer Eastern Friulian (from San Luring), 2 speakers of Inner Western Friulian (from Tesis), and 3 speakers of Outer Western Friulian (from Gleris). Subjects surveyed were 10 men and 10 woman aged between 21 and 75 (mean = 53 years). All 20 informants were recorded by means of a Marantz PMD671 digital recorder and a Shure SM58 microphone. A total of 928 utterances were recorded and analyzed.

4.3 Intonation and phrasing

In the following sections we will describe the main intonational features of the most important sentence types, focusing especially on the nuclear configurations. We will also give information about the morphosyntactic and lexical features of the sentence types we describe. The examples presented in the figures in this section have been chosen from the corpus with the aim of representing the most noteworthy intonational characteristics of the dialects of Friulian.

4.3.1 Statements

Before describing the intonational features of statements in Friulian, it is worth remembering that this kind of sentence is morphosyntactically characterized by the fact that the SCLs are proclitic to the verb,⁶ as in examples (1) and (2) presented in §4.1.1.3.

4.3.1.1 Broad-focus statements In all varieties of Friulian, broad-focus statements are characterized by late rising prenuclear accents (L*+H) and an early falling nuclear accent (H+L*) followed by a low final boundary tone (L%). Figs 4.7 and 4.8 exemplify the intonation of this sentence type and show allotonic variations of both the prenuclear pitch accent and the boundary tone. In Fig. 4.7, in fact, the prenuclear pitch accent is realized as a low stressed TBU followed by a rise in the post-tonic TBU, whereas in Fig. 4.8 the same pitch accent is characterized by a rise beginning early in the stressed TBU. The final L boundary tone is implemented as a L target followed by a shallow rise in Fig. 4.7 (Northern Friulian) and by a steep rise in Fig. 4.8 (Central Friulian). The steepness of this final optional rise is a dialectal characteristic of Central-Eastern Friulian.

4.3.1.2 Narrow-focus statements Whereas in broad-focus statements all information contained in the sentence is new, narrow-focus statements provide new

⁶ The very few exceptions where SCLs are enclitic in statements (see Benincà 2007: 124–6) are not intonationally relevant.

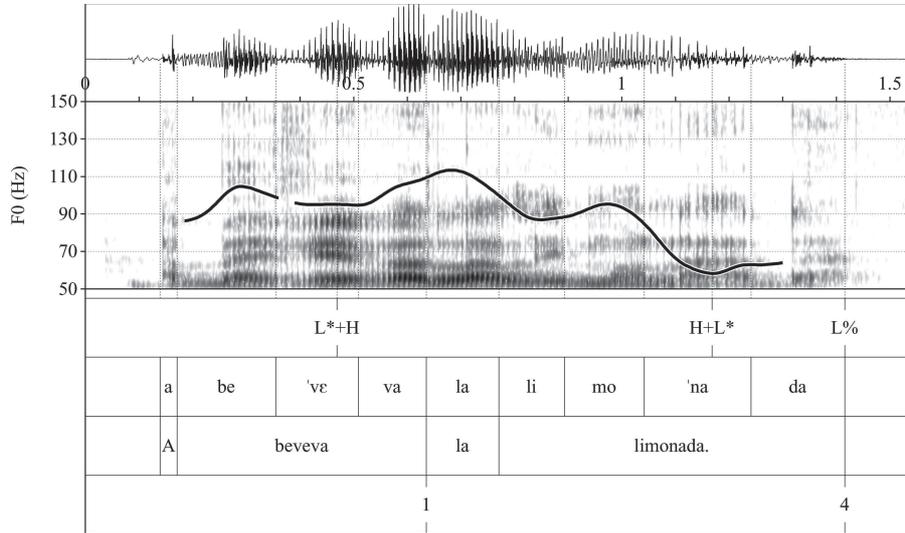


FIG. 4.7 Waveform, spectrogram, and F0 track of the broad-focus statement *A beveva la limonada* 'She drank the lemonade', produced by a speaker of Northern Friulian (Negrans)

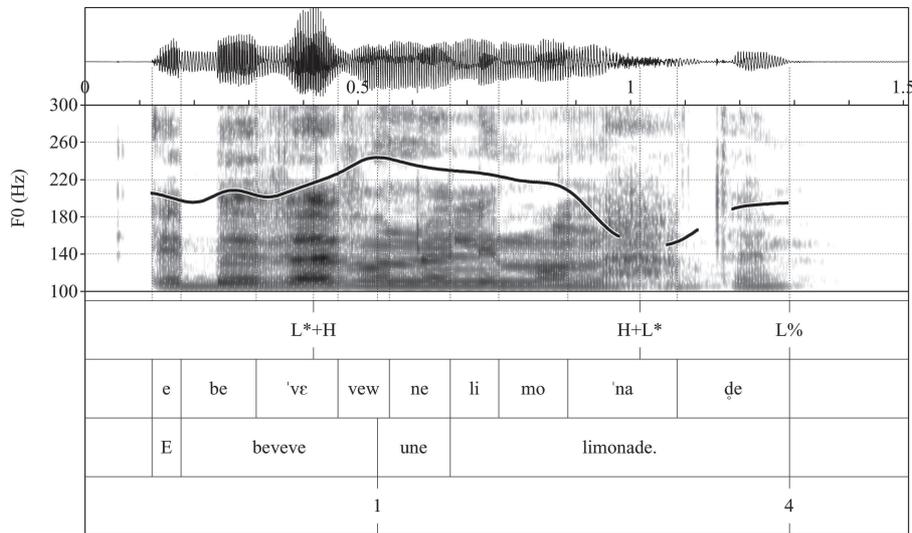


FIG. 4.8 Waveform, spectrogram, and F0 track of the broad-focus statement *E beveve une limonade* 'She drank lemonade' produced by a speaker of Central Friulian (Colorèt di Montalban)

information in which there is a particular constituent which is focalized with respect to the background (i.e. *My daughter's name is [Marina]_f* in response to the question *What's your daughter's name?*). From an intonational point of view, in Friulian these types of sentence do not differ from broad-focus statements. Other types of narrow-focus statement, such as contrastive narrow-focus statements (§4.3.1.2.1), by contrast, do differ from broad-focus statements.

4.3.1.2.1 Contrastive-focus statements A specific type of narrow-focus statement is the so-called contrastive-focus statement, which refers to sentences that express the direct rejection of an alternative (i.e. “It is B, and not A”). In Friulian, the nuclear accent of contrastive-focus statements is early rising (L+H*) and is followed by a low boundary tone at the end of the focused element. The use of this nuclear configuration to express contrastive focus is typical of all Friulian varieties. If postfocal elements are present, intonationally they are realized as a low plateau.

An example of a contrastive-focus statement is presented in Fig. 4.9 for the utterance *No! As UNDIS!* ‘No! At ELEVEN o’clock!’. This contour was obtained as the correction of a wrongly interpreted item. The first intonation unit (*No!*) is produced with a rising pitch accent, and the final low boundary tone is truncated (§4.1.3). The second intonation phrase includes the focalized element, which is produced with an early rising accent (L+H*) with the peak located at the end of the stressed TBU and a fall to L that begins in the consonantal coda of the stressed syllable *un-*.

Focus in Friulian may be highlighted either intonationally only, as in (3) and Fig. 4.9, or by means of both intonation and various syntactic strategies like fronting (as in (4)) or clefting (Vicario 2005: 65; Benincà 2007: 126–8; Tavano and Collavini

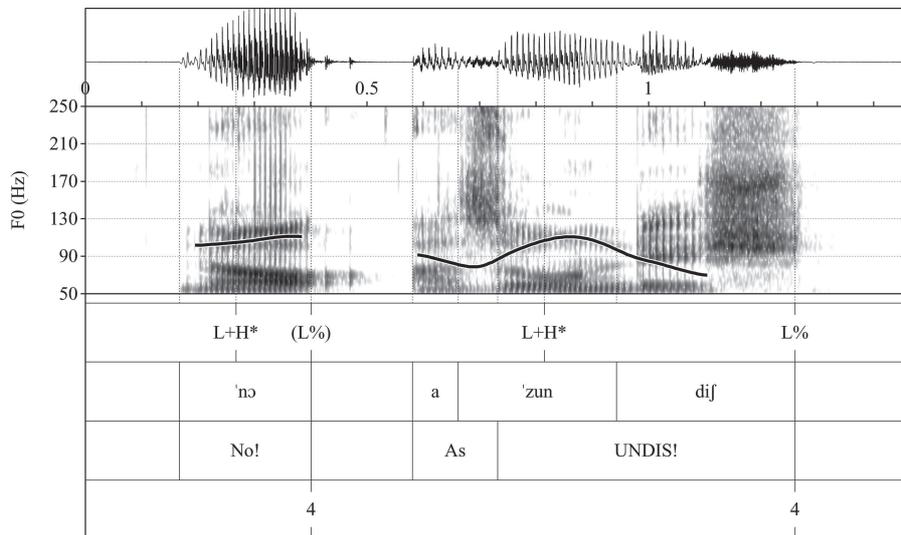


FIG. 4.9 Waveform, spectrogram, and F0 track of the contrastive-focus statement *No! As UNDIS!* ‘No! At ELEVEN o’clock!’, produced by a speaker of Northern Friulian (Negrans)

2007: 171–2). Regardless of whether the focused element is syntactically marked or not, it always has a L+H* pitch accent.

- (3) *No!* *E=je messe a [UNDIS]_f!*
 no SCL.3SG.F=is mass at eleven
 ‘No! The mass is at ELEVEN!’
- (4) *No!* *A [UNDIS]_f e=je messe! No a dīs!*
 no at eleven SCL.3SG.F=is mass not at ten
 ‘No! The mass is at ELEVEN! Not at ten!’

4.3.1.3 *Epistemically biased statements* Statements that express obviousness, doubt, or any other kind of epistemic bias are characterized by a late falling nuclear configuration (H*+L L%) in all varieties of Friulian. If the existence of an epistemic bias is encoded linguistically by means of intonation, the function of specifying the kind of bias is carried out by lexical elements, such as particles or adverbs. Although the presence of these elements is not obligatory, they are very frequent in the corpus used for this research. The modal particles that appear most frequently in epistemically biased statements are *eh* and *po* (both expressing obviousness), *î* and *ma* (expressing doubt), *gjo* (expressing restatement), *ben* (expressing contradiction of the listener’s expectations in an affirmative statement), or *mighe* (expressing contradiction of the listener’s expectations in a negative statement) (see Appendix for further details).

Fig. 4.10 shows an example of a sentence which conveys uncertainty on the part of the speaker: *Ma... No... Forsi no gji plasevin* ‘Well... No... Maybe they didn’t like

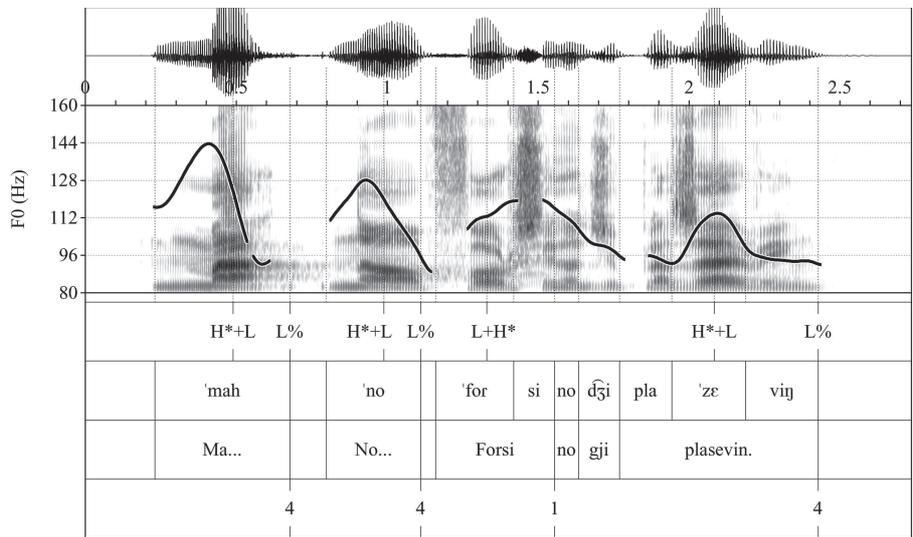


FIG. 4.10 Waveform, spectrogram, and F0 track of the uncertainty statement *Ma... No... Forsi no gji plasevin* ‘Well... No... Maybe they didn’t like them’, produced by a speaker of Outer Eastern Friulian (San Luring)

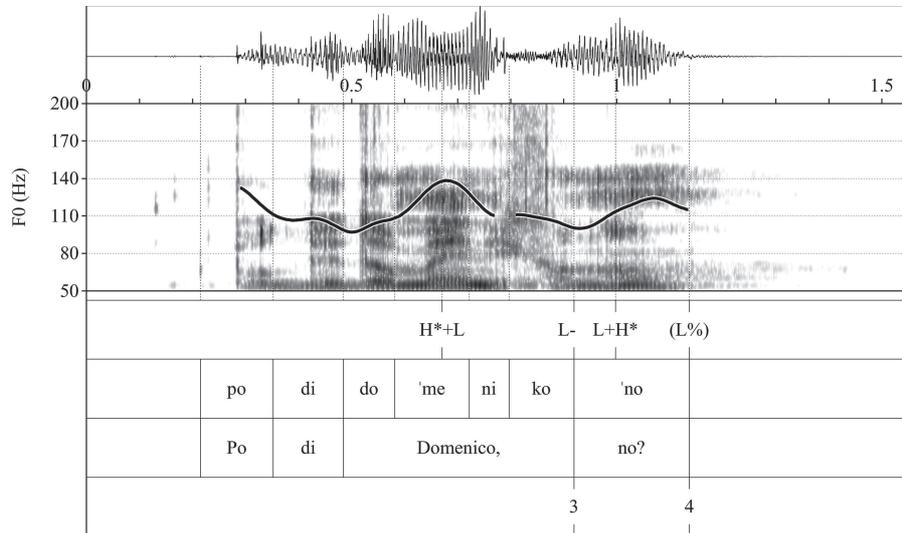


FIG. 4.11 Waveform, spectrogram, and F0 track of the statement of the obvious *Po di Domenico, no?* 'Obviously it's Domenico's, don't you know?', produced by a speaker of Outer Eastern Friulian (San Lurinj)

them'. The sentence is uttered with three intonational units. The first two contain the monosyllables *ma* and *no*, produced with a low initial tone followed by a late falling pitch movement H*+L. The third unit includes a H*+L nuclear accent consisting of a late fall starting in the stressed TBU and a low post-tonic final syllable. From a lexical point of view, the sentence is headed by the dubitative particle *ma* and contains the adverb *forsi* 'maybe', both expressing uncertainty. Other lexical cues for uncertainty are the use of the future indicative as in *Al varà trente agns* 'He must be thirty years old' (lit. 'He will have thirty years') and the use of periphrasis to indicate obligation as in *Al à di vê trente agns* 'He must be thirty years old' (lit. 'He has to have thirty years').

Statements of the obvious, like other epistemically biased statements, are characterized by a late falling nuclear configuration. In Fig. 4.11 this configuration is associated with the word *Domenico* 'Dominic'. The statement of the obvious is headed by the modal particle *po*, which expresses obviousness, and followed by the confirmation tag *no?* 'don't you know?'.

4.3.2 Exclamatives

As in other Romance varieties, exclamatives in Friulian can be headed by a wh-word. In wh-exclamatives, SCLs are proclitic and the wh-constituent co-occurs with the complementizer *che* that precedes the SCL, as in (5) (see Zanuttini and Portner 2003 for a similar structure in Paduan). Wh-exclamatives are therefore morphosyntactically

different from direct *wh*-questions, which have enclitic SCLs and do not present the complementizer *che*, as in (6) (Benincà 2007: 126). A further difference between *wh*-questions and *wh*-exclamatives lies in the fact that while all *wh*-words can head a *wh*-question, not all of them may appear in an exclamative (e.g. *parcè* ‘why’ and *cuâl* ‘which’ fail to occur in exclamatives).

- (5) *Ce musiche che tu=scoltis!*
 What music that SCL.2SG=listen
 ‘What music you are listening to!’
- (6) *Ce musiche scoltis=tu?*
 What music listen=SCL.2SG
 ‘What kind of music do you listen to?’

From an intonational point of view, in all varieties of Friulian *wh*-exclamatives are characterized by a sequence of rising L+H* prenuclear pitch accents, followed by a L+H* L% nuclear configuration. Fig. 4.12 offers an example of a *wh*-exclamative with three L+H* pitch accents whose high target is aligned with the end of the stressed vowels. The fall to the following low point begins immediately after the end of the stressed TBU, which means that in the cases of the syllables *-dour* and *-len-* it begins in the coda of the stressed syllable. The final low boundary tone is associated with the final unstressed vowel.

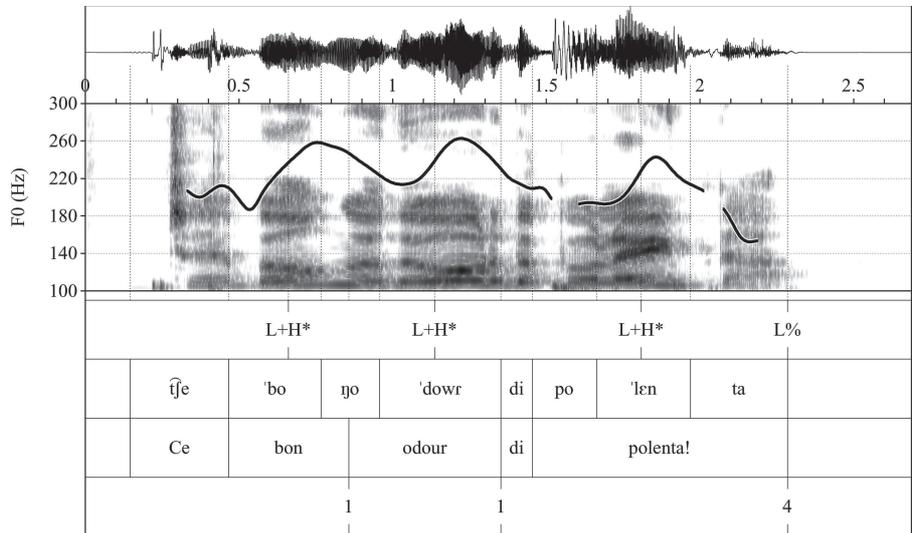


FIG. 4.12 Waveform, spectrogram, and F0 track of the exclamative *Ce bon odour di polenta!* ‘What a nice smell of cornmeal pudding!’, produced by a speaker of Inner Western Friulian (Tesis)

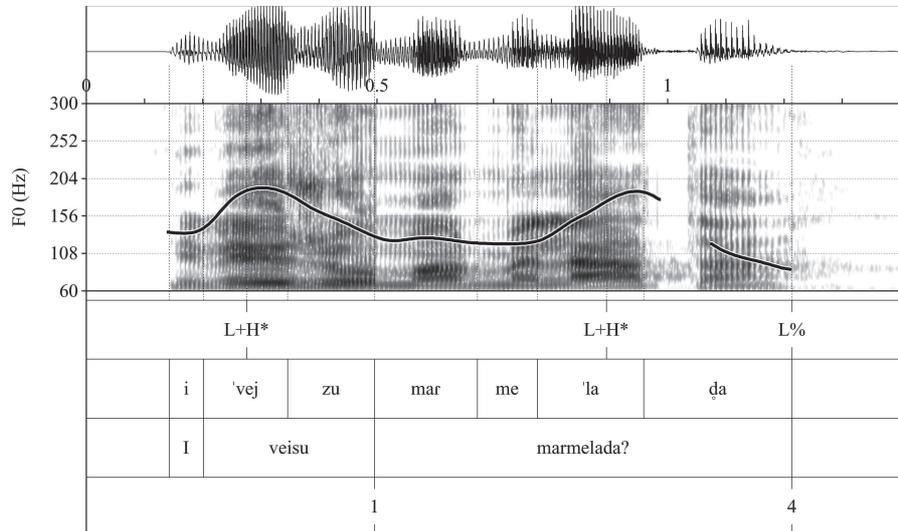


FIG. 4.14 Waveform, spectrogram, and F₀ track of the information-seeking yes/no question *I veisu marmelada?* ‘Do you have jam?’, produced by a speaker of Outer Western Friulian (Gleris)

veiso ‘do you have’ and the nuclear low pitch accent is aligned with the vowel of the last stressed syllable *-la-*. The final high target is reached at the end of the final unstressed vowel. Fig. 4.14, on the other hand, offers an example of the rising–falling pattern: after a prenuclear rising accent associated with the word *veisu* ‘do you have’, F₀ draws a rising nuclear accent associated with the vowel of the stressed syllable *-la-* and falls to the low final target, which is reached at the end of the utterance.

A third intonational pattern was found quite frequently in information-seeking yes/no questions in all dialects. This contour, exemplified in Fig. 4.15, is a chant characterized by a rise from a low to a high level in the nuclear stressed TBU, followed by a fall to a mid level. The !H% tone spreads to the left and is realized as a mid plateau that includes all final posttonic syllables. As noted in Table 4.4, this fall to !H may be followed by an optional rise, which in Central Friulian can be steep. The sentence in question thus displays a prenuclear rising pitch accent associated with the word *veiso* ‘do you have’, a rising nuclear accent associated with the vowel of the nuclear syllable *-la-*, and a final mid boundary tone, realized as a rise. This chanted contour is found in several other sentence types, and its pragmatic function will be discussed in §4.3.6.3.

4.3.3.2 Echo yes/no questions Echo questions typically arise when a person fails to understand what one of the interlocutors in a conversation has just said. In English, echo questions preserve the sentence type of the echoed utterance, whatever this

- (11) A: *Ce cjanti=al Marc?*
 what sings=SCL.3SG.M Marc
 ‘What does Marc sing?’
 B: *Ce che al=cjante Marc?*
 what that SCL.3SG.M=sings Marc
 ‘What does Marc sing?’

From an intonational point of view, echo questions are characterized by a $L+\uparrow H^* L\%$ nuclear configuration, regardless of the sentence type of the echoed element. An example of an echo question is presented in Fig. 4.16 for the utterance *As UNDIS?* ‘At ELEVEN o’clock?’. The echoed element *As UNDIS* is produced with a pitch accent rising to a superhigh level, and the $\uparrow H$ target is reached at the end of the stressed TBU. The fall to the final L target begins in the consonantal coda of the stressed syllable *un-*. Note the difference in range between the rising $L+H^*$ accent in Fig. 4.9 (corresponding to 7 semitones) and the $L+\uparrow H^*$ rise in Fig. 4.16 (corresponding to 15 semitones), both produced by the same speaker. Another example of the difference in range between these two pitch accents is represented by Figs 4.4 and 4.6, which contain utterances produced by another speaker.

Although echo questions can express a failure to understand an utterance, they can also be used to convey some type of counterexpectational meaning such as surprise, incredulity, disapproval, and even outrage. All these meanings indicate that what the

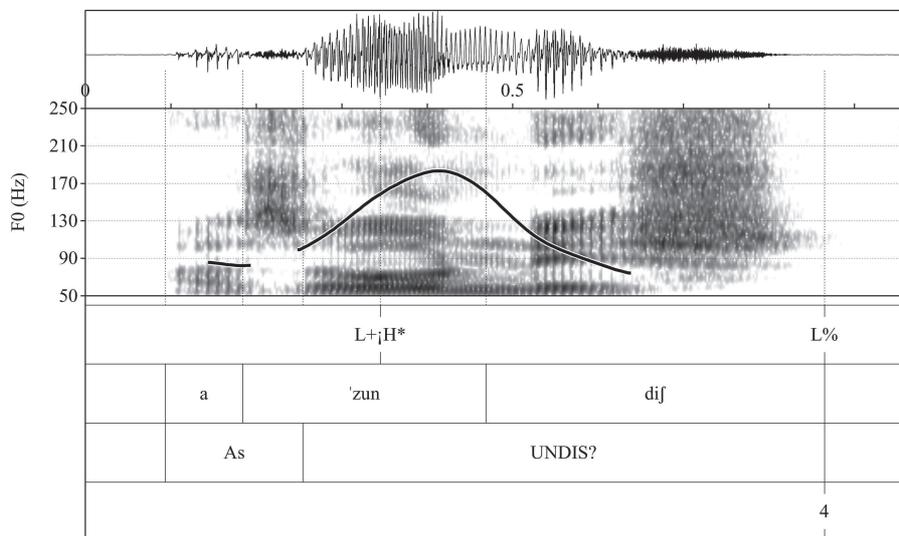


FIG. 4.16 Waveform, spectrogram, and Fo track of the echo question *As UNDIS?* ‘At eleven o’clock?’, produced by a speaker of Northern Friulian (Negrans)

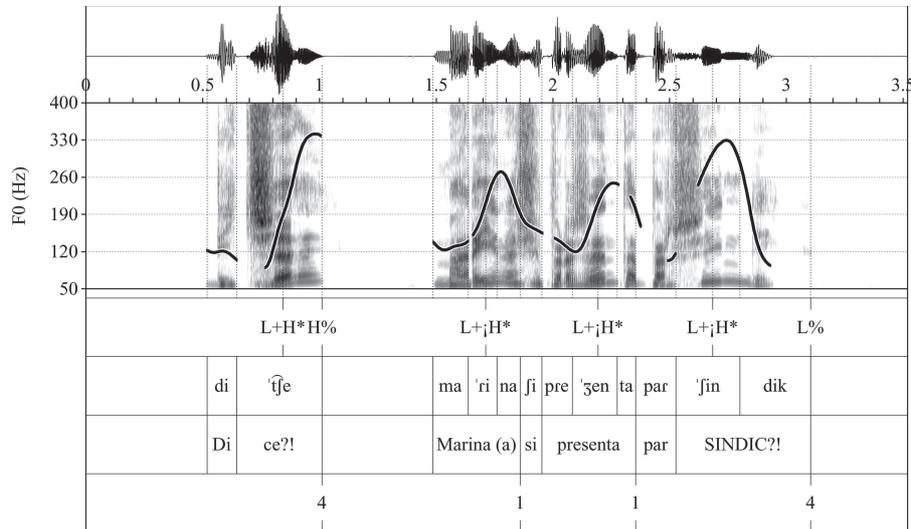


FIG. 4.17 Waveform, spectrogram, and F₀ track of the counterexpectational echo question *Di ce?! Marina a si presenta par SINDIC?!* ‘What?! Marina’s running for mayor?!’, produced by a speaker of Northern Friulian (Negrons)

interlocutor says (or some non-verbal element of the situation where the conversation takes place) contradicts the speaker’s expectations.

If a whole statement uttered by A goes against what B expects, B can produce an echo question that has the morphosyntactic structure exemplified in (9B) and a contour formed by a L+_iH* nuclear pitch accent, followed by a low final boundary tone. The L+_iH* pitch accents that appear in counterexpectational echo questions usually have a higher range than what we see in non-counterexpectational echo questions.

Fig. 4.17 contains an example of a counterexpectational echo question produced by the same speaker as in Fig. 4.16. In addition to the higher pitch range, note the presence of the initial surprise wh-question *Di ce?!* ‘What?!’ Counterexpectational questions can also be introduced by the tag question *Eh?!* ‘What?!’ or by the particle *Ma* ‘but’.

4.3.3.3 Confirmation-seeking yes/no questions Confirmation-seeking yes/no questions present the same intonational patterns and morphosyntactic characteristics as information-seeking yes/no questions in all dialects. Speakers of Friulian can also ask for confirmation of a piece of information by means of another strategy, which appears when the degree of certainty is higher, and which consists in uttering a declarative sentence—i.e. with proclitic SCLs as in (1)—followed by the confirmation question tag *no?*, which is realized with a rising intonation. Whereas *no?* is a neutral confirmation-seeking question tag used for confident checks, other confirmation tag

questions transmit other nuances, such as reproach, disapproval, or irritation (see Appendix).

4.3.4 *Wh-questions*

Before describing the intonational features of direct *wh*-questions in Friulian, it is important to remember that this kind of sentence is morphosyntactically characterized by the fact that the SCLs are enclitic to the verb and that there is *wh*-movement, as in the example *Ce cjantial Marc?* ‘What does Marc sing?’ in (12). In indirect *wh*-questions, by contrast, SCLs are proclitic as in statements, and the *wh*-constituent co-occurs with the complementizer *che* that precedes the SCL. Indirect *wh*-questions can be embedded in a carrier sentence like *O vuei savê . . .* ‘I want to know . . .’ or *Mi âstu domandât . . .?* ‘Did you ask me . . .?’ as in (13).

(12) *Ce cjanti=al Marc?*
What sings=SCL.3SG.M Marc
‘What does Marc sing?’

(13) *O=vuei savê ce che al=cjante Marc.*
SCL.1SG=want know what that SCL.3SG.M=sings Marc
‘I want to know what Marc sings.’

4.3.4.1 Information-seeking *wh*-questions In all varieties of Friulian the intonation of information-seeking *wh*-questions is characterized by an initial L*+H rise associated with the *wh*-word and a H*+L L% nuclear configuration.⁷ Fig. 4.18 shows an example of an information-seeking *wh*-question in Northern Friulian. The sentence begins with a rising pitch accent associated with the *wh*-word. The late falling pitch accent associated with the nuclear syllable reaches its Fo peak early in the stressed nuclear TBU. After the peak, Fo sharply falls to a local minimum in the post-tonic syllable and remains low until the end of the utterance.

4.3.4.2 Echo *wh*-questions Echo *wh*-questions typically arise when a person fails to understand a *wh*-question that the interlocutor has uttered. As we mentioned in §4.3.3.2, *wh*-echo questions in Friulian share the same morphosyntactic and intonational features of other types of echo questions. Thus, if the echoed element is a *wh*-question as in (11), the SCL is proclitic to the verb and the nuclear configuration is L+_iH* L%.

Fig. 4.19 contains an example of a question echoing a *wh*-question. From a morphosyntactic point of view, one notes the presence of the complementizer *ch*’

⁷ Although all Friulian dialects use the same nuclear configuration in *wh*-questions, there seem to be some differences in the association of the tones. In Northern Friulian the nuclear pitch accent cannot be associated with an auxiliary verb, whereas in other varieties it can. It also seems that in Outer Eastern Friulian the nuclear accent is often associated with the first lexically stressed item after the *wh*-word; but further research is needed on this subject.

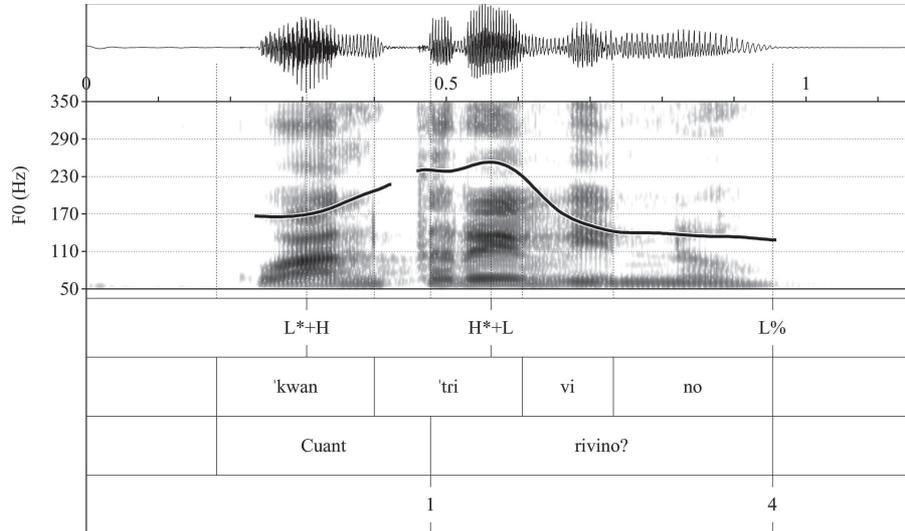


FIG. 4.18 Waveform, spectrogram, and F0 track of the information-seeking wh-question *Cuant rivino?* 'When will they arrive?', produced by a speaker of Northern Friulian (Negrons)

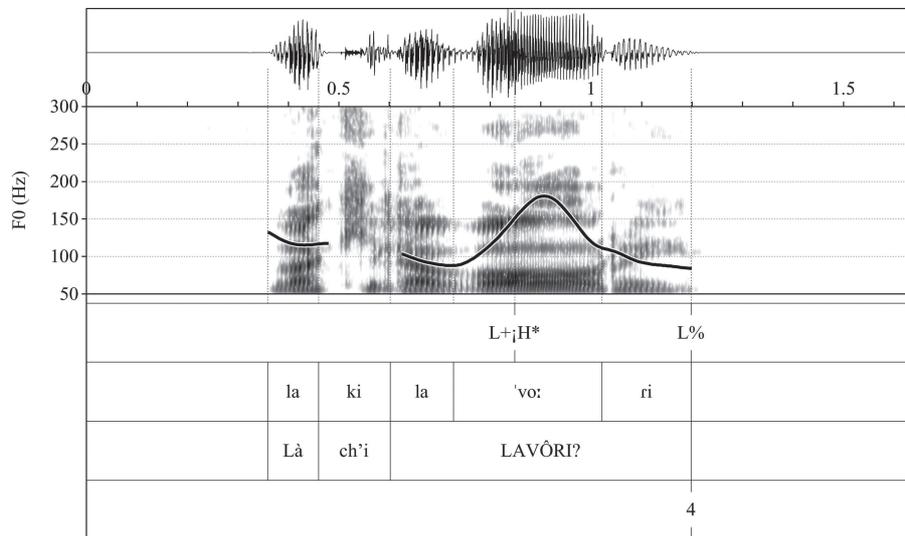


FIG. 4.19 Waveform, spectrogram, and F0 track of the echo question *Là ch'i LAVÔRI?* 'Where do I work?', produced by a speaker of Northern Friulian (Negrons)

(the elided form of *che*) which precedes the proclitic SCL *i*. With regard to intonation, one notes the rise to a superhigh level (L+_iH*) that takes place in the first vocalic mora of the bimoraic nucleus of the last stressed syllable *-vô-*, followed by a fall to the final low boundary tone.

In §4.3.3.2 it was observed that if a whole statement uttered by A goes against what B expects, B can produce an echo question that has the morphosyntactic structure exemplified in (11B) and a contour made up of a L+_iH* nuclear pitch accent, followed by a low final boundary tone. If it is not the whole of A's statement but only part of it that contradicts B's expectations, B can produce a counterexpectational wh-question in which the wh-word replaces the element that has caused B's surprise, as in (14.B).

- (14) A: *Ivan si maride cun Eline.*
Ivan self marries with Eline
'Ivan's getting married to Eline'
B: *Cun cui si maridial Ivan!?*
with who self marries=SCL.3SG.M Ivan
'Ivan's getting married to WHOM?!'

This wh-question usually has the morphosyntactic characteristics of other direct wh-questions exemplified in (12). From an intonational point of view, one should note that the wh-word of counterexpectational wh-questions is associated with a L+H* pitch accent in all varieties of Friulian. The nuclear configuration consists of a rising pitch accent followed by a high boundary tone, which can surface as either a continuation of the rise or a high plateau. Fig. 4.20 illustrates a counterexpectational wh-question with two prenuclear rising accents (associated with the wh-word *cui* and the vowel of the stressed syllable *-ri-*) and a rising pitch accent associated with the nuclear stressed vowel *I-*, followed by a high boundary tone.

A sentence type related to echo questions is reclamatory questions (Bolinger 1989), which can arise when a person fails to remember what one of the interlocutors in a conversation has said and therefore asks him or her to repeat the utterance or part of it. Such questions in Friulian differ from wh-echo questions both morphosyntactically and intonationally, and they differ intonationally (but not morphosyntactically) from direct wh-questions. In fact, they are characterized by enclitic SCLs and, from an intonational point of view, by a low nuclear accent followed by a high boundary tone. In lexical terms, they can optionally be introduced by the carrier wh-question *Ce vevistu dit...?* 'What did you say it was...?'. Fig. 4.21 contains an example of a reclamatory question formed by two prenuclear rising accents, a low nuclear pitch accent associated with the stressed vowel of the syllable *-ma-* and a final high boundary tone.

4.3.4.3 *Imperative wh-questions* Wh-questions that have an imperative or irritated connotation usually display an early rising accent (L+H*) associated with the

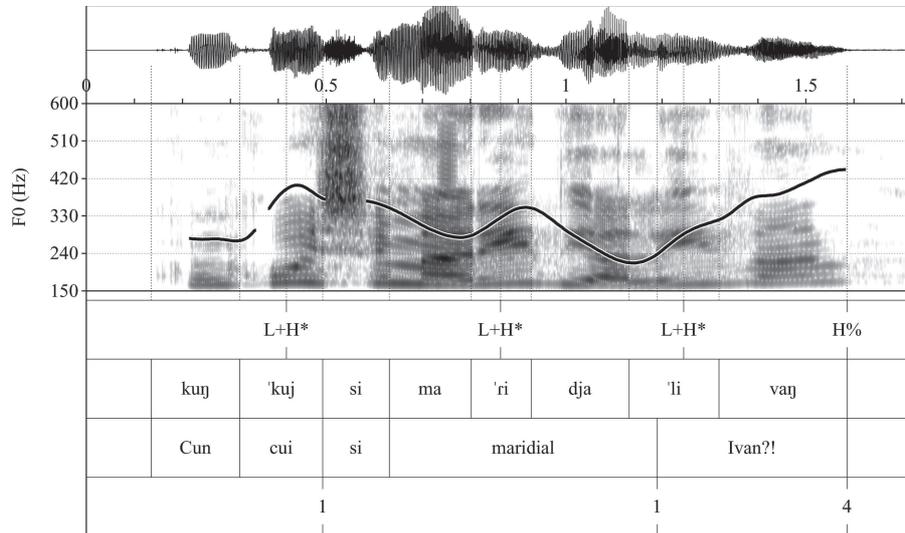


FIG. 4.20 Waveform, spectrogram, and F0 track of the counterexpectational wh-question *Cun cui si maridial Ivan?!* 'Ivan's getting married to WHOM?!', produced by a speaker of Central Friulian (Colorèt di Montalban)

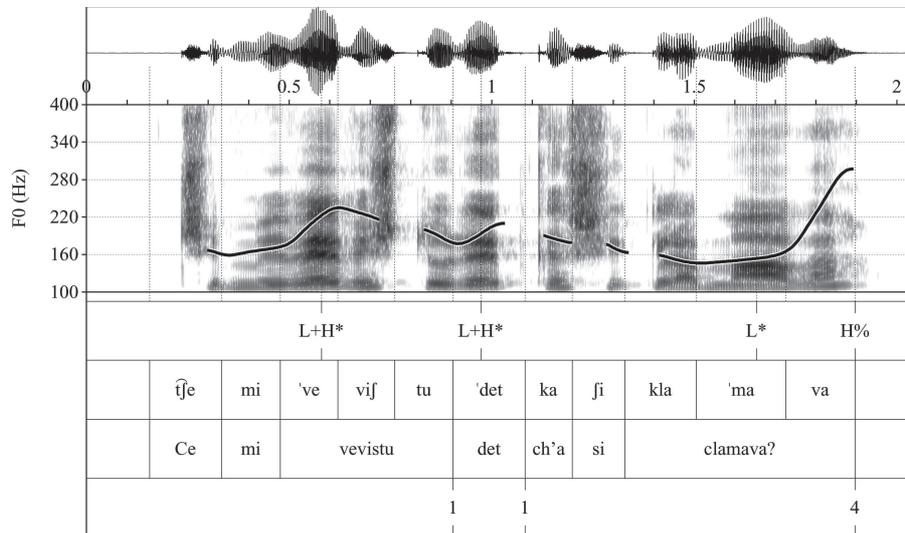


FIG. 4.21 Waveform, spectrogram, and F0 track of the reclamatory question *Ce mi vevistu det ch'a si clamava?* 'What was her name again?', produced by a speaker of Northern Friulian (Negrans)

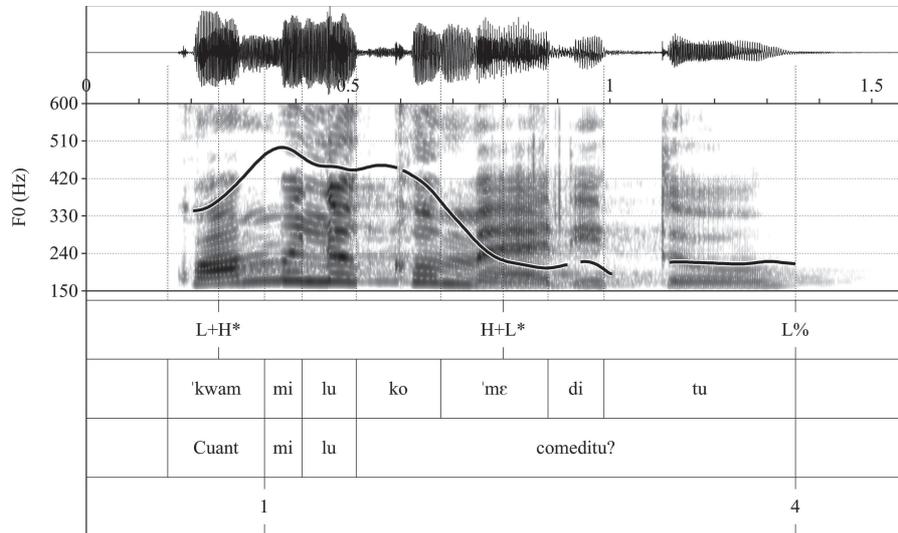


FIG. 4.22 Waveform, spectrogram, and F₀ track of the imperative wh-question *Cuant mi lu comeditu?* ‘When will you mend it for me?’, produced by a speaker of Central Friulian (Remanzàs)

wh-word, followed by an early falling nuclear accent (H+L*) and a low final boundary tone (L%). Imperative questions can be also headed by discourse particles such as *insomis* ‘in sum’, *alore* ‘then’, or *ma* ‘but’.

Fig. 4.22 shows an example of an imperative wh-question in which, after the initial L+H* rise associated with the wh-word, F₀ remains high until the last pretonic syllable, where it begins to fall to a minimum that is reached in the vowel of the stressed syllable. The fundamental frequency then remains low until the end of the utterance.

4.3.5 Imperatives: commands and requests

Imperatives in Friulian are morphosyntactically characterized by the use of the imperative mood, in which the SCLs do not appear, as in (15). Nevertheless, the imperative mode is used only for the 2SG, 1PL, and 2PL persons. If an order is formulated using the 3SG or 3PL, present subjunctive preceded by the complementizer *che* is used as in (16). If a sentence expresses a prohibition, the main verb is in the infinitive mood and is preceded by the verbal locution *no stâ a* conjugated in the imperative mood for first and second persons (as in (17)) and in present subjunctive for third persons (as in (18)).

- (15) *Cjant-ait!*
 sing-IMP.PRS.2PL
 ‘Sing!’

- (16) *Che al=cjant-i!*
 that SCL.3SG.M=sing-SBJV.PRS.3SG
 ‘Sing!’
- (17) *No st-ait a cjant-â!*
 Not stay-IMP.PRS.2PL to sing-INF
 ‘Don’t sing!’
- (18) *Che no-l=stedi a cjant-â!*
 that not-SCL.3SG.M=stay to sing-INF
 ‘Don’t sing!’

4.3.5.1 *Commands* Intonationally, commands are characterized by rising L+H* prenuclear accents, an early falling H+L* nuclear accent, and a final low boundary tone. In Fig. 4.23 this configuration is repeated twice: after the initial call *Marina*, a prenuclear rising accent is associated with the word *ven* ‘come’ and a falling nuclear accent is associated with *dongje* ‘close’, and afterwards *F₀* remains low till the end of the word. In the following ip, a rising accent is associated with *sta*, and a falling H+L* nuclear accent is associated with the word *slontanâti* ‘go away’. The final low boundary tone is realized as a shallow phonetic rise.

As seen in other Romance languages like Catalan (Prieto 2002b), if the command comprises only one prosodic word, it is realized with a L+H* L% nuclear configuration (see also Chapter 2, this volume).

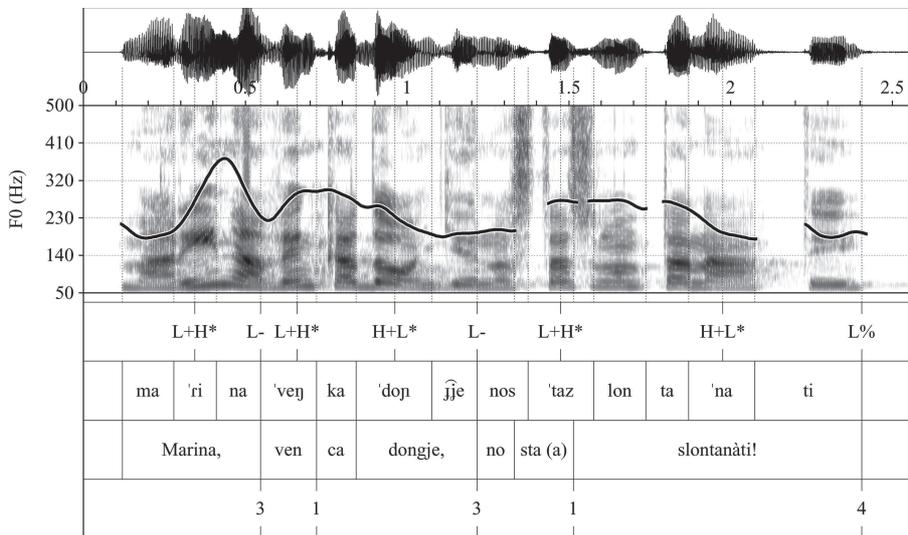


FIG. 4.23 Waveform, spectrogram, and *F₀* track of the command *Marina, ven ca dongje, no sta a slontanâti!* ‘Marina, come here close to me, don’t go away!’, produced by a speaker of Central Friulian (Colorêt di Montalban)

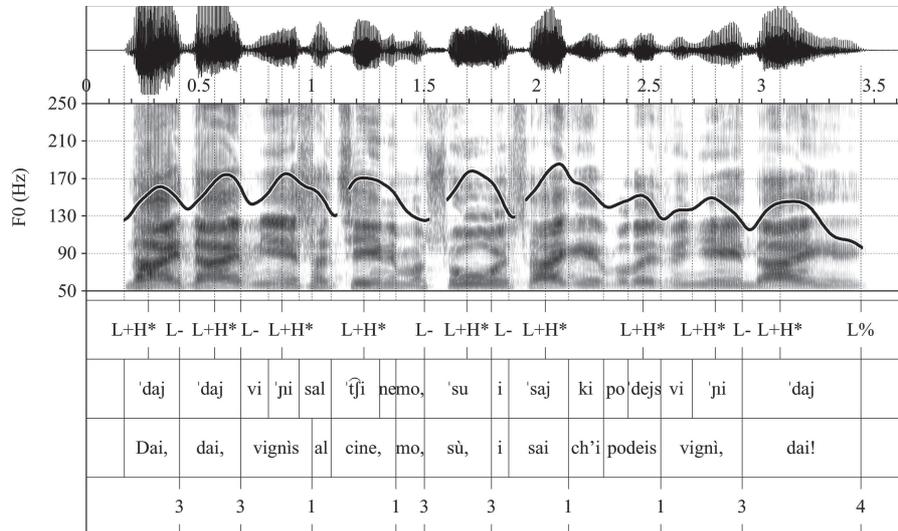


FIG. 4.24 Waveform, spectrogram, and F₀ track of the request *Dai, dai, vignis al cine, mo, sù, i sai ch'i podeis vigni, dai!* 'Come on, come on, come to the movies, come on, I know you can come, come on!', produced by a speaker of Outer Western Friulian (Gleris)

4.3.5.2 *Requests* In intonational terms, requests are characterized by a sequence of L+H* rising pitch accents, followed by a low final boundary tone. From a lexical point of view, they usually present the exhortative particles *sù* and *dai* 'come on', often reinforced by *mo*. Regarding voice quality, it should be noted that requests are often uttered in the speaker's lowest register (so that the L+H* movements are realized in a much more reduced range than exclamatives) and using a creaky voice.

Fig. 4.24 offers an example of a request, where the L+H* L- configuration is repeated several times, and the exhortative particles mentioned above appear repeatedly.

4.3.6 *Vocatives*

Vocatives do not display any noteworthy morphosyntactic characteristics (because they do not contain a verb phrase). Nevertheless, they are identified by two unique intonational nuclear configurations that in Friulian appear with only this pragmatic function, L+H* H!H% and L+H* HL%, where in both cases the last target of the boundary tone is associated with a lengthened syllable.⁸

⁸ Vocatives constitute the only cases in which the prohibition to add morae mentioned in §4.1.3 can be violated.

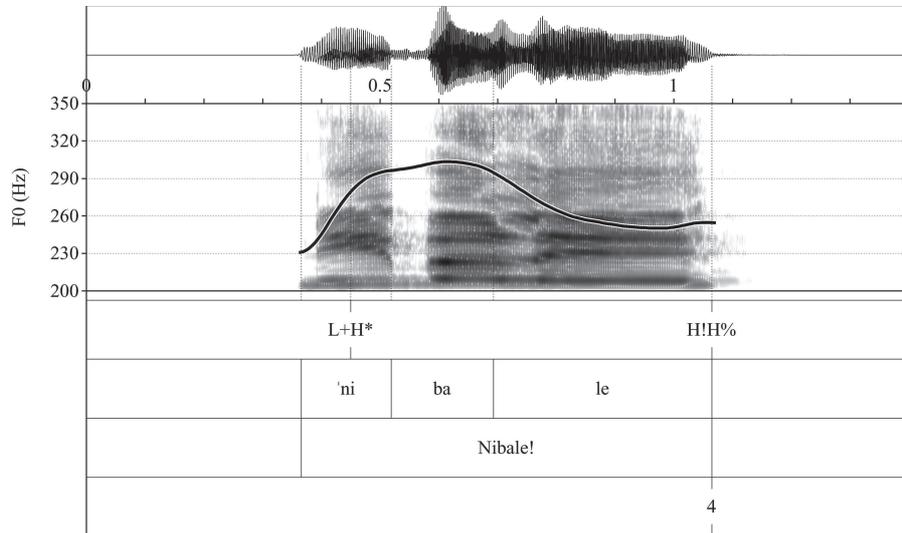


FIG. 4.25 Waveform, spectrogram, and F0 track of the vocative *Nibale!*, produced by a speaker of Northern Friulian (Negrans)

4.3.6.1 *Initial call* In Friulian, unlike most of the other languages described in this book, vocatives are characterized not by a rising pitch accent followed by a sustained mid boundary tone but rather by a L+H* H!H% configuration, the intonational difference thus being the presence of a bitonal boundary tone. This configuration is used, in all dialects, for the initial call.

Fig. 4.25 contains a vocative uttered by a speaker of Northern Friulian. One notes a L+H* rising pitch accent that is associated with the vowel of the stressed syllable *Ni-* and a high target in the first posttonic unstressed syllable *-ba-*. The presence of this high target explains why F0 remains high in the post-tonic syllable instead of starting its fall to the final mid target, which is reached at the end of the utterance, after a descent that begins only in the last post-tonic syllable (which is lengthened).

4.3.6.2 *Insistent call* Insistent or imperative calls are characterized by a L+H* HL% nuclear configuration in all dialects of Friulian. Insistence may be conveyed also by the particle *Oh* preceding the name of the person being called. Fig. 4.26 shows an example of an insistent vocative, characterized by a rising L+H* pitch accent associated with the vowel of the stressed syllable *Ni-* and a high target in the first posttonic unstressed syllable *-ba-*. The presence of this high target explains why F0 remains high in the post-tonic syllable instead of starting its fall to the final low target, which is reached at the end of the utterance, after a descent that begins only in the last post-tonic syllable (which is lengthened).

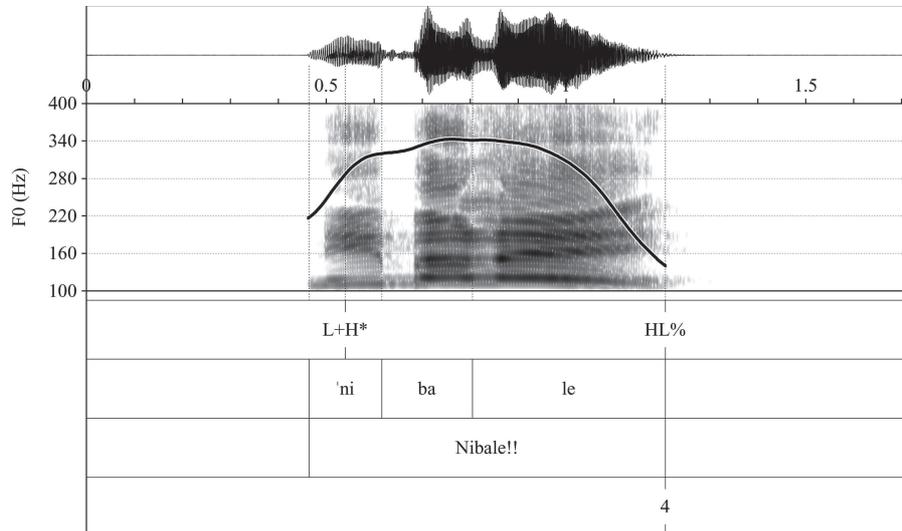


FIG. 4.26 Waveform, spectrogram, and F0 track of the insistent vocative *Nibale!!*, produced by a speaker of Northern Friulian (Negrans)

4.3.6.3 *Non-vocative chant* As mentioned in §4.3.3.1, the L+H* !H% chant in Friulian can appear in a variety of sentence types (narrow-focus statements and epistemically biased statements, exclamatives, information-seeking and confirmation-seeking yes/no questions, echo questions, imperatives and—albeit rarely—wh-questions). Actually, the only sentence type where it is not attested in our data is the broad-focus statement. The pragmatic function of this chant is probably similar to the phatic function it has in German (Gibbon 1998). In other words, when a speaker produces an utterance with this tune, she or he is opening a communication channel (or keeping it open) and, depending on the situation, also asking a question, making an exclamation, etc. It is very likely that in Friulian it is possible to use such a highly multifunctional tune without hindering communication because the sentence modality is already encoded quite clearly by means of morphosyntax and lexicon. One example of a non-vocative chant is shown in Fig. 4.15.

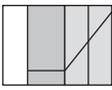
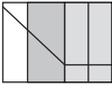
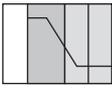
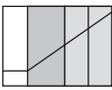
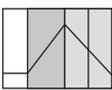
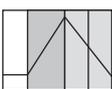
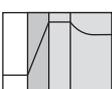
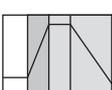
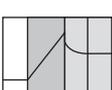
The difference between the non-vocative chant (L+H* !H%) and the contour used in vocatives (L+H* H!H%) consists of the fact that in L+H* H!H% the first post-tonic syllable is high, whereas in L+H* !H% it is mid because !H% spreads to the left (see §4.3.3.1).

4.3.7 *Intonational analysis*

The descriptions we have offered in §§4.3.1–4.3.6 allow us to conclude that Friulian makes use of nine different nuclear configurations, whose functions are described in

Table 4.5. It is worth pointing out that the number of nuclear configurations attested in our data (i.e. 9) is much smaller than the number of theoretically possible configurations, which is 30 (6 pitch accents \times 5 boundary tones = 30 nuclear configurations).

TABLE 4.5 Inventory of Friulian nuclear configurations, their schematic representations, and their use in sentence types

Configuration	Sentence types where it is used
	L* H% Information-seeking yes/no questions, confirmation-seeking yes/no questions, reclamatory wh-questions, non-final elements of a declarative enumeration
	H+L* L% Broad-focus statements, commands, imperative wh-questions, final element of an enumeration, final element of a disjunction
	H*+L L% Epistemically biased statements, information-seeking wh-questions, subject in SVO yes-no questions
	L+H* H% Counterexpectational wh-questions, non-final elements of a disjunction
	L+H* L% Contrastive narrow-focus statements, exclamatives, information-seeking yes/no questions, confirmation-seeking yes/no questions, requests
	L+¡H* L% Echo questions, counterexpectational echo yes/no questions
	L+H* H!H% Vocatives
	L+H* HL% Insistent or imperative vocatives
	L+H* !H% Several utterance types (possibly with the function of adding a phatic element)

4.4 Conclusion

In this chapter we have described a set of commonly occurring tunes for a variety of sentence types in the most important dialects of Friulian, which has revealed itself to be a very cohesive language from an intonational point of view. Minor dialectal differences have in fact only been found in the association of intonational morphemes in *wh*-questions (§4.3.4.1) and the phonetic realization of the low final boundary tone (§4.1.2.2).

It has also become evident that intonation in Friulian displays the same linguistic functions as in the majority of Romance languages described in this book, namely (a) delimiting prosodic constituents, (b) implementing acoustically lexical accents (together with vocalic duration, as in other Romance languages South of the Alps, as well as in Slovene), and (c) encoding sentence modality. Sentence modality in Friulian is encoded by means of intonation, modal particles, and morphosyntax. The latter feature is shared—in general terms—with neighboring Rhaeto-Romance, Gallo-Romance, and German varieties (§4.1.1.3). In addition to this, the presence of modal particles suggests a similarity between Friulian and German (§4.1.1.2). Two further characteristics of Friulian seem to link it with neighboring non-Romance languages. On one hand, the fact that it is very probably stress-timed (§4.1.1.1) drifts it away from syllable-timed Romance languages like Spanish (see e.g. Pamies Bertrán 1999), Catalan (Chapter 2, this volume), French (see e.g. Nespor et al. 2011), Romanian (Chapter 8), and most varieties of Italian (Chapter 5), and brings it closer to stress-timed languages like German. On the other hand, the fact that the TBU is the mora and not the syllable makes Friulian resemble some of the neighboring Southern Slavic languages like Serbo-Croatian (Godjevac 2005).

From an intonational point of view, it would be indeed interesting to compare Friulian first of all with its closest Romance neighbor, Venetian; but studies on the intonational phonology of this language are scarce and often neglected in favor of research on the regional variety of Italian spoken in Veneto. A broader comparison with the languages described in this book suggests that Friulian shares some very general features with them. For example, as in all other Romance languages described in this book, statements end with a phonologically low boundary tone. Whereas almost all European Romance varieties west and north of the Alps have a $L^* L\%$ nuclear configuration in broad-focus statements, the Romance varieties spoken in the Italian peninsula and the Balkans (Italian, Sardinian, Algherese Catalan, Cisalpine Occitan, Friulian, and Romanian) display a $H+L^* L\%$ nucleus (see §3.1.1. of the corresponding chapters in this book).

Friulian *yes/no* questions commonly display two patterns, both of them appearing also in other languages described in this book. The $L^* H\%$ pattern, in fact, is also found in Catalan and Spanish (see respectively Chapters 10 and 2), while other languages described in this book—like Italian, Portuguese, French, and

Occitan—make use of slightly different rising patterns. The second contour we have described for Friulian information-seeking yes/no questions is circumflex (L+H* L%) and is also found in some Southern Italian varieties (Chapter 5) and in Romanian (Chapter 8).

The difference between information-seeking yes/no questions and echo questions in Friulian is conveyed by means of both morphosyntax (see §4.3.3.2) and intonation. The nuclear configuration used in Friulian for echo questions (L+_iH* L%) is attested, with the same function, also in Spanish (Chapter 10), Catalan (Chapter 2), and Occitan (Chapter 6).

The typical L+H* !H% calling contour appears in vocatives in most Romance languages described in this book, with the exception of Friulian and Italian. These two languages, in fact, typically use a slightly different calling contour, L+H* H!H%. The L+H* !H% contour in Friulian been attested only with non-vocative functions, and seems to have a phatic function, as in German (see §4.3.6.3).

On the whole, therefore, from a prosodic, intonational and pragmatic point of view Friulian seems to present interesting similarities not only with other Romance varieties but also with neighboring Germanic and Slavic languages. It would thus be attractive to think of Friulian as a bridge language between Romance, Germanic, and Slavic.

4.5 Appendix: Modal particles in Friulian

Modal particles are an aspect of Friulian that has not been studied in depth. For this reason, the following table should be regarded merely as a provisional inventory.

TABLE 4.6 Most frequently used modal particles and tags in Friulian, their function, and their position in the sentence

Particle	Function and position	Example and translation
<i>no?</i>	(a) Confident check (used after a statement, either declarative or negative) (b) Obvious order (used after a positive imperative)	<i>Tu vegnīs a cene, no?</i> You're coming for dinner, aren't you? <i>Vierç une altre cartele, no?</i> Open another folder, it's obvious!
<i>si?</i>	Irritated confirmation-seeking of an evident fact (used after a yes/no question)	<i>Tornistu a rivâ tart, si?</i> You're late again, aren't you?
<i>si o no?</i>	Imperative confirmation-seeking (used after a yes/no question)	<i>Ti distrighistu, si o no?</i> Do hurry up!
<i>eh</i>	Obviousness (before a statement)	<i>Eh, al è di Meni!</i> It belongs to Meni, obviously!

(continued)

TABLE 4.6 Continued

Particle	Function and position	Example and translation
<i>po</i>	Obviousness (usually after a declarative statement, sometimes before it)	<i>Al è di Meni, po!</i> It belongs to Meni, obviously!
<i>ve</i>	Obviousness (after a negative statement)	<i>Nol è mighe è di Meni, ve!</i> It doesn't belong to Meni, obviously!
<i>ma</i>	Doubt (used before a statement, either declarative or negative)	<i>Ma, forsit no ur plasevin.</i> Uh, maybe they didn't like it.
<i>i</i>	Doubt (used before a statement, either declarative or negative)	<i>Î, no sai se ur plasevin.</i> Uh, I don't know whether they liked it or not.
<i>mo</i>	Phatic (added to some particles to strengthen them, or to other elements to maintain the communication channel opened)	<i>Tu vegnis a cene, no mo?</i> You're coming for dinner, aren't you? <i>Scolte, mo!</i> Listen!
<i>gjo</i>	Restatement (used after a statement, either declarative or negative)	<i>A van a vivi a Milan, gjo!</i> They're going to live in Milan, I said!
<i>dissal</i> (M), <i>dissè</i> (F)	Quotative (used after the element that is quoted directly)	<i>"Al è biel!" dissal il frut.</i> "It's nice!" said the boy.
<i>dai</i>	Exhortation (used before an imperative and, optionally, also after)	<i>Dai, anin al cine!</i> Come on, come to the movies!
<i>dai mo</i>	Pleading exhortation (used before an imperative)	<i>Dai mo, anin al cine!</i> Come on, come to the movies!
<i>dai po</i>	Irritated exhortation (used before an imperative)	<i>Dai po, distrighiti!</i> Come on, hurry up!
<i>sù po</i>	Irritated exhortation (used before an imperative)	<i>Sù po, distrighiti!</i> Come on, hurry up!
<i>alore</i>	Irritation (used before several sentence types)	<i>Alore, cuant me comedistu?</i> So, when will you fix it?
<i>eh?</i>	Counterexpectational (used alone or before a counterexpectational question)	<i>Eh? Cun cui si maridial?</i> What? He's getting married with whom?
<i>oh</i>	Surprise (used alone or before a counterexpectational question)	<i>Oh, cuant sèstu rivât?</i> Eh, when did you arrive?
<i>joi</i>	Surprise (used alone or before an exclamative)	<i>Joi, ce pôre!</i> Oh dear, you scared me!
<i>be(n)</i>	(a) Contradiction of interlocutor's expectations (used between auxiliary and main verb in an affirmative statement) (b) Hope for positive answer to confirmation-seeking tag question (used	<i>Jal ai ben dit.</i> I've told him [although one might think I haven't]. <i>Tu vignarâs ben a cene, no?</i>

	between auxiliary and main verb in an affirmative statement)	You ARE coming for dinner, aren't you?
<i>mighe</i>	(a) Contradiction of interlocutor's expectations (used between auxiliary and main verb in a negative statement)	<i>No jal ai mighe dit.</i> I haven't told him [although one might think I have].
	(b) Hope for negative answer to confirmation-seeking declarative question (used between auxiliary and main verb in a negative question)	<i>No tu jal varâs mighe dit?</i> You can't have told him, can you?
	(c) Availability to accept a negative answer to an information-seeking yes/no question	<i>Sâstu mighe se al è a cjase?</i> Do you happen to know if he's at home?
<i>mai</i>	Wish (used between auxiliary and main verb in an optative sentence)	<i>Vessio mai tasût!</i> I wish I had not spoken!

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